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Protecting Children Against Bullying and Its Consequences



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Chapter 1

Introduction

School bullying has been studied for about 40 years and a lot of knowledge has already been gathered regarding its nature, dynamics, predictors, and outcomes. It is already known that bullying is a very damaging type of violence which consists of some students deliberately attacking and hurting others who are unable to defend themselves. These aggressive behaviors are frequent and occur on a long-term basis. It is not only a dyadic interaction, but rather a social phenomenon with well-established roles. Over time, some students become chronically victimized, others become perpetrators or bully-victims, while the rest of the children act as bystanders who might support the perpetrator, defend the victim, or just stand by without doing anything.

Research has found that bullying has very damaging short- and long-term consequences (Ttofi et al. 2011a, b). These consequences affect children involved in any bullying role and also the whole-school community and the society. Thus, it is crucial to protect children against bullying. Many anti-bullying programs are being conducted around the world (Farrington and Ttofi 2009) and there are numerous studies that focus on risk factors for bullying (Zych et al. 2015b). Even though much knowledge has been advanced and the number of studies has increased exponentially throughout the history of the field (Zych et al. 2015a), this kind of violence is still present and prevalent in schools around the world. New studies with longitudinal designs and research on strengths rather than weaknesses are needed to shed new light on the phenomenon. There are still many gaps in knowledge that need to be filled.

This book focuses on factors that protect children from bullying and its consequences. This specific analysis of strengths, rather than weaknesses, builds on the current literature with a new positive focus. Throughout its chapters, the book synthesizes the newest research on the topic in a brief and reader-friendly format. Meta-analyses and research syntheses are reviewed, together with empirical findings, to provide a global vision on what is being done and what can be done to protect children from bullying. Findings from the more common cross-sectional

studies are included together with the results from newer prospective longitudinal studies that are uncovering causal relationships.

Chapter 2 of this book focuses on the concept of bullying, highlighting its complex nature and dynamics. A short history of research on bullying, together with the prevalence of this kind of violence in different parts of the world, are reviewed. Meta-analytic findings regarding short-term risk factors and outcomes of being involved in different bullying roles are described. This book is concerned specifically with school bullying, not with school violence or peer aggression in general.

Chapters 3 and 4 focus on personal and contextual protective factors, respectively. Personal factors are classified into social, emotional, and moral competencies. Contextual factors, on the other hand, include safety in school and in the neighborhoods, a whole-school policy, classroom management, and relationships among the members of the school community. Most of the findings are cross-sectional and, therefore, causal relations are rarely established. Nevertheless, these chapters provide insights on different variables related to lower levels of bullying and, therefore, can be a good starting point for further research and understanding of personal and contextual protective factors.

Chapter 5 describes the main findings on the most effective components of anti-bullying programs, based on the systematic review and meta-analysis conducted by Farrington and Ttofi (2009). Afterwards, 10 different programs conducted in different geographic areas are reviewed, paying specific attention to school-management strategies and curriculum influences. Participants, designs, and outcomes of each program are also described.

Chapter 6 reviews the results of prospective longitudinal studies on later outcomes of bullying and victimization, including offending, violence, drug use, and depression. It also summarizes research on protective factors that prevent these long-term undesirable outcomes, including protective factors that prevent bullies becoming offenders and protective factors that prevent victims becoming depressed. This chapter focuses on groundbreaking research whose designs make it possible to shed some light on causal relationships. Understanding the long-term problems caused by being involved in bullying (and not only related to bullying) and factors that predict and protect against lower bullying rates or from the consequences of having been involved represents the achievement of a milestone in this research field.

We hope that this book will provide a comprehensive and global vision of research related to the protection of children from bullying and its consequences. It is also hoped that having these studies reviewed and gathered in a single book will encourage further development of anti-bullying policies and practices. This book shows that decreasing bullying is possible and should be attempted. If these findings are applied, many children can be protected, saved, and hopefully brought up in healthier communities and societies.

References

- Farrington, D. P., & Ttofi, M. M. (2009). School-based programs to reduce bullying and victimization. *Campbell Systematic Reviews*, 6, 1–148.
- Ttofi, M. M., Farrington, D. P., Lösel, F., & Loeber, R. (2011a). Do the victims of school bullies tend to become depressed later in life? A systematic review and meta-analysis of longitudinal studies. *Journal of Aggression, Conflict and Peace Research*, 3, 63–73.
- Ttofi, M. M., Farrington, D. P., Lösel, F., & Loeber, R. (2011b). The predictive efficiency of school bullying versus later offending: A systematic/meta-analytic review of longitudinal studies. *Criminal Behaviour and Mental Health*, 21, 80–89.
- Zych, I., Ortega-Ruiz, R., & Del Rey, R. (2015a). Scientific research on bullying and cyberbullying: Where have we been and where are we going. *Aggression and Violent Behavior: A Review Journal*, 24, 188–198.
- Zych, I., Ortega-Ruiz, R., & Del Rey, R. (2015b). Systematic review of theoretical studies on bullying and cyberbullying: Facts, knowledge, prevention, and intervention. *Aggression and Violent Behavior: A Review Journal*, 23, 1–21.

Chapter 2

School Bullying in Different Countries: Prevalence, Risk Factors, and Short-Term Outcomes

2.1 Definitions, Types, and Roles in Bullying

School bullying is a specific kind of aggression in which students display frequent and long-term aggressive behavior toward their peers. This aggressive behavior is intentionally perpetrated on a student who cannot easily defend himself or herself and, therefore, there is an imbalance of power between the two (Smith and Brain 2000). It has been pointed out that, with time, this complex psychosocial phenomenon includes also a dominance–submission scheme in which students assume certain behaviors as perpetrators or victims and that this occurs under the “law of silence” (Ortega 2010). This means that there are many students who know about bullying in their school, but do not report this to teachers or parents because they feel afraid of becoming victims themselves or think that reporting is not the right thing to do. This book is concerned specifically with school bullying, not with school violence or peer aggression in general.

Research on bullying focuses on different roles of students. The most salient roles are bullies and victims. The former are the children or adolescents who display aggressive behaviors toward others and the latter are the students who persistently suffer harm. Some students are both victims and perpetrators, usually described as bully/victims. Nevertheless, bullying is not only a dyadic interaction between two students or groups. Less salient but equally important, there is also a group of bystanders who witness the phenomenon and play an important role in its nature and dynamics. Salmivalli et al. (1996) stated that some of them act as defenders, that is, they help the victim; others are outsiders, that is, they do not intervene and withdraw from this situation. There are also reinforcers of the bullies who respond to their aggressive behavior in a positive way such as cheering or laughing and assistants of the bullies who join them in the perpetration. Bystanders and not involved children are very important, taking into account that bullies have been described as children who are motivated by the possibility of achieving high status in the peer group by means of their aggressive behaviors. Thus, it is the whole peer

group that responds in a way that would make it impossible for the perpetrators to achieve this goal (Salmivalli 2010).

Bullying is a very complex phenomenon and might occur in many different forms and among different groups of students (e.g., ethnic-cultural or sexual minorities and majorities—Llorent et al. 2016). Rivers and Smith (1994) defined direct bullying, in which a confrontation takes place in face-to-face situations, and also indirect bullying that occurs mediated by other people. The indirect form of bullying is more commonly perpetrated verbally, although verbal bullying itself can be direct or indirect (Rivers and Smith 1994). Thus, behaviors, such as pushing, kicking, insulting, or name-calling, would be considered direct aggression, whereas spreading rumors or telling other students not to relate to the victim and to exclude them from the group would be considered indirect bullying.

During the first decade of the twenty-first century, a new form of bullying called cyberbullying has become intensively studied. This is defined as aggression that is repeatedly perpetrated by individuals or groups through electronic devices on victims who cannot defend themselves (Smith et al. 2008). Research has found that there is a significant overlap between bullying and cyberbullying (Baldry et al. 2016; Del Rey et al. 2012), but there is still no agreement on whether cyberbullying should be treated as a separate phenomenon or as an extension of bullying. Most of the studies on cyberbullying use specific instruments to evaluate this form of aggressive behavior (Berne et al. 2013). Given its particular characteristics (Baldry et al. 2015; Nocentini et al. 2010), it is usually studied as a specific topic within research on bullying. Therefore, research on cyberbullying is mentioned in this book but it is beyond the scope of the book to discuss it in detail. This book focuses on face-to-face school bullying.

2.2 A Short History of Research on Bullying

The first studies on bullying were conducted in Scandinavia by Olweus (1973) although a similar concept called “mobbing” was mentioned by a school physician Peter-Paul Heinemann in the late 1960s (Heinemann 1969). The topic became popular in the communication media after a series of suicides committed by students in different countries which were attributed to bullying. This was the case in Norway, where three adolescent boys who were victimized by their peers committed suicide in the 1980s; this triggered the development of the first national campaign against bullying in Norway (Olweus and Limber 2010). Similar cases were reported in different geographic areas. Since the publication of the first studies on bullying, the number of publications has been increasing exponentially, with a total number of about 11,000 documents published in journals included in the Web of Science up to 2015. A review of these studies throughout the history of the field has been recently published in the journal *Aggression and Violent Behavior: A Review Journal* (Zych et al. 2015a), and a short summary of this review is included below.

After the first studies conducted in the Nordic countries and the attention paid to bullying in the communication media after a series of tragic events attributed to this kind of violence, research on bullying flourished in the 1990s. During these years, Peter K. Smith and colleagues started to study bullying in the UK, describing the phenomenon on broad samples of 6000 (Whitney and Smith 1993) or 7000 (Rivers and Smith 1994) participants, and distinguishing its direct and indirect forms. Rigby and Slee (1991) started to study bullying in Australia. Also in the early 1990s, the main results of the Olweus anti-bullying programs were described (Olweus 1994).

Although it had already been mentioned in previous studies, the first highly cited and widely accepted article on bullying as a group process was published by Salmivalli et al. (1996). In this article, the phenomenon was described as a complex psychosocial interaction among the students, taking into account roles such as perpetrators, victims, and bystanders (outsiders, defenders, assistants, and reinforcers). An ecological approach was applied to bullying taking into account contextual factors that influence in its nature and dynamics by Debra Pepler and colleagues in Canada (Atlas and Pepler 1998). In the 1990s, studies on bullying were published in many different parts of the world including our research line in Spain (Ortega 1997) and in the UK (Farrington 1993).

Although international studies had been conducted before, the 2000s was a decade with many cross-national comparisons among the geographic zones, such as the research conducted by Due et al. (2005), in which they compared 28 countries. During the first half of the decade, studies on cyberbullying started to be published in the US (Ybarra and Mitchell 2004a, b) and, during the second half, their number started to increase very quickly around the world. Many of these studies focused on the relationship between bullying and cyberbullying (e.g., Dooley et al. 2009; Raskauskas and Stoltz 2007; Slonje and Smith 2008), trying to establish whether cyberbullying is another type of bullying or whether it should be treated as a different phenomenon. The number of intervention studies also increased in the 2000s and a meta-analysis of anti-bullying programs was conducted by Farrington and Ttofi (2009), finding that these programs can be effective in reducing bullying and that certain characteristics and components are more effective than others.

The number of studies on bullying and cyberbullying in the 2010s continued to grow. Some projects have focused on the long-term impact of bullying. Longitudinal studies on bullying versus later offending and being a victim of bullying versus later depression (Ttofi et al. 2011a, b) were also published. Interventions against cyberbullying are also being conducted all over the world (see for example Della Cioppa et al. 2015, Zych et al. 2017).

2.3 Systematic Reviews and Meta-analyses on Bullying

The classical narrative literature reviews are useful to describe research on different phenomena according to the criteria of their authors. These documents include primary empirical studies chosen by the person who is writing the review. If this

person is an expert on the topic, their description and arguments can be very useful for the further advancement of the field, and can draw the attention of the scientists toward certain aspects of the phenomena that were otherwise neglected or suggest improvements in the theoretical frameworks and methodologies.

The nature of systematic reviews and meta-analyses is different from classic narrative literature reviews. Systematic reviews approach a field of knowledge with the objective of including and synthesizing all the studies on the topic. Systematic reviews use rigorous methods for locating, appraising, and synthesizing evidence from existing studies. They have explicit objectives, explicit criteria for including and excluding studies, and a structured and detailed report (Farrington and Petrosino 2000). Systematic searches are conducted in databases and journals, using specific keywords and inclusion criteria. Then, studies are coded and, in meta-analyses, overall effect sizes are calculated to find out statistically, for example, if the selected group of interventions is effective, or the results are different for different moderating variables.

For example, if a relationship between variables is reported in dozens of articles based on thousands of participants surveyed in different settings and parts of the world, each article would usually report different results. Some studies could report a positive significant relationship, while others could report no relationship at all or even a negative significant relationship. If a meta-analysis is conducted, it is possible to summarize this relationship for the whole set of studies, taking into account all the articles, settings, and participants, providing also information on the strength of the relationships. Therefore, systematic reviews and meta-analyses are particularly useful to provide a global vision on a field of research, maximizing objectivity and replicability and minimizing bias (Lipsey and Wilson 2001). These studies are helpful in evaluating intervention programs and naturally occurring predictors and outcomes of different phenomena (Murray et al. 2009). This is why the following parts of this introductory chapter will include much information based on meta-analytic findings.

Recently conducted assessments of systematic reviews and meta-analyses on bullying and cyberbullying (Farrington et al. 2016; Ttofi et al. 2014; Zych et al. 2015b) included dozens of research syntheses on the topic. Zych et al. (2015b) synthesized findings from 66 systematic reviews and meta-analyses on bullying and cyberbullying. They found that face-to-face bullying is more prevalent than cyberbullying and that differences between genders or age groups are unclear. The relationship between bullying and cyberbullying was found to be significant and strong. It was concluded that bullying is a serious problem with damaging consequences among students in minority groups. This review also focused on anti-bullying programs, showing that most of the meta-analyses find them effective in reducing bullying, although this effectiveness depends on nature of a program and its components. Thus, it was concluded that it is important to choose a program that has been scientifically validated and is included among evidence-based interventions.

A recent assessment of systematic reviews of community-based programs to prevent different forms of antisocial behavior has been conducted by Farrington

et al. (2016). They included and described six systematic reviews of anti-bullying programs and found that, overall, these programs were effective in reducing bullying. Ttofi et al. (2014) analyzed six meta-analyses of anti-bullying programs. They reported that these meta-analyses differed greatly in their search strategies, inclusion and exclusion criteria and methodological approach. After analyzing these criteria, they concluded that the meta-analysis conducted by Farrington and Ttofi (2009) was the most detailed and would probably yield the most exact results. This meta-analysis reported an overall decrease in perpetration of about 20–23% and a decrease in victimization of about 17–20% for anti-bullying programs. These are optimistic findings, and choosing the right program is crucial to successfully prevent and intervene in bullying. Detailed descriptions of anti-bullying programs and program components are described in Chap. 5.

Interested readers can find more information about the meta-analyses on bullying in our publications on the topic described above. In this chapter, we will include the most important meta-analytic findings relating to the prevalence of the phenomenon, risk and protective factors, and short-term outcomes.

2.4 Evaluation and Prevalence of Bullying in Different Countries

Bullying is aggressive behavior that is present in schools around the world. Given its complex nature and dynamics, it is very difficult to measure and, therefore, its prevalence is very difficult to determine. Evaluating prevalence in a population requires working with representative samples, which involves gathering a great amount of data usually recruiting thousands of participants. In most cases, this can be done by means of surveys, usually with self-report questionnaires, which are the most popular evaluation tools in the field. Nevertheless, these self-reports also vary among the studies and the results depend on the criteria established in each assessment.

Some systematic reviews have been conducted to compare bullying measurement instruments. Evans et al. (2014) analyzed the tools used to assess anti-bullying interventions. They found that about one quarter of the studies used a one-item evaluation whereas about three quarters used a multi-item assessment. The results of the studies using these two forms of evaluation varied, with one-item tools showing a desirable effect of interventions on victimization and perpetration in 83 and 67% of the studies, respectively, and with multi-item scales showing desirable effects in 57 and 44%, respectively. Vivolo-Kantor et al. (2014), in another systematic review, found that some studies used the term “bullying” or even included its definition whereas other studies did not, and that timeframes also varied among the studies. Our recent systematic review of research on cyberbullying in Spain shows that the prevalence reported through multi-item instruments is about twice as

high as the prevalence measured with one-item questions (Zych et al. 2016). This was also found in studies focused on bullying (Baldry and Farrington 2004).

When the prevalence is described, participants are classified as involved (i.e., as victims, perpetrators or bully/victims), or not according to an established cutoff point. In some studies, reporting an aggressive behavior even once could be enough to be classified as involved, whereas other studies would require answers such as “frequently,” “2–3 times a month,” “once a week,” etc. The timeframes also vary among the studies, with some asking about behaviors that “ever” happened and others asking about the past year or the past couple of months. The one-item evaluations would usually include a definition of the phenomenon and ask the participants if they have been bullied or perpetrated bullying. Multi-item scales would usually include items that describe different bullying behaviors (e.g., insulting, name-calling, kicking, pushing), and ask about their frequency and/or duration. Participants are then classified as involved or uninvolved depending on their average score on the scale or on their answers to each item within the scale. All these evaluation issues are discussed in our recent review on cyberbullying in Spain (Zych et al. 2016) and can be also applied to the evaluation of face-to-face bullying.

Taking into account these differences in measurement, it is very difficult to compare prevalence among studies. This is even more complex if these studies have been conducted in different geographic areas and with participants from different cultures and in different languages. Given the fact that many of these difficulties are related to terminology, and the term bullying is difficult to translate and can be understood in different ways, Smith et al. (2002) conducted a study in which they compared 67 terms related to bullying in 14 different countries. The results show that there are some differences among the countries in defining the phenomenon (e.g., in focusing more or less on social exclusion or fighting), but it is present in all the geographic areas.

A meta-analysis conducted by Modecki et al. (2014) synthesized studies on the prevalence of bullying in different contexts. A total of 80 studies from different geographic zones were included, and it was found that the mean prevalence rates of involvement in bullying, across these reports, were 35% (35% for perpetration and 36% for victimization). It is worth mentioning that the criteria used to calculate the prevalence rates differed greatly among the included studies, with some of them classifying children as involved who reported even very mild forms of bullying and others, on the other hand, requiring more severe forms. Thus, the results of the meta-analysis show that 35% of students are involved in some form of bullying, including its mild or severe forms.

In Asia, a review of studies in China shows victimization rates ranging from 2 to 66% and perpetration rates ranging from 2 to 34% (Chan and Wong 2015). Another review shows that bullying exists also in Southeast Asian Countries with prevalence rates of having been bullied on more than 10 days during the past 30 days between 1 and 7.7% (Sittichai and Smith 2015).

In the UK, a recent report released by the Anti-Bullying Alliance (2015) reviewed research on bullying conducted in the country since 2010. Among the

research on the prevalence rates of bullying, a study conducted with 11,000 secondary education students in England and Wales showed that 33% of the participants reported having been bullied sometimes and 11% a lot (BIG 2015). Similar studies were conducted in Scotland and Northern Ireland and more details can be found in the Anti-Bullying Alliance report (2015).

Examples of empirical studies on the prevalence of bullying in different countries are reported in summary Table 2.1. Here we include mostly research with broad and representative samples and, when possible, studies that compare different countries using similar methodologies.

The study conducted by Ortega et al. (2012), comparing the UK, Italy, and Spain reported the highest rates of direct victimization in the UK, followed by Italy and Spain. Indirect victimization was the highest in Italy, followed by the UK and Spain. A comparison of 40 different countries (Craig et al. 2009) showed the lowest rates of involvement for boys in Sweden, the Czech Republic and Spain and for girls in Sweden, Iceland, and Malta. The highest rates for boys were reported in Lithuania, Latvia, and Estonia and for girls in Lithuania, Latvia, and Greenland. Eslea et al. (2004) compared seven different countries finding the highest rates of perpetration in Japan and Spain, of victimization in Italy and Portugal, and of bully/victims in Spain and Italy. The lowest rates of perpetration were reported in China and England, of victimization in Ireland and Japan and of bully/victims in China, England, and Ireland. A study with Swiss and Australian adolescents (Perren et al. 2010) showed higher rates of involvement in any bullying role in Switzerland. Research conducted in the US showed relatively high rates when compared to other western countries (Guerra et al. 2011; Wang et al. 2009).

Most of the studies on bullying have been conducted in Europe, North America, and Australia (Zych et al. 2015a); more studies are needed in other geographic zones. The number of projects on the topic in Latin America is still few. In Nicaragua, Romera et al. (2011) found that the prevalence of involvement in any bullying role was high when compared to other countries. This high prevalence, especially of bully/victims, could be related to the high level of violence in this region, difficulties in the education system and the low income in the country. In Colombia, victimization, perpetration, and bystanding rates were also relatively high (Chaux et al. 2009). On the other hand, the prevalence in Asian countries is similar to or lower than in Europe (Cheng et al. 2010; Eslea 2004; Sittichai 2014).

Although there are great differences among the studies, all of them show that bullying is present in schools across countries and contexts. Mostly in relation to the tragic cases of suicides of students attributed to school bullying, the media frequently report that the phenomenon is on the rise. On the other hand, it is worth mentioning that research shows that there is actually some decline in the prevalence of bullying over the last decades, although it seems that the prevalence of cyberbullying has increased (Rigby and Smith 2011). However, this possible increase in cyberbullying cannot be confirmed because the evaluation strategies differ greatly among the studies, leading to different prevalence rates and making it difficult to compare time points (Zych et al. 2016). The decline in the prevalence of bullying could indicate that the great efforts of the scientific community and policy makers to

Table 2.1 Empirical studies that report prevalence of bullying in different countries

Study	Country	Participants	Main findings
Chaux et al. (2009)	Colombia	A representative sample of students in grades 5 and 9 with 53,316 students enrolled in 1000 schools	Victimization—29.1%, perpetration—21.9% and having witnessed bullying— 49.9% Cutoff: dichotomous (yes/no) response to single questions regarding the past 2 months
Cheng et al. (2010)	China	A representative sample of 9173 middle school students, grades 7–1	Victimization reported by 25.7% of the students Cutoff: 1 or more days of the past 30 days
Craig et al. (2009)	40 different countries	A total number of 202,056 adolescents in grades 6, 8, and 10, about 4500 per country	Overall, 10% reported perpetration, 12.6% victimization and 3.6% bully/victims The lowest percentages of involvement (victimization or perpetration) for boys were found in Sweden (8.6%), the Czech Republic (9.7%) and Spain (10.2%). The lowest percentages of involvement in girls were reported in Sweden (4.8%), Iceland (5.4%) and Malta (6.3%) The highest percentages of involvement in boys were found in Lithuania (45.6%), Latvia (43.5%) and Estonia (42.8%) and for girls in Lithuania (35.8%), Latvia (32%) and Greenland (32%) Cutoff point: at least 2 or 3 times a month during the past 2 months
Eslea et al. (2004)	China England Ireland Italy Japan Portugal Spain	A total number of 47,992 children in primary and secondary schools in 7 different countries	Perpetration: China (2%), England (National—2.2%, Sheffield— 5.3%), Ireland (2.4%), Italy (Cosenza—9.9%, Firenze— 7.4%), Japan (11.4%), Portugal (10.5%), Spain (16.9%) Victimization: China (13.3%), England (National—11.5%, Sheffield— 13.6%), Ireland (5.2%), Italy (Cosenza—23.1%, Firenze— 25.6%), Japan (7.9%),

(continued)

Table 2.1 (continued)

Study	Country	Participants	Main findings
			Portugal (14.9%), Spain (12.8%) Bully/victims: China (1.5%), England (National—0.8%, Sheffield—2.5%), Ireland (1.5%), Italy (Cosenza—9.5%, Firenze—9.1%), Japan (6%), Portugal (6.7%), Spain (19.6%) Cutoff point: more than just once or twice during this term
Guerra et al. (2011)	USA	A total number of 2,678 children and adolescents from Colorado enrolled in 59 schools (21 elementary, 30 middle and 8 high schools)	Perpetration of any frequency was reported by 50% of the elementary school students, 71% of middle school students and 72% of high school students. Perpetration of moderate to high frequency was found in 8% of the elementary school pupils, 15% of middle school students and 12% of high school students Cutoff point: any—more than once during the previous year; moderate to frequent—several times or more during the previous year
Ortega et al. (2012)	Spain Italy UK	Adolescents in secondary education schools (age $M = 14.20$, $SD = 1.77$). Spain ($N = 1671$), Italy ($N = 1964$), and the UK ($N = 2227$)	Frequent direct victimization: Spain—3.2%, Italy—4.3%, UK—7.1% Occasional direct victimization: Spain—7.5%, Italy—10.7%, UK—11.6% Frequent indirect victimization: Spain—3.4%, Italy—7.3%, UK—6.2% Occasional indirect victimization: Spain—12.4%, Italy—15.7%, UK—14% Cutoff point: occasional—once or twice during the past 2 months, frequent—“more frequently” during the past 2 months

(continued)

Table 2.1 (continued)

Study	Country	Participants	Main findings
Perren et al. (2010)	Australia Switzerland	Adolescents in Switzerland (374) and Australia (1320) (age $M = 13.8$, $SD = 1.0$)	Frequent victimization: Australia—9.6% of girls and 9.1% of boys, Switzerland—11.1% of girls and 13.8% of boys Frequent perpetration: Australia—4.2% of girls and 11.5% of boys, Switzerland—11.6% of girls and 17.8% of boys Frequent Bully/victims: Australia—2.8% of girls and 4.4% of boys, Switzerland—2.5% of girls and 5.2% of boys Cutoff point: at least once a week in the past 3 months
Romera et al. (2011)	Nicaragua	A representative sample of 3042 pupils from 46 elementary schools (age $M = 11.3$, $SD = 1.6$)	Involvement in any bullying role was reported by 50% of the students. Frequent perpetration by 6%, frequent victimization by 25.3% and there were also 18.7% of frequent bully/victims Cutoff point: at least many times in the past 3 months
Sittichai (2014)	Thailand	A total number of 1200 adolescents (14 and 17 years old) in 12 secondary schools	Occasional victimization: 16% Frequent victimization: 6% Cutoff point: occasional—once or twice, or more, in the past couple of months; frequent—two or three times a month or more, in the past couple of months
Wang et al. (2009)	USA	Nationally representative sample of 7508 US adolescents, grade 6–10	Perpetration: physical (13.3%), verbal (37.4%), social (27.2%) and electronic (8.3%) Victimization: physical (12.8%), verbal (36.5%), relational (41%) and cyber (9.8%) Cutoff point: at least once in at least 2 months

eradicate this kind of violence are actually bearing fruit. Nevertheless, taking into account the highly damaging consequences of bullying for individuals and societies, new research and programs are necessary to continue with this effort and decrease the rates even further.

2.5 Risk Factors and Short-Term Outcomes

Many studies have focused on risk factors related to bullying. Most of them are correlational and cross-sectional and focus on short-term relationships among variables. Thus, it is important to take into account that although we call these variables risk and protective factors on theoretical basis, most of the studies are cross-sectional and, therefore, cannot confirm causal relationships. Nevertheless, these studies are very useful to describe variables that are related to bullying. Protective factors are also studied, although this research line is still in a relatively early stage. Thus, this section will focus on risk factors and short-term outcomes of being involved in bullying. This description is based on our systematic review of the systematic reviews and meta-analyses on bullying (Zych et al. 2015b), providing information from the research syntheses. Further details of the personal and contextual protective factors are described in Chaps. 3 and 4. Chapter 6 will focus on long-term consequences of bullying and how children involved in the phenomenon can be protected against these negative outcomes.

Gender and age have been broadly studied to find out whether girls and boys are at different risk of being involved in bullying and whether certain age groups are more involved than others. A meta-analysis performed on 153 studies by Cook et al. (2010) showed that, overall, boys were more involved than girls in perpetration, victimization and as bully/victims. Age groups ranging from early childhood (3–4 years) to adolescence (15–18 years) were compared and there was a weak, but significant positive relationship between age and perpetration. However, the relationship between age and victimization or bully/victim status was not significant. A narrative review conducted by Farrington and Baldry (2010) showed that gender differences varied according to the different types of bullying. Perpetration is more common in boys, but this applies mainly to direct bullying. On the other hand, indirect bullying seems to be more common among girls. These authors also found that victimization seems to decrease with age but this was not clear in the case of perpetration. Thus, some gender differences and age trends in involvement in bullying have already been described but it would be useful to conduct new meta-analyses and longitudinal prospective studies to provide more details on on these topics.

Personal and contextual risk and protective factors and outcomes have been reported in thousands of articles on bullying. Many of them have been included in meta-analyses that were synthesized in a recent article (Zych et al. 2015b). In this chapter, only the variables with the largest effect sizes are described but there are many other variables with smaller but significant effects that are also important in explaining bullying and its consequences. Interested readers can find more information in the meta-analyses included in our systematic review. A summary of risk and protective factors and outcomes with the largest effect sizes is shown in Fig. 2.1.

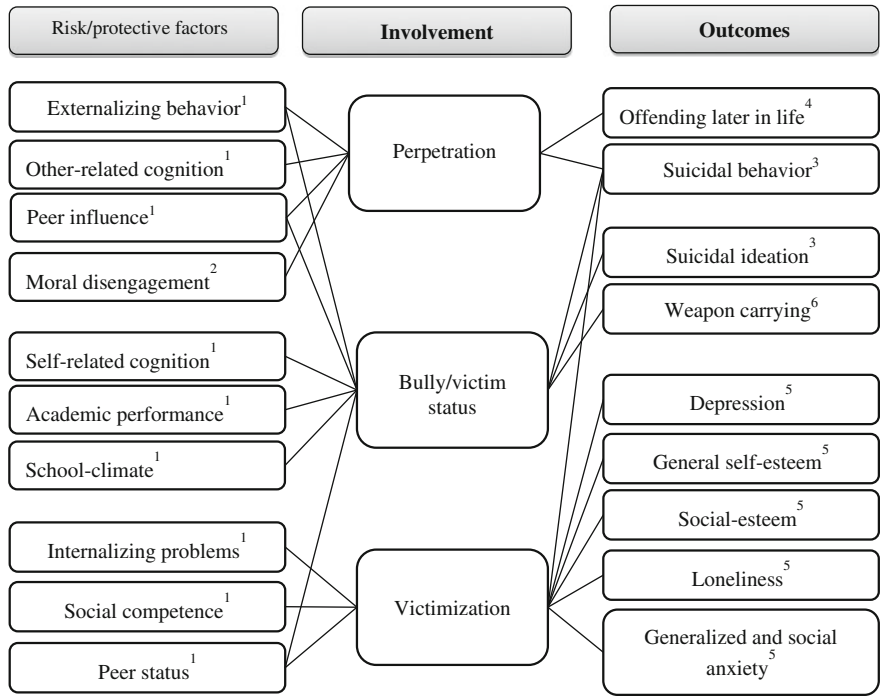


Fig. 2.1 Risk and protective factors and outcomes of bullying involvement with the largest effect sizes according to meta-analyses. *Notes* 1 Cook et al. (2010); 2 Gini et al. (2014); 3 Holt et al. (2015); 4 Tofi et al. (2011b); 5 Hawker and Boulton (2000); 6 Van Geel et al. (2014)

2.5.1 Perpetration

Some studies have investigated risk and protective factors for perpetration. Cook et al. (2010) reported risk and protective factors with moderate effect sizes for perpetration such as externalizing behavior, peer influence, and other-related cognitions. Externalizing behavior was defined as aggressive, defiant, or disruptive undercontrolled acts and was positively related to perpetration. Peer influence was also an important predictor with lower levels of perpetration in children affiliated to prosocial peer groups that reinforce positive rather than negative behaviors. Other-related cognitions, that is, cognitions about other people including normative beliefs, empathy and perspective taking, also predicted less perpetration. Gini et al. (2014) focused on moral disengagement. This was defined by Bandura et al. (1996) as a mechanism through which people justified the transgression of moral rules, being able to convince themselves that these rules do not apply to certain situations. Applying this idea to bullying, it could be possible that the aggressors understand and have internalized moral principles according to which hurting other people is not right but, at the same time, disconnect morally, thinking that this should not be

applied to certain people or groups who become their victims, finding excuses to justify their behavior. In their meta-analysis, Gini et al. (2014) found that moral disengagement was an important predictor of perpetration.

Perpetration was found to be related to very damaging outcomes. Holt et al. (2015) found that perpetration was associated with more suicidal behavior such as suicidal attempts and self-injury. A systematic review and meta-analysis of longitudinal studies conducted by Ttofi et al. (2011b) reported that perpetration predicted offending later in life, and this issue is described and analyzed in Chap. 6.

2.5.2 *Victimization*

There are also factors that increase the risk of victimization or protect children from being victimized. Cook et al. (2010) found that victimization was predicted by internalizing behaviors, social competence and peer status. Internalizing problems include depressive, anxious, withdrawn, or avoidant responses and are inwardly directed. These responses were related to more victimization. Social competence, defined as skills that help in interacting with other people and avoiding socially unaccepted behaviors, was related to lower levels of victimization. Peer status, that is the quality of peer relationships taking into account rejection and isolation on the one hand and popularity and likeability on the other hand, was also related to less victimization.

The outcomes of victimization are very harmful. The largest effect size was reported by Hawker and Boulton (2000) in relation to depression. These authors also found that victims showed lower general self-esteem and social esteem. Children who were victimized by their peers were also lonelier and had higher levels of general and social anxiety. Holt et al. (2015) discovered that suicidal behavior was also more common in victims. The consequences of victimization are reviewed in Chap. 6.

2.5.3 *Bully/Victims*

Bully/victims share some of the risk and protective factors and outcomes with perpetrators and also with victims, but there are some variables that are related more to this status. Cook et al. (2010) reported that bully/victim status was predicted by peer influence, externalizing behavior, social competence, and peer status. It was also predicted by self-related cognitions, with less involvement in this role among children who display more positive cognitions about themselves such as self-respect, self-esteem, and self-efficacy. Better academic performance also predicts a lower likelihood of being a bully/victim. Finally, these authors also found that school climate, defined as a sense of belonging to the school, respect and fair treatment, was also related to fewer bully/victims.

Damaging consequences were also reported for students involved in bullying as bully/victims. Some of these consequences are very serious. The strongest effect sizes were found by Holt et al. (2015), who reported that bully/victims had more suicidal behavior and also more suicidal ideation. Also, Van Geel et al. (2014) found that bully/victim status was strongly related to weapon carrying. More research is needed on bully/victims, especially to investigate whether victimization leads to bullying and viceversa.

2.6 Summary

Bullying is a specific kind of aggression in which some students intentionally show frequent and long-term aggressive behavior toward their peers who cannot easily defend themselves. There are different forms of bullying and these can be classified as direct and indirect. There are also different roles of students, where some of them become perpetrators, others become victims, and others are bully/victims. Moreover, there is a group of bystanders who witness this kind of violence.

Although research on bullying started in the 1970s, there is a broad literature on the topic. There are thousands of studies on the nature and dynamics of the phenomenon and many risk and protective factors have been described. Anti-bullying programs are also being implemented and evaluated throughout the world. Systematic reviews and meta-analyses on the topic provide very thorough insights and a global vision on the field. Taking into account the complex nature of the phenomenon and differences in the methodologies across the studies, its prevalence is very difficult to compare among contexts and countries. Nevertheless, it can be concluded that bullying is important all over the world.

Meta-analytic findings provide information on many risk and protective factors and outcomes taking into account the different roles of involvement in bullying. Perpetration is predicted by externalizing behavior, other-related cognitions, peer influence, and moral disengagement; and, it is related to offending later in life and suicidal behavior. Victimization is predicted by internalizing problems, social competence, and peer status and its outcomes are very damaging, including depression, social and self-esteem, loneliness, and generalized and social anxiety. The predictors of bully/victims include externalizing behavior, peer influence, self-related cognition, academic performance, school climate, and peer status. However, many of these findings are based on cross-sectional studies, where the time ordering is not clear. More prospective longitudinal studies of risk and protective factors for bullying and victimization are needed.

References

- Anti-Bullying Alliance. (2015). *Focus on: Bullying. A report from the anti-bullying alliance, hosted by National Children's Bureau*. London: National Children's Bureau.
- Atlas, R. S., & Pepler, D. J. (1998). Observations of bullying in the classroom. *Journal of Educational Research*, 92, 86–99.
- Baldry, A. C., & Farrington, D. P. (2004). Evaluation of an intervention program for the reduction of bullying and victimization in schools. *Aggressive Behavior*, 30, 1–15.
- Baldry, A. C., Farrington, D. P., & Sorrentino, A. (2015). “Am I at risk of cyberbullying”? A narrative review and conceptual framework for research on risk of cyberbullying and cybervictimization: The risk and needs assessment approach. *Aggression and Violent Behavior*, 23, 36–51.
- Baldry, A. C., Farrington, D. P., & Sorrentino, A. (2016). Cyberbullying in youth. A pattern of disruptive behaviour. *Psicología Educativa*, 22, 19–26.
- 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.
- Berne, S., Frisen, A., Schultze-Krumbholz, A., Scheithauer, H., Naruskov, K., Luik, P., et al. (2013). Cyberbullying assessment instruments: A systematic review. *Aggression and Violent Behavior*, 18, 320–334.
- BIG. (2015). *Bullying Intervention group: Current statistics August 2015*. Retrieved June 21, 2016 from <https://www.bullyinginterventiongroup.co.uk/>.
- Chan, H. C., & Wong, D. S. W. (2015). Traditional school bullying and cyberbullying in Chinese societies: Prevalence and a review of the whole-school intervention approach. *Aggression and Violent Behavior*, 23, 98–108.
- Chaux, E., Molano, A., & Podlesky, P. (2009). Socio-Economic, socio-political and socio-emotional variables explaining school bullying: A country-wide multilevel analysis. *Aggressive Behavior*, 35, 520–529.
- Cheng, Y. L., Newman, I. M., Qu, M., Mbulo, L., Chai, Y., Chen, Y., et al. (2010). Being bullied and psychosocial adjustment among middle school students in China. *Journal of School Health*, 80, 193–199.
- Cook, C. R., Williams, K. R., Guerra, N. G., Kim, T. E., & Sadek, S. (2010). Predictors of bullying and victimization in childhood and adolescence: A meta-analytic investigation. *School Psychology Quarterly*, 25, 65–83.
- Craig, W., Harel-Fisch, Y., Fogel-Grinvald, H., Dostaler, S., Hetland, J., Simons-Morton, B., et al. (2009). A cross-national profile of bullying and victimization among adolescents in 40 countries. *International Journal of Public Health*, 54, 216–224.
- Del Rey, R., Elipe, P., & Ortega-Ruiz, R. (2012). Bullying and cyberbullying: Overlapping and predictive value of the co-occurrence. *Psicothema*, 24, 608–613.
- Della Cioppa, V., O'Neil, A., & Craig, W. (2015). Learning from traditional bullying interventions: A review of research on cyberbullying and best practice. *Aggression and Violent Behavior*, 23, 61–68.
- Dooley, J. J., Pyzalski, J., & Cross, D. (2009). Cyberbullying versus face-to-face bullying: A theoretical and conceptual review. *Zeitschrift Fur Psychologie-Journal of Psychology*, 217, 182–188.
- Due, P., Holstein, B. E., Lynch, J., Diderichsen, F., Gabhain, S. N., Scheidt, P., Curie, C., & The Health Behaviour in School-Aged Children Bullying Working Group. (2005). Bullying and symptoms among school-aged children: international comparative cross sectional study in 28 countries. *European Journal of Public Health*, 15, 128–132.
- Eslea, M., Menesini, E., Morita, Y., O'Moore, M., Mora-Merchan, J. A., Pereira, B., et al. (2004). Friendship and loneliness among bullies and victims: Data from seven countries. *Aggressive Behavior*, 30, 71–83.

- Evans, C. B. R., Fraser, M. W., & Cotter, K. L. (2014). The effectiveness of school-based bullying prevention programs: A systematic review. *Aggression and Violent Behavior, 19*, 532–544.
- Farrington, D. P. (1993). Understanding and preventing bullying. *Crime and Justice, 17*, 381–458.
- Farrington, D. P., & Baldry, A. C. (2010). Individual risk factors for school bullying. *Journal of Aggression, Conflict and Peace Research, 2*, 4–16.
- Farrington, D. P., & Petrosino, A. (2000). Systematic reviews of criminological interventions: The Campbell Collaboration Crime and Justice Group. *International Annals of Criminology, 38*, 49–66.
- Farrington, D. P., & Ttofi, M. M. (2009). School-based programs to reduce bullying and victimization. *Campbell Systematic Reviews, 6*, 1–148.
- Farrington, D. P., Ttofi, M. M., & Lösel, F. (2016). Developmental and social prevention. In D. Weisburd, D. P. Farrington, & C. Gill (Eds.), *What works in crime prevention and rehabilitation: Lessons from systematic reviews* (pp. 15–76). New York: Springer.
- Gini, G., Pozzoli, T., & Hymel, S. (2014). Moral disengagement among children and youth: A meta-analytic review of links to aggressive behavior. *Aggressive Behavior, 40*, 56–68.
- Guerra, N. G., Williams, K. R., & Sadek, S. (2011). Understanding bullying and victimization during childhood and adolescence: A mixed methods study. *Child Development, 82*, 295–310.
- 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. *Journal of Child Psychology and Psychiatry and Allied Disciplines, 41*, 441–455.
- Heinemann, P. (1969). Apartheid. *Liberal Debat, 2*, 3–14.
- Holt, M. K., Vivolo-Kantor, A. M., Polanin, J. R., Holland, K. M., DeGue, S., Matjasko, J. L., et al. (2015). Bullying and suicidal ideation and behaviors: A meta-analysis. *Pediatrics, 135*, E496–E509.
- Lipsey, M. W., & Wilson, D. B. (2001). *Practical meta-analysis*. Thousand Oaks, CA: Sage.
- Llorent, V. J., Ortega, R., & Zych, I. (2016). Bullying and cyberbullying in minorities: Are they more vulnerable than the majority group? *Frontiers in Psychology, 7*, 1507.
- 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.
- Murray, J., Farrington, D. P., & Eisner, M. P. (2009). Drawing conclusions about causes from systematic reviews of risk factors: The Cambridge Quality Checklists. *Journal of Experimental Criminology, 5*, 1–23.
- Nocentini, A., Calmaestra, J., Schultze-Krumbholz, A., Scheithauer, H., Ortega, R., & Menesini, E. (2010). Cyberbullying: Labels, behaviours and definition in three European countries. *Australian Journal of Guidance and Counselling, 20*, 129–142.
- Olweus, D. (1973). *Hackkycklingar och översittare: Forskning om skolmobbing*. Stockholm: Almqvist & Wiksell.
- Olweus, D. (1994). Annotation—Bullying at school—Basic facts and effects of a school-based intervention program. *Journal of Child Psychology and Psychiatry and Allied Disciplines, 35* (7), 1171–1190.
- Olweus, D., & Limber, S. P. (2010). The Olweus bullying prevention program: Implementation and evaluation over two decades. In S. R. Jimerson, S. M. Swearer, & D. L. Espelage (Eds.), *The handbook of school bullying: An international perspective* (pp. 377–402). New York: Routledge.
- Ortega, R. (1997). El proyecto Sevilla Anti-violencia Escolar. Un modelo de intervención preventiva contra los malos tratos entre iguales. *Revista de Educación, 313*, 143–158.
- Ortega, R. (2010). *Agresividad injustificada, bullying y violencia escolar*. Madrid: Alianza Editorial.
- Ortega, R., Elisei, P., Mora-Merchan, J. A., Genta, M. L., Brighi, A., Guarini, A., et al. (2012). The emotional impact of bullying and cyberbullying on victims: A European cross-national study. *Aggressive Behavior, 38*, 342–356.

- Perren, S., Dooley, J., Shaw, T., & Cross, D. (2010). Bullying in school and cyberspace: Associations with depressive symptoms in Swiss and Australian adolescents. *Child and Adolescent Psychiatry and Mental Health*, 4, 28.
- Raskauskas, J., & Stoltz, A. D. (2007). Involvement in traditional and electronic bullying among adolescents. *Developmental Psychology*, 43, 564–575.
- Rigby, K., & Slee, P. T. (1991). Bullying among Australian school-children-reported behavior and attitudes toward victims. *Journal of Social Psychology*, 131, 615–627.
- Rigby, K., & Smith, P. K. (2011). Is school bullying really on the rise? *Social Psychology of Education*, 14, 441–455.
- Rivers, I., & Smith, P. K. (1994). Types of bullying behavior and their correlates. *Aggressive Behavior*, 20, 359–368.
- Romera, E. M., Del Rey, R., & Ruiz, R. O. (2011). Prevalence and differentiating aspects related to gender with regard to the bullying phenomenon in poor countries. *Psicothema*, 23, 624–629.
- Salmivalli, C. (2010). Bullying and the peer group: A review. *Aggression and Violent Behavior*, 15, 112–120.
- Salmivalli, C., Lagerspetz, K., Bjorkqvist, 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.
- Sittichai, R. (2014). Information technology behavior cyberbullying in Thailand: Incidence and predictors of victimization and cyber-victimization. *Asian Social Science*, 10, 132–140.
- Sittichai, R., & Smith, P. K. (2015). Bullying in South-East Asian countries: A review. *Aggression and Violent Behavior*, 23, 22–35.
- Slonje, R., & Smith, P. K. (2008). Cyberbullying: Another main type of bullying? *Scandinavian Journal of Psychology*, 49, 147–154.
- Smith, P. K., & Brain, P. (2000). Bullying in schools: Lessons from two decades of research. *Aggressive Behavior*, 26, 1–9.
- Smith, P. K., Cowie, H., Olafsson, R. F., & Liefhoghe, A. P. D. (2002). Definitions of bullying: A comparison of terms used, and age and gender differences, in a fourteen-country international comparison. *Child Development*, 73, 1119–1133.
- Smith, P. K., Mahdavi, J., Carvalho, M., Fisher, S., Russell, S., & Tippett, N. (2008). Cyberbullying: Its nature and impact in secondary school pupils. *Journal of Child Psychology and Psychiatry*, 49, 376–385.
- Tofi, M. M., Bowes, L., Farrington, D. P., & Lösel, F. (2014a). Protective factors that interrupt 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.
- Tofi, M. M., Eisner, M., & Bradshaw, C. P. (2014b). Bullying prevention: Assessing existing meta-evaluations. In G. Bruinsma & D. Weisburd (Eds.), *Encyclopedia of criminology and criminal justice* (pp. 231–242). New York: Springer.
- Tofi, M. M., Farrington, D. P., Lösel, F., & Loeber, R. (2011a). Do the victims of school bullies tend to become depressed later in life? A systematic review and meta-analysis of longitudinal studies. *Journal of Aggression, Conflict and Peace Research*, 3, 63–73.
- Tofi, M. M., Farrington, D. P., Lösel, F., & Loeber, R. (2011b). The predictive efficiency of school bullying versus later offending: A systematic/meta-analytic review of longitudinal studies. *Criminal Behaviour and Mental Health*, 21, 80–89.
- Van Geel, M., Vedder, P., & Tanilon, J. (2014). Bullying and weapon carrying: A meta-analysis. *JAMA Pediatrics*, 168, 714–720.
- Vivolo-Kantor, A. M., Martell, B. N., Holland, K. M., & Westby, R. (2014). A systematic review and content analysis of bullying and cyber-bullying measurement strategies. *Aggression and Violent Behavior*, 19, 423–434.
- Wang, J., Iannotti, R. J., & Nansel, T. R. (2009). School bullying among adolescents in the United States: Physical, verbal, relational, and cyber. *Journal of Adolescent Health*, 45, 368–375.
- Whitney, I., & Smith, P. K. (1993). A survey of the nature and extent of bullying in junior, middle and secondary schools. *Educational Research*, 35, 3–25.

- Ybarra, M. L., & Mitchell, K. J. (2004a). Online aggressor/targets, aggressors, and targets: A comparison of associated youth characteristics. *Journal of Child Psychology and Psychiatry*, 45, 1308–1316.
- Ybarra, M. L., & Mitchell, K. J. (2004b). Youth engaging in online harassment: Associations with caregiver-child relationships, Internet use, and personal characteristics. *Journal of Adolescence*, 27, 319–336.
- Zych, I., Baldry, A.C., & Farrington, D.P. (2017). School bullying and cyberbullying: Prevalence, characteristics, outcomes, and prevention. In V.B. Van Hasselt, & M.L. Bourke (Eds.), *Handbook of behavioral criminology: Contemporary strategies and issues*. New York: Springer.
- Zych, I., Ortega-Ruiz, R., & Del Rey, R. (2015a). Scientific research on bullying and cyberbullying: Where have we been and where are we going. *Aggression and Violent Behavior: A Review Journal*, 24, 188–198.
- Zych, I., Ortega-Ruiz, R., & Del Rey, R. (2015b). Systematic review of theoretical studies on bullying and cyberbullying: Facts, knowledge, prevention, and intervention. *Aggression and Violent Behavior: A Review Journal*, 23, 1–21.
- Zych, I., Ortega-Ruiz, R. & Marín-López, I. (2016). Cyberbullying: A Systematic review of research, its prevalence and assessment issues in Spanish studies. *Psicología Educativa*, 22, 5–18.

Chapter 3

Personal Protective Factors Against Bullying: Emotional, Social, and Moral Competencies

3.1 Personal Protective Factors Against Bullying

Although there is no specific profile of a child involved in bullying, there are some personal characteristics that increase a child's likelihood of being involved. At the same time, there are certain competencies that can be acquired to protect children against becoming perpetrators or victims. These characteristics can be described in terms of risk and protective factors.

Conceptual issues regarding risk and protective factors were discussed by Lösel and Farrington (2012) in the context of youth violence. Risk factors were defined as characteristics that predict future violent behavior including its onset, persistence, and aggravation. On the other hand, protective factors were of two types—direct and buffering. Direct protective factors are those that predict lower levels of future violent behavior while buffering protective factors predict a lower level of violence in the presence of risk factors. For example, if growing up in a neighborhood with a high level of criminality is a risk factor, there are probably some buffering protective factors that explain why some children from this neighborhood will not get involved in delinquent acts. Lösel and Farrington (2012) also point out that some variables can be risk and protective factors at the same time. This means that, for example, a low level of moral development can be considered as a risk factor, whereas a high level of moral development could protect children from involvement in violence. In this chapter, we will focus on protective factors although this does not mean that they cannot act as risk factors as well.

Specific review articles focusing on protective factors against bullying are still very scarce. The narrative review on protective factors against a broader concept of youth violence conducted by Lösel and Farrington (2012) suggests that variables, such as cognitive competence and intelligence, social cognitions, temperament, and biological factors, might be important from the individual perspective. There are also family, school, peer, and neighborhood factors that play an important role in direct and buffering protection against violence. Although all these factors are

important, in this chapter, we will focus on the individual characteristics that can be changed through education. Variables, such as intelligence, temperament or biological factors, are relatively stable; therefore, they are less likely to be modifiable in attempting to protect children against bullying and its consequences. Family factors are also usually beyond the influence of schools, although some interventions are being conducted and studies on family–child relationships and bullying will be described in Chap. 4. School factors are the main topic of the Chap. 4, and emotional, social, and moral competencies necessary to initiate and maintain positive peer relationships are described in this chapter.

Taking into account research syntheses described in Chap. 2, we believe that individual variables can be grouped into three categories of protective factors against bullying—emotional, social, and moral competence. Emotional competence consists of understanding emotions in oneself and others, positive emotional management and use, and being able to avoid undercontrolled (externalizing) or overcontrolled (internalizing) responses. Social competence is the capacity to understand other people, communicate in an adequate way, and initiate and maintain high quality positive relationships with prosocial peers (high peer status in a prosocial group), resisting negative peer influence. Moral competence is the ability to understand moral principles and act in a morally adequate way, understanding that hurting other people cannot be justified and applying this in real-life situations.

Although this chapter is structured into these three domains (emotional, social, and moral), there are overlaps among them. And, all of these competencies are involved at the same time in building positive relationships and protecting children from bullying. It should also be taken into account that most of these studies are correlational and cross-sectional and, therefore, no causal relationships can be established. To avoid a possible problem of a tautological statement of the theory, it should be kept in mind that these competencies are conceptually different from a low level of aggressive behavior or not being involved in bullying. For example, it would be possible to imagine a person who usually helps other people, understands other's feelings and thoughts, controls their feelings, and understands moral principles being, at the same time, a perpetrator or a victim. Thus, bullying does not necessarily reflect low competence, and the relationships between these competencies and bullying is described in this chapter.

3.2 Protective Role of Emotional Competence

3.2.1 Emotions

Emotions appear when individuals experience events that affect their lives or welfare in a significant, positive or negative way, preparing people to respond to these events (Ekman 2007). These have been described as bioregulatory reactions

that induce physiological states that would lead to wellbeing (Damasio 2004). There are two different brain mechanisms that are related to the emotions: the fast and automatic road activated after perceiving a potentially important stimulus and the slower and more elaborated pathway that involves thinking about and interpreting the stimulus (LeDoux 1998). Most researchers agree on the fact that emotions include physiological arousal (e.g., accelerated heartbeat, sweating), cognitive appraisal (e.g., interpreting a situation as life-threatening), and behavior (e.g., running away, fighting or jumping).

Emotions have been fascinating researchers from all over the world for many decades and the number of studies on the topic is great, including research from different perspectives and fields such as psychology, neuroscience, anthropology, or humanities. Classical research conducted by Ekman (1992), Plutchik (1980), and Izard (1997) led to the conclusion that some emotions were basic and natural; that is, that all human beings would express and perceive these emotions in the same way. Thus, some emotions were understood as natural and not affected by the culture or being constructed voluntarily by people. Other emotions were described as secondary emotions that appeared as a result of mixing other, more basic emotions. Although research failed to find a neurological substrate that would be specific to these two types of emotions, there is agreement on the fact that emotions can be controlled and managed, at least to a certain degree. Moreover, it is possible to learn how to express and manage emotions (e.g., anger) in a socially positive way.

3.2.2 Emotional Intelligence and Competence

Emotional intelligence was a term suggested by Mayer and Salovey (1997) for the ability to perceive, express, understand, and regulate emotions in oneself and others. These researchers distinguished four different abilities of emotional intelligence. Emotional perception and expression is the basis of emotional intelligence and includes good skills to recognize the tone of the voice, body or facial expression of emotions, and the ability to consider different communication channels. The second ability, using emotions to facilitate thought, is to know how to use different emotional states to improve performance in tasks. This means that people who score high in this dimension understand well the relationship between feeling and thinking and are able to use it in an adequate way. The third branch, understanding emotions, includes being able to analyze the causes and outcomes of the emotions in oneself and others, and knowing which emotions would usually appear in certain contexts and situations. The fourth branch, regulating and managing emotions, is the ability to express emotions in a socially adequate way, being able to increase and decrease certain emotions depending on the situation (Mayer et al. 2004). Scoring high in emotional intelligence was found to be related to psychological wellbeing (Sanchez-Alvarez et al. 2016) and a higher quality of interpersonal relationships (Lopes et al. 2003).

The term emotional competence is closely related to emotional intelligence (see for example, Schutte et al. 1998), although emotional competence is more focused on skills that can be taught and learned and it has been more linked to the school setting. At the same time, emotional competence refers to skills that are applied to real life situations and according to the needs of each moment, mostly related to the social situation (Saarni 1999). Thus, children can learn to be emotionally skillful if their development occurs in an adequate social context. Emotional competence is improved through continuous interaction with other people and it is social in nature. As stated by Denham (2007), this social nature is threefold; specifically, the behaviors of other people influence one's emotions and subsequent response, one's emotions influence behaviors and help to communicate with others, and one's emotions influence the emotional experience of others. Therefore, it is crucial for children to be able to experience and regulate emotions, express them in an adequate way, and understand them (Denham 2007). The following section will analyze whether being skillful with emotions is related to bullying.

3.2.3 Emotional Competence and Bullying

A systematic review conducted by García-Sancho et al. (2014) on the relationship between different types of aggressive behavior and emotional intelligence shows that most of the studies find negative significant relationships between the two. There are also many empirical studies that focused on the relationship between bullying and emotional intelligence or competence. Examples of these studies and their main findings are included in summary Table 3.1.

Therefore, most of the studies described in Table 3.1 show that emotional competence protects children from being involved in bullying as victims or perpetrators. Although more studies on the topic are still needed, it seems reasonable to include these competencies in the school curriculum and also in anti-bullying programs.

3.3 Social Competence Protects Against Bullying

3.3.1 Social Competence

From the very beginning of their lives, human beings interact with other people. With practice and positive interpersonal relationships, people can become socially competent. According to Topping et al. (2000), the term social competence was defined as being able to achieve social goals in a specific context and culture integrating abilities to think, feel, and act. These authors explain that people with a high level of social competence are able to analyze and think about different social

Table 3.1 Studies on emotional intelligence or competence and its relation to bullying

Study	Country and participants	Variables measured	Main findings
Baroncelli and Ciucci (2014)	Italy; 669 preadolescents (age 10–15)	Appraisal of self and others' emotions, regulation and use of emotions	Perpetration was predicted by deficiencies in regulating emotions and was not significantly predicted by the appraisal of emotions in self and others
Casas et al. (2015)	Spain; 2,806 students in secondary education schools in Spain (age 11–21)	Emotional attention: paying attention to the emotions Emotional clarity: understanding the mechanisms and meanings of emotions Emotional repair: being able to regulate emotions	Victimization was predicted by more emotional attention and less clarity and repair. Perpetration was predicted by less emotional attention, clarity and repair
Elipe et al. (2012)	Spain; 5759 adolescents in secondary education schools (age 12–18)	Emotional attention, clarity and repair (see Casas et al. 2015)	Involvement (including any bullying role) was predicted by higher level of attention and lower level of repair. Clarity was not a significant predictor. Victims displayed higher attention and lower clarity than perpetrators. None of the variables were significant predictors of bullying duration
Garner and Hinton (2010)	US; 77 children in after-school programs (age 7–11)	Emotional self-regulation and knowledge on appropriate displays of sadness and anger, matching stories and vignettes	Knowledge about how sadness is expressed, but not anger, predicted victimization (only self-reported and physical). Knowledge about anger or sadness expression did not predict perpetration. Lability and negativity in emotion regulation predicted caregiver reported victimization and perpetration

(continued)

Table 3.1 (continued)

Study	Country and participants	Variables measured	Main findings
Kokkinos and Kipritsi (2012)	Greece; 206 elementary school pupils (age 10–13)	Trait emotional intelligence (without subscales) Emotional self-efficacy—perceived efficacy when coping with negative emotions	High levels of emotional trait intelligence predicted lower levels of victimization and perpetration. Perceived emotional self-efficacy did not predict victimization or perpetration
Lomas et al. (2012)	Australia; 68 adolescents (age 12–16)	Understanding emotions of others, emotional recognition and expression, emotional management and control, and emotions direct cognition (using emotions to think)	Understanding emotions of others was related to less perpetration whereas emotions direct cognitions and emotional management and control were related to less victimization. Relationships between the other variables were not statistically significant
Mahady et al. (2000)	Canada; 120 (30 victims, 30 perpetrators and 30 uninvolved) elementary school students (grades 1–6)	Observational study (videotaped) of emotional display and regulation during the episodes of bullying	The most frequently displayed emotions in bullies and victims were interest and joy; ignoring and being verbally and physically aggressive was the most common coping strategy. This emotional display does not seem to be adequate and can actually encourage more bullying. The aggressive coping strategy was found to be related to bullying perpetuation and escalation whereas less common problem solving strategies were related to the resolution of bullying episodes

(continued)

Table 3.1 (continued)

Study	Country and participants	Variables measured	Main findings
Mavroveli and Sanchez-Ruiz (2011)	England; 565 elementary school pupils (age 7–12)	Trait emotional intelligence analyzed without subscales	Self-reported victimization and perpetration had a significant negative relationship with emotional intelligence. Peer reported perpetration was also related to lower emotional intelligence. There was no significant relationship between peer reported victimization and emotional intelligence
Polan et al. (2010)	USA; 171 young adolescents (age 11–14)	Expression of own emotions, interpersonal skills (empathy, social responsibility and relationship skills) and stress management	Expressing own emotions had no significant relationship with perpetration and good interpersonal skills and stress management skills predicted less perpetration
Shields and Cicchetti (2001)	USA; 267 children (age 8–12)	Emotion regulation including aspects such as socially appropriate and adaptive regulation, empathy, lability or anger regulation	Emotion dysregulation was a significant predictor of victimization and perpetration
Schockman et al. (2014)	Australia; 284 adolescents (age 11–18)	Same as Lomas et al. (2012)	Perpetration was predicted by better understanding of emotions but also by lower emotional management and control. Victimization was predicted by lower emotional management and control

(continued)

Table 3.1 (continued)

Study	Country and participants	Variables measured	Main findings
Woods et al. (2009)	UK; 373 children (aged 9–11)	Emotion recognition abilities measured through a task in which children were asked to identify emotions (sadness, happiness, anger and fear) on photographs of faces	Children who suffered physical victimization only had the same emotion recognition abilities as their non-victimized peers. Children who suffered relational victimization and mixed victimization (relational and physical at the same time) showed a higher total number of errors with more errors in recognizing fear in both cases and with more errors in recognizing anger for pure relational victims

contexts and circumstances, integrating their feelings in these contexts, and choose the most appropriate behaviors. To achieve this, people need to be able to perceive and interpret social cues, be aware of the obstacles and consequences of each behavior, think about possible and socially positive solutions, and be able to put them into practice and display self-efficacy.

Rose-Krasnor (1997) conducted a narrative review on social competence in which she distinguished three different levels. At the more general, theoretical level, social competence is understood as effective interaction with others. The index level focuses on the quality of the interactions for self and others in specific situations, including relationships, sequence, self-efficacy, or social status. The skills level is the most specific one and consists of personal skills that make it possible to interact and relate to other people.

Social competence is based on thoughts and also on feelings. Thus, it is related to emotional competence and sometimes the two concepts are treated jointly as social–emotional competence. Experiencing, expressing, understanding, and regulating emotions are a *sine qua non* condition for social development (Denham et al. 2011). Although no clear limit can be established between the two, in this section, we will focus specifically on competencies that allow children to initiate and maintain positive relationships with others, and whether these skills can protect them from bullying.

3.3.2 Bullies as Socially Incompetent or Socially Skillful: A Debate

Classical studies on social information processing in aggressive children point out that these children fail in perceiving or interpreting social cues, selecting goals, or in response strategies (Crick and Dodge 1994). Deficits in theory of mind (being able to accurately attribute mental states to oneself and others, understanding that other people have minds that are different from one's mind) were found in children with conduct problems (Happé and Frith 1996).

Nevertheless, there is an open debate on whether social skills protect children from being involved in bullying. Sutton et al. (1999a) argued that bullying is a specific kind of aggressive behavior and that perpetrators can actually be skillful manipulators. Manipulation in social interaction requires having a good theory of mind and skillful processing of social information rather than deficits in understanding other people's mental states or social cues. To prove this idea, Sutton et al. (1999b) presented a set of stories to primary school children in the UK in which the participants were asked to suggest what the character's thoughts and feelings would be in different situations. Indeed, they found that perpetrators had higher scores in understanding cognitions and emotions in these stories (Sutton et al. 1999b).

In this debate, Crick and Dodge (1999) responded to Sutton et al. (1999a), stating that it is possible that perpetrators might be skillful in perspective taking, but that there must be other cognitive processes which, as a whole, make them socially incompetent. Arsenio and Lemerise (2001) added to this debate, pointing out that a good theory of mind might or might not involve its positive use in interpersonal relationships. Moreover, if the definition of social competence focuses on positive and prosocial relationships, including also moral values, then some social skills could be used in some socially incompetent behaviors such as bullying. Thus, a combination of social skills, and knowledge adequately applied in specific contexts and circumstances, together with emotional and moral competence, is needed to protect children from being involved in bullying.

3.3.3 Social Competence and Bullying

A systematic review of theoretical studies (Zych et al. 2015) shows that social competence is one of the most important variables related to involvement in bullying. This was found in the meta-analysis conducted by Cook et al. (2010) in which other-related cognitions and peer influence were found to protect against perpetration while social competence and peer status protected against victimization.

Empathy can be classified as both social and emotional competence. Given that it is always related to interaction with others, it is included in this part of the chapter

focused on social competence. Empathy has been defined as understanding other people's emotions (cognitive empathy) and actually experiencing the emotional states of others (affective empathy). Our recent systematic review and meta-analysis on empathy and involvement in bullying, based on 50 empirical studies from all over the world (Zych et al. 2017) shows that perpetrators and bully-victims display less cognitive and also less affective empathy. However, children who defend the victim have higher scores in both types of empathy. There is no relationship between cognitive or affective empathy and victimization.

There are also other studies that show that social competence can protect children from involvement in bullying. In England, Mavroveli and Sanchez-Ruiz (2011) found that social competence in primary school students (evaluated through peer nominations of being a leader, cooperating and being kind), was negatively related to bullying perpetration and victimization. In US adolescents, Polan et al. (2010) found that interpersonal skills, such as the perceived importance of having friends, trying not to hurt others, respecting and caring about others or liking most of the people, predicted less involvement in violence in general but were not a significant predictor of bullying perpetration specifically.

Camodeca et al. (2015) studied Italian preschoolers and found that high levels of social competence, defined as the ability to develop positive relationships, predicted less involvement in victimization and perpetration and also more defending the victim when witnessing bullying. Another study with adolescents from Holland explored the relationship between popularity, peer-nominated acceptance, and involvement in bullying (De Bruyn et al. 2010). It was found that victimization was predicted by low perceived popularity and low peer-nominated acceptance, whereas perpetration was predicted by high perceived popularity and low acceptance.

In Spain, Gómez-Ortiz et al. (2017) conducted a study on social competence with a representative sample of more than 4000 adolescents. They found that social adjustment, defined as social acceptance and friendship, was lower in bullies, bully/victims and victims compared to children not involved in bullying. Perceived efficacy in social relationships was also lower in bullies, victims and bully/victims in comparison to noninvolved children and prosocial behavior defined as helping other children in different circumstances was low in bullies and bully/victims. Romera et al. (2016) also found that social efficacy mediates the relationship between victimization and social adjustment.

There are also some studies that show that, in certain circumstances, perpetrators can be socially skillful or at least perceive themselves as such. A study conducted by Caravita and Cillessen (2012), in Italian elementary and middle school children, showed that, in both age groups, self-perceived popularity predicted more perpetration, whereas peer-nominated popularity predicted less perpetration. This is in agreement with the studies conducted by Salmivalli and colleagues (see a review by Salmivalli 2010) which show that bullies try to achieve high peer status through their aggressive behavior. Therefore, it should be emphasized, once again, that social skills leading to higher status or knowledge do not necessarily protect against

bullying and might even be a risk factor. Social competence, on the contrary, involves the application of these skills in a prosocial way.

3.4 Moral Competence and Bullying

3.4.1 *Morality and Moral Disengagement*

Moral development has been studied for a long time and was strongly influenced by research conducted by Piaget at the beginning of the twentieth century and later by Kohlberg (e.g., Kohlberg 1976). These theories focused mostly on the development of abilities to understand and think about different moral principles and choices. These choices were found to mature with the progressive development of cognitive structures that improved moral reasoning and judgment.

Some years after these classical studies, researchers realized that understanding and knowing moral principles was not enough to actually behave according to the moral principles. In his narrative review, Haidt (2001) argued that moral choices are based on intuition instead of rational analysis and reasoning. Greene (2014) conducted a series of studies in which he explained different dilemmas to the participants. One of them is a story of a train that is uncontrolled and it is about to kill five people. If a participant decides to change the track, it would kill only one person. In the second story, the train is again about to kill five people, but this can be avoided by pushing one person into the track. They found that, in the first story, participants usually find killing one person instead of five to be morally acceptable. On the other hand, they found that it was morally unacceptable to kill one person in the second story. Based on these studies and neuroscientific findings, Greene (2014) proposed a dual-process theory of moral judgment and decision-making. According to this theory, there is a slow and controlled process that involves thinking and reasoning and also a fast emotional response to hurting other people.

Morality involves cognition and emotions. Haidt (2003) proposed a concept of moral emotions that respond to moral violations and trigger moral actions. These emotions would appear when witnessing immoral acts towards somebody (e.g., anger), or to regulate one's own moral behavior (e.g., shame or guilt). Bandura et al. (1996) found that these moral emotions can be "disconnected" through moral disengagement which is a process through which people justify immoral action even having good moral standards. This is done by finding excuses such as "higher good" or making harmful behaviors appear less serious, comparing to other "worse" behaviors. It can also be accomplished by obscuring one's responsibility for certain behaviors, focusing on nonserious consequences, or blaming the victim. As described in the following section, moral disengagement is strongly related to bullying perpetration.

3.4.2 Moral Functioning and Emotions in Relation to Bullying

Most of the research on bullying and morality has focused on moral emotions and moral disengagement. Nevertheless, before discussing these central issues, we will review research that focused on moral reasoning, moral behavior, and neuroscientific findings that connect bullying and morality.

Moral reasoning in bullies, victims, and outsiders was studied by Perren et al. (2012). Adolescent participants were showed a vignette in which a student intentionally misinforms a disliked classmate about a meeting point. Then, they were asked to reason about the correctness of this behavior. It was found that bully-victims perceived this behavior as correct more than other groups of students. Morally responsive justifications were based on reciprocity, following moral rules, or focusing on the victim's feelings. These justifications were negatively related to involvement in bullying.

Studies on involvement in bullying from the neuroscientific and biological perspective are still very scarce. Viding et al. (2011) reviewed research relating to bullying and concluded that interdisciplinary work between schools and neuroscientists would be very beneficial. They noted that some children involved in anti-social behaviors such as bullying show callous-unemotional traits that can be defined as lack of empathy and emotionally "cold" behavior. These traits were related to reduced amygdala activity (Marsh et al. 2008) and abnormal prefrontal cortex function (Finger et al. 2008). On the other hand, it should be noted that a longitudinal investigation conducted by Ouellet-Morin et al. (2013) showed that bullying victimization was followed by DNA damage. To our knowledge, this has not yet been examined in perpetrators. There are brain structures (i.e., the amygdala and ventromedial prefrontal cortex) relating to the emotional response to transgression in the moral domain (Blair 2007); and it seems that these structures are somehow related to bullying. Nevertheless, new prospective longitudinal studies are needed to describe cause-and-effect relationships.

Moral emotions and disengagement were broadly studied in relation to bullying. A systematic review and meta-analysis conducted by Gini et al. (2014), that included 15 empirical studies, reported that moral disengagement was a strong predictor of bullying and cyberbullying perpetration. In Italy, Gini (2006) used moral stories presented to children, classified into different roles of involvement in bullying, to describe to what degree different moral emotions are understood by these children. The study also evaluated moral disengagement in different bullying roles. It was found that there was no difference between bullying roles in understanding moral emotions. However, bullies were more likely to use moral disengagement in comparison to other children. In another study conducted with preadolescents in Cyprus (Ttofi and Farrington 2008), using a series of vignettes, children were asked about the shaming that their parents would promote and also their own feelings after behaving in an inadequate way. Specifically, it was found

that shaming related to rejection, and stigmatization was predicted by bonding with mothers and was a predictor of shame management. The latter, at the same time, was a predictor of bullying.

A cross-national study with children in primary schools in Spain and Italy (Menesini et al. 2003; Ortega-Ruiz et al. 2002) showed that, when imagining themselves as perpetrators, children who were classified as bullies showed more moral disengagement and egocentric moral reasoning. Also, with Italian primary children, Menesini and Camodeca (2008) investigated emotions in situations eliciting shame and guilt as behavioral regulators in which participants were asked to imagine themselves as perpetrators or victims. They found that prosocial children felt more shame and guilt when compared to perpetrators and uninvolved children in situations designed to elicit these emotions. Moreover, victims displayed more shame than uninvolved children in situations related to this emotion. Another study with Italian adolescents (Menesini et al. 2013) showed that moral disengagement predicted involvement in bullying and cyberbullying. Overall, different studies seem to suggest that adequate moral functioning protects children from being involved in bullying.

3.5 Promoting Emotional, Social and Moral Competence

Although mostly correlational in nature, the studies described in this section show that there is a relationship between emotional, social, and moral competencies and involvement in bullying. These studies give some clues on how the adequate promotion of these competencies could protect children against bullying.

These competencies can be taught and learned through different activities and also when adults (teachers and parents) act as models and show adequate emotion expression, perception, use, and regulation in different situations (Zych et al. 2016). It is also crucial to create contexts in which children have the opportunity to play and interact with their peers. Our recent study with preschoolers showed that play is the situation in which children show more affect than in other situations; therefore, it seems to be very important for the development of emotional competence (Zych et al. 2016). Another study showed that an intervention through play improved interpersonal relationships in preschoolers; consequently, play seems to help to develop social competence (Romera et al. 2008).

At the same time, it has been found that enhancing these competencies in schools can also be effective. A meta-analysis of programs for social and emotional learning implemented in schools shows their effectiveness in fostering these competencies, improving adjustment and prosocial behavior, and decreasing behavioral and internalizing difficulties (Durlak et al. 2011). Thus, children can learn these competencies in schools, when interacting with adults and especially when socializing with their peers.

3.6 Summary

There is no specific profile of children involved in bullying; however, there are some personal characteristics that are related to lower involvement in this kind of aggression and, therefore, can protect children against bullying. Most of the studies on these factors are correlational in nature and causal relationships are still to be confirmed. Nevertheless, findings from these studies can shed some light on competencies that might protect children against perpetration and victimization. These factors were divided into emotional, social, and moral competencies. These three domains are interconnected and there are significant overlaps among them.

Emotional intelligence is the ability to perceive, express, understand, and manage emotions. Emotional competence involves employing these skills in a socially adequate way and in real life situations. In this chapter, we include a summary table of the most important findings of different studies that focused on emotional skills and bullying. Most of this research shows that a high level of emotional competence can protect children against perpetration and victimization.

Social skills involve pursuing social goals, thinking about different social contexts, perceiving and interpreting social cues, choosing solutions to social problems, and putting them into practice in different contexts or cultures. There is a debate on whether perpetrators show deficits in social skills or, on the contrary, have good social skills that are used to manipulate others. Scientific findings support both possibilities. Research also reveals that perpetrators and bully-victims show lower levels of empathy, while victims have the same level of empathy as non-victims. Thus, social competence would require social skills employed in a positive and prosocial way to protect children from bullying.

Moral functioning includes understanding moral principles and acting according to these principles. Moral emotions are elicited in situations that are related to these principles but can be disconnected through moral disengagement mechanisms. In this chapter, we also described different studies that show that moral disengagement is a strong predictor of perpetration. Thus, it seems that understanding moral principles, and knowing that no justification or excuse could be valid to neutralize them, seems to protect children from bullying.

We conclude that, although more research on the topic is still needed, and causal relationships are still to be confirmed through future prospective longitudinal studies, social, emotional and moral competencies should be promoted to protect children from bullying. These competencies are acquired through positive peer interpersonal relationships and should also be promoted in schools. Teachers should act as models, and specific programs to foster these competencies could also be useful.

References

- Arsenio, W. F., & Lemerise, E. A. (2001). Varieties of childhood bullying: Values, emotion processes, and social competence. *Social Development, 10*, 59–73.
- 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.
- Baroncelli, A., & Ciucci, E. (2014). Unique effects of different components of trait emotional intelligence in traditional bullying and cyberbullying. *Journal of Adolescence, 37*, 807–815.
- Blair, R. J. R. (2007). The amygdala and ventromedial prefrontal cortex in morality and psychopathy. *Trends in Cognitive Sciences, 11*, 387–392.
- Camodeca, M., Caravita, S. C., & Coppola, G. (2015). Bullying in preschool: The associations between participant roles, social competence, and social preference. *Aggressive Behavior, 41*, 310–321.
- Caravita, S. C. S., & Cillessen, A. H. N. (2012). Agentic or communal? Associations between interpersonal goals, popularity, and bullying in middle childhood and early adolescence. *Social Development, 21*, 376–395.
- Casas, J. A., Ortega-Ruiz, R., & Del Rey, R. (2015). Bullying: The impact of teacher management and trait emotional intelligence. *British Journal of Educational Psychology, 85*, 407–423.
- Cook, C. R., Williams, K. R., Guerra, N. G., Kim, T. E., & Sadek, S. (2010). Predictors of bullying and victimization in childhood and adolescence: A meta-analytic investigation. *School Psychology Quarterly, 25*, 65–83.
- Crick, N. R., & Dodge, K. A. (1994). A review and reformulation of social information-processing mechanisms in children's social-adjustment. *Psychological Bulletin, 115*, 74–101.
- Crick, N. R., & Dodge, K. A. (1999). 'Superiority' is in the eye of the beholder: A comment on Sutton, Smith, and Swettenham. *Social Development, 8*, 128–131.
- Damasio, A. R. (2004). Emotions and feelings: A neurobiological perspective. In A. S. R. Manstead, N. Frijda, & A. Fischer (Eds.), *Feelings and emotions: The Amsterdam symposium* (pp. 49–57). Cambridge, UK: Cambridge University Press.
- De Bruyn, E. H., Cillessen, A. H. N., & Wissink, I. B. (2010). Associations of peer acceptance and perceived popularity with bullying and victimization in early adolescence. *Journal of Early Adolescence, 30*, 543–566.
- Denham, S. (2007). Dealing with feelings: How children negotiate the worlds of emotions and social relationships. *Cognition, Brain, Behavior, 11*, 1–48.
- Denham, S., Warren, H., Von Salisch, M., Benga, O., Chin, J.-C., & Geangu, E. (2011). Emotions and social development in childhood. In P. K. Smith & C. H. Hart (Eds.), *The Wiley-Blackwell handbook of childhood social development* (2nd ed., pp. 413–433). Oxford, UK: Blackwell.
- Durlak, J. A., Weissberg, R. P., Dymnicki, A. B., Taylor, R. D., & Schellinger, K. B. (2011). The impact of enhancing students' social and emotional learning: A meta-analysis of school-based universal interventions. *Child Development, 82*, 405–432.
- Ekman, P. (1992). An argument for basic emotions. *Cognition and Emotion, 6*, 169–200.
- Ekman, P. (2007). *Emotions revealed, second edition: Recognizing faces and feelings to improve communication and emotional life*. New York: Henry Holt and Company.
- Elipe, P., Ortega, R., Hunter, S. C., & del Rey, R. (2012). Perceived emotional intelligence and involvement in several kinds of bullying. *Behavioral Psychology-Psicologia Conductual, 20*, 169–181.
- Finger, E. C., Marsh, A. A., Mitchell, D. G., Reid, M. E., Sims, C., Budhani, S., et al. (2008). Abnormal ventromedial prefrontal cortex function in children with psychopathic traits during reversal learning. *Archives of General Psychiatry, 65*, 586–594.
- García-Sancho, E., Salguero, J. M., & Fernández-Berrocal, P. (2014). Relationship between emotional intelligence and aggression: A systematic review. *Aggression and Violent Behavior, 19*, 584–591.

- Garner, P. W., & Hinton, T. S. (2010). Emotional display rules and emotion self-regulation: Associations with bullying and victimization in community-based after school programs. *Journal of Community and Applied Social Psychology*, 20, 480–496.
- Gini, G. (2006). Social cognition and moral cognition in bullying: What's wrong? *Aggressive Behavior*, 32, 528–539.
- Gini, G., Pozzoli, T., & Hymel, S. (2014). Moral disengagement among children and youth: A meta-analytic review of links to aggressive behavior. *Aggressive Behavior*, 40, 56–68.
- Gómez-Ortiz, O., Romera, E. M., & Ortega Ruiz, R. (2017). Multidimensionality of social competence: Measurement of the construct and its relationship with bullying roles. *Revista de Psicodidáctica*, 22, 37–44.
- Greene, J. D. (2014). The cognitive neuroscience of moral judgment and decision making. In M. S. Gazzaniga & G. R. Mangun (Eds.), *The cognitive neurosciences* (5th ed.). Cambridge, MA: MIT Press.
- Haidt, J. (2001). The emotional dog and its rational tail: A social intuitionist approach to moral judgment. *Psychological Review*, 108, 814–834.
- Haidt, J. (2003). The moral emotions. In R. J. Davidson, K. R. Scherer, & H. H. Goldsmith (Eds.), *Handbook of affective sciences* (pp. 852–870). Oxford, UK: Oxford University Press.
- Happé, F., & Frith, U. (1996). Theory of mind and social impairment in children with conduct disorder. *British Journal of Developmental Psychology*, 14, 385–398.
- Izard, C. E. (1997). *Human emotions*. New York: Plenum.
- Kohlberg, L. (1976). Moral stages and moralization: The cognitive-developmental approach. In T. Lickona (Ed.), *Moral development and behavior: Theory, research, and social issues* (pp. 170–205). New York: Holt, Rinehart and Winston.
- Kokkinos, C. M., & Kipritsi, E. (2012). The relationship between bullying, victimization, trait emotional intelligence, self-efficacy and empathy among preadolescents. *Social Psychology of Education*, 15, 41–58.
- LeDoux, J. (1998). *The emotional brain*. London: Weidenfeld & Nicolson.
- Lomas, J., Stough, C., Hansen, K., & Downey, L. A. (2012). Emotional intelligence, victimisation and bullying in adolescents. *Journal of Adolescence*, 35, 207–211.
- Lopes, P. N., Salovey, P., & Straus, R. (2003). Emotional intelligence, personality, and the perceived quality of social relationships. *Personality and Individual Differences*, 35, 641–658.
- Lösel, F., & Farrington, D. P. (2012). Direct protective and buffering protective factors in the development of youth violence. *American Journal of Preventive Medicine*, 43, S68–S83.
- Mahady Wilton, M. M., Craig, W. M., & Pepler, D. J. (2000). Emotional regulation and display in classroom victims of bullying: Characteristic expressions of affect, coping styles and relevant contextual factors. *Social Development*, 9, 226–245.
- Marsh, A. A., Finger, E. C., Mitchell, D. G. V., Reid, M. E., Sims, C., Kosson, D. S., et al. (2008). Reduced amygdala response to fearful expressions in children and adolescents with callous-unemotional traits and disruptive behavior disorders. *American Journal of Psychiatry*, 165, 712–720.
- Mavroveli, S., & Sanchez-Ruiz, M. J. (2011). Trait emotional intelligence influences on academic achievement and school behaviour. *British Journal of Educational Psychology*, 81, 112–134.
- Mayer, J. D., & Salovey, P. (1997). What is emotional intelligence? In P. Salovey & D. Sluyter (Eds.), *Emotional development and emotional intelligence: Implications for educators* (pp. 3–31). New York: Basic Books.
- Mayer, J. D., Salovey, P., & Caruso, D. R. (2004). Emotional intelligence: Theory, findings, and implications. *Psychological Inquiry*, 15, 197–215.
- Menesini, E., & Camodeca, M. (2008). Shame and guilt as behaviour regulators: Relationships with bullying, victimization and prosocial behaviour. *British Journal of Developmental Psychology*, 26, 183–196.
- Menesini, E., Nocentini, A., & Camodeca, M. (2013). Morality, values, traditional bullying, and cyberbullying in adolescence. *British Journal of Developmental Psychology*, 31, 1–14.

- Menesini, E., Sanchez, V., Fonzi, A., Ortega, R., Costabile, A., & Lo Feudo, G. (2003). Moral emotions and bullying: A cross-national comparison of differences between bullies, victims and outsiders. *Aggressive Behavior*, 29, 515–530.
- Ortega-Ruiz, R., Sánchez, V., & Menesini, E. (2002). Violencia entre iguales y desconexión moral: Un análisis transcultural. *Psicothema*, 14, 37–49.
- Ouellet-Morin, I., Wong, C. C., Danese, A., Pariente, C. M., Papadopoulos, A. S., Mill, J., et al. (2013). Increased serotonin transporter gene (SERT) DNA methylation is associated with bullying victimization and blunted cortisol response to stress in childhood: A longitudinal study of discordant monozygotic twins. *Psychological Medicine*, 43, 1813–1823.
- Perren, S., Gutzwiller-Helfenfinger, E., Malti, T., & Hymel, S. (2012). Moral reasoning and emotion attributions of adolescent bullies, victims, and bully-victims. *British Journal of Developmental Psychology*, 30, 511–530.
- Plutchik, R. (1980). *Emotion: A psychoevolutionary synthesis*. New York: Harper and Row.
- Polan, J., Sieving, R., & McMorris, B. (2010). Are young adolescents' social and emotional skills protective against involvement in bullying and violence? *Journal of Adolescent Health*, 46, S64–S65.
- Romera, E. M., Gómez-Ortiz, O., & Ortega Ruiz, R. (2016). The mediating role of psychological adjustment between peer victimization and social adjustment in adolescence. *Frontiers in Psychology*, 7, 1749.
- Romera, E. M., Ortega, R., & Monks, C. (2008). Impacto de la actividad lúdica en el desarrollo de la competencia social. *International Journal of Psychology and Psychological Therapy*, 8, 193–202.
- Rose-Krasnor, L. (1997). The nature of social competence: A theoretical review. *Social Development*, 6, 111–135.
- Saarni, C. (1999). *The development of emotional competence*. New York: Guilford.
- Salmivalli, C. (2010). Bullying and the peer group: A review. *Aggression and Violent Behavior*, 15, 112–120.
- Sanchez-Alvarez, N., Extremera, N., & Fernandez-Berrocal, P. (2016). The relation between emotional intelligence and subjective well-being: A meta-analytic investigation. *Journal of Positive Psychology*, 11, 276–285.
- Schokman, C., Downey, L. A., Lomas, J., Wellham, D., Wheaton, A., Simmons, N., et al. (2014). Emotional intelligence, victimisation, bullying behaviours and attitudes. *Learning and Individual Differences*, 36, 194–200.
- Schutte, N. S., Malouff, J. M., Hall, L. E., Haggerty, D. J., Cooper, J. T., Golden, C. J., et al. (1998). Development and validation of a measure of emotional intelligence. *Personality and Individual Differences*, 25, 167–177.
- Shields, A., & Cicchetti, D. (2001). Parental maltreatment and emotion dysregulation as risk factors for bullying and victimization in middle childhood. *Journal of Clinical Child Psychology*, 30, 349–363.
- Sutton, J., Smith, P. K., & Swettenham, J. (1999a). Bullying and 'theory of mind': A critique of the 'social skills deficit' view of anti-social behaviour. *Social Development*, 8, 117–127.
- Sutton, J., Smith, P. K., & Swettenham, J. (1999b). Social cognition and bullying: Social inadequacy or skilled manipulation? *British Journal of Developmental Psychology*, 17, 435–450.
- Topping, K., Bremner, W., & Holmes, E. A. (2000). Social competence: The social construction of the concept. In R. Bar-On & J. D. Parker (Eds.), *The handbook of emotional intelligence* (pp. 28–39). San Francisco: Jossey-Bass.
- Tofi, M. M., & Farrington, D. P. (2008). Reintegrative shaming theory, moral emotions and bullying. *Aggressive Behavior*, 34, 352–368.
- Viding, E., McCrory, E. J., Blakemore, S. J., & Frederickson, N. (2011). Behavioural problems and bullying at school: Can cognitive neuroscience shed new light on an old problem? *Trends in Cognitive Sciences*, 15, 289–291.
- Woods, S., Wolke, D., Nowicki, S., & Hall, L. (2009). Emotion recognition abilities and empathy of victims of bullying. *Child Abuse and Neglect*, 33, 307–311.

- Zych, I., Elipe, P., & Sánchez, V. (2016a). Competencias socio-emocionales para la convivencia y la ciberconvivencia. In F. Córdoba, O. Nail, & R. Ortega-Ruiz (Eds.), *Gestión de la convivencia y afrontamiento de problemas de conflictividad, violencia escolar y bullying* (pp. 37–50). Santiago de Chile: RiL Editores.
- Zych, I., Ortega-Ruiz, R., & Del Rey, R. (2015). Systematic review of theoretical studies on bullying and cyberbullying: Facts, knowledge, prevention, and intervention. *Aggression and Violent Behavior: A Review Journal*, 23, 1–21.
- Zych, I., Ortega-Ruiz, R., & Sibaja, S. (2016b). Children's play and affective development: Affect, school adjustment and learning in preschoolers/El juego infantil y el desarrollo afectivo: Afecto, ajuste escolar y aprendizaje en la etapa preescolar. *Infancia y Aprendizaje*, 39, 380–400.
- Zych, I., Ttofi, M. M., & Farrington, D. P. (2017). Empathy and callous-unemotional traits in different bullying roles: A systematic review and meta-analysis. *Trauma, Violence and Abuse* (in press).

Chapter 4

Contextual Protective Factors Against Bullying

4.1 Contextual Protective Factors

Personal protective factors classified into social, emotional, and moral competencies have been described in Chap. 3. Children with better competencies are less likely to be involved in bullying. Nevertheless, bullying is a very complex phenomenon that is influenced by the individual, social, and contextual factors. There is always an interaction between the individual and the environment. While, some children are more vulnerable than others to get involved in bullying, specific circumstances are also needed. Research shows that the prevalence of bullying is higher in some schools, whereas there are also schools that seem to protect their students from being involved in bullying. In this chapter, we focus on these contextual factors and especially on the school climate.

The school climate has been defined as school lives experienced by members of the school community including school safety, its organization, norms, and values, relationships and teaching process (National School Climate Center, n.d.). The US Department of Education (n.d.) suggests that a positive school climate includes engagement, defined as relationships among all the members of the school community, safety from different risks, and an adequate environment including discipline, facilities, and management. Recently, an instrument was validated to evaluate school climate according to these dimensions, which were found to describe the construct adequately through a confirmatory factor analyses (Bradshaw et al. 2014).

Similarly, a Spanish concept, *convivencia*, is an essential part of the Spanish culture and is defined as living with each other, sharing spaces and activities, and establishing norms that would make community living as good as possible. This also includes solving conflicts peacefully through dialogue, and being concerned with the wellbeing of self and others. *Convivencia* also includes moral values such as solidarity and helping each other (Ortega-Ruiz 2007). Promoting *convivencia* in schools was first proposed by Ortega-Ruiz and now it is considered a crucial part of

the development of a positive school climate in Spanish schools (Ortega-Ruiz and Zych 2016).

Even though the school climate and *convivencia* have been widely promoted in educational settings, scientific research on the topic is still scarce. Most of the studies focused only on specific contextual factors and there are also some reviews and proposals that include different dimensions of the school climate. In their narrative review, Thapa et al. (2013) suggest the five most important aspects of the school climate. According to these authors, school safety includes physical and emotional components together with norms and rules. Relationships refer to the engagement in school, respecting minorities and receiving support from others. There is also the dimension of teaching and learning which includes different aspects of this process such as teacher–student relationships, academic learning, and promoting competencies (including those described in Chap. 3). Other important aspects are the institutional environment, such as resources or physical factors, and continuous school improvement.

A systematic review of contextual factors related to bullying (Machado Azeredo et al. 2015), with 31 empirical reports, showed that income inequalities in schools, classrooms, and cities or countries were related to more bullying. Violence rates in the city or in the country were also related to more bullying. Variables found to be linked to lower levels of bullying were anti-bullying norms, classroom management, and teacher support.

Del Rey et al. (2009) examined the perception of *convivencia* in secondary education students, their teachers, and parents. They focused on positive relationships among these members of the school community such as peer, student–teacher, or family–school relationships. They found that the opinions of the students about the quality of *convivencia* in their schools were mostly positive. Other studies included dimensions related to the disciplinary management, quality of interpersonal relationships, violence, or school culture (Córdoba 2013; Ortega-Ruiz et al. 2013). Recently, Cordoba Alcaide et al. (2016) reported that, with a representative sample of elementary school children in Spain, *convivencia* included good interpersonal relationships between teachers and other members of the school community, a low level of disruptiveness in the classroom and, above all, a positive peer network and relationships.

Although different authors have proposed different dimensions of the school climate, most of them focus on the quality of interpersonal relationships among different members of the school community, school, and classroom policy, and management and school safety. The following sections will focus on the variables classified in these dimensions. Many of these studies were conducted on risk factors rather than protective factors, but it seems reasonable to suggest that these may be two extremes of one dimension. Most studies are correlational and cross-sectional. Thus, the following sections include protective factors suggested by existing studies; however, new specific and longitudinal studies are necessary to confirm whether they actually protect children from bullying.

4.2 Safety in School and Outside School

Research has shown that safety issues are related to children's involvement in bullying. Taking into account that schools are not isolated places and that they are located in more or less safe communities or neighborhoods, some studies focused on community relationships with school bullying. Holt et al. (2014) examined whether the perception of neighborhood disorder such as crime, lack of supervision of children, buildings in a bad condition (etc.) predicted victimization. They found that neighborhood disorder was a significant predictor of physical, verbal, and cyber victimization. Espelage et al. (2000) evaluated self-perceived neighborhood safety, including the presence of gangs. They found that access to guns and a low level of neighborhood safety predicted bullying others.

A longitudinal study with twins (Bowes et al. 2009), based on a representative birth cohort in England and Wales, shows that problems with neighbors evaluated at the age of 5 predicted a higher rate of bully-victims at the age of 7. Another study on weapon carrying and gang membership reveals that both variables predicted involvement in victimization, perpetration or bully-victim status (Bradshaw et al. 2013). Thus, living in an unsafe neighborhood predicts more involvement in bullying and it is reasonable to conclude that increasing safety in the community would protect children against bullying.

There is also research that focuses on the relationship between bullying and school safety. Goldweber et al. (2013), in an analysis of the relationship between perpetration and feeling safe and belonging to school, found that children with the lowest involvement in perpetration had the highest level of belonging and felt the most safe. Espelage et al. (2000) on the other hand, found that perceived unsafeness at school did not significantly predict perpetration. In a sample of urban middle school US students, Varjas et al. (2009) reported that perpetration and victimization were related to a lower perception of school safety, and this relationship was stronger in case of victimization. Also in the US, Glew et al. (2008) concluded that children involved in bullying (perpetrators, victims, or bully-victims) felt less safe at school. Altogether, these studies suggest that guaranteeing safety in school could be a good way of protecting children from bullying.

Living in poverty is a situation in which the basic needs of a person are not met. This means that a poor person is psychologically and physically unsafe. Some studies have examined whether poverty or low socioeconomic status (SES) are related to involvement in bullying. Research conducted in poor countries is scarce, but the reported prevalence of bullying is much higher there than in high income geographic areas (Del Rey and Ortega 2008; Romera et al. 2011).

A meta-analysis conducted by Tippet and Wolke (2014) of 28 empirical studies showed that there was a relationship between low SES and victimization and bully-victim status. They also found that victims and bullies had a lower probability of coming from a high SES family. A multilevel study in 35 countries (Due et al. 2009) found that low family affluence was related to higher rates of victimization. School and country economic levels were not related to bullying, but economic

inequalities in schools and countries were related to increased victimization. Taking into account the results of these studies, it seems reasonable to suggest that children should be protected from poverty and inequalities in order to decrease their involvement in bullying.

4.3 Whole-School Anti-bullying Policy

Whole-school anti-bullying policies were found to be an effective component of anti-bullying programs (Ttofi and Farrington 2011). Many countries have educational laws that include anti-bullying policies as a legal requirement in all school settings. Nevertheless, the number of studies that compare these policies in different schools or geographic areas is very scarce.

An interview with school policy makers in Australia (Chalmers et al. 2016) reported on the most important themes that should be included in these policies according to the respondents. Most of the definitions given by these professionals were partial and only included some important features of bullying and cyberbullying. About half of the respondents knew that there was a template to be used in the development of an anti-bullying policy. Also, about half reported that their school policy was available online and that cyberbullying was added to the newest version of the document. Most of them said that cyberbullying and bullying were differentiated. There were also different answers about the effectiveness of the policy and the need for prevention and also intervention.

Samara and Smith (2008) analyzed anti-bullying policies in English schools, comparing those in 1996 to those implemented in 2002. They found that only 18% had a specific whole-school anti-bullying policy before 1996, 29% after 1996, 49% before 2002, and 67% after 2002. Including bullying as a part of a wider conduct policy was more common in the 1990s but this was progressively substituted by later bullying-specific documents.

A content analysis of anti-bullying policies (Smith et al. 2008) showed that most of them included a definition of bullying in its physical, direct, or relational forms. The majority failed to state clearly the difference between bullying and other kinds of aggression, to include cyberbullying, or to consider minority groups (but included racial bullying). Most of them (62%) specified what victims should do, but many aspects of reporting and responding to bullying (such as responsibilities, actions, and sanctions of teachers, other staff, bystanders, or parents) were absent. The recording and evaluation were also mostly unclear. Most of the policies mentioned the promotion of positive behavior, school climate, and safety, but failed to discuss peer or parental support, the inclusiveness of students with special needs, or playground supervision.

A follow-up investigation conducted six years later (Smith et al. 2012) showed that anti-bullying policies had improved on most of the criteria, although they should still be worked on in different schools. This study also focused on the possible relationships between the inclusion and quality of different dimensions in

the anti-bullying policies and the actual involvement in bullying of the students. This analysis discovered that most of the correlations between school policy and bullying were not significant. Nevertheless, there was a relationship between a higher level of the perception of the presence of bullying in a school and good reporting and responding strategies in the policies. There was also a significant relationship between a high score on strategies for bullying prevention in the policies and lower self-reported perpetration.

Another analysis of whole-school anti-bullying policies was conducted by Woods and Wolke (2003) in primary schools. They scored the documents provided by the head teachers of 34 schools, taking into account the general prerequisites such as involvement and awareness related to bullying. They also considered if schools had an appropriate definition of bullying (as intentional, repeated, with a power imbalance) and its types (physical, verbal, psychological, and relational), and if documents contained information on its deleterious consequences and different possible locations. They included items for different levels such as school (whether schools used surveys for bullying assessment or had conferences, supervision, and coordinated group to work on bullying), class (rules, meetings, and involvement of parents), and individuals (talks with the children involved in bullying, their parents, and use of imagination). Taking into account these criteria, schools were classified as low, medium, or high on their anti-bullying policies. Woods and Wolke (2003) found that there was no correlation between this score and direct bullying or victimization and that schools with better anti-bullying policies had more involvement in relational bullying. Of course, the documents provided by schools may not relate to what happens in practice.

New longitudinal studies are needed to analyze whole-school anti-bullying policies and their relationship to involvement in bullying. The fact that some studies found positive relationships between the prevalence of bullying and the quality of the anti-bullying policy might only mean that the schools with more bullying are more preoccupied with the phenomenon and therefore pay more attention to their policy. Taking into account the meta-analytic findings (Ttofi and Farrington 2011), we believe a comprehensive whole-school anti-bullying policy applied in real-life situations can protect children from bullying and its consequences. The scientific findings included in this section show that there is still no agreement on the criteria for a good anti-bullying policy and that its definition, research and application still needs to be improved. Anti-bullying interventions are reviewed in Chap. 5.

4.4 School and Classroom Organization and Management

Some studies focused on the way that schools and classrooms are organized and managed and the relation to bullying. School and classroom size are sometimes thought to be related to bullying, but findings of the research studies on this topic yield inconclusive results. A longitudinal twin study conducted by

Bowes et al. (2009) showed that large school size evaluated at the age of 5 predicted more victimization but less perpetration at the age of 7. Wei et al. (2010) found that, in Taiwanese middle schools, there was no relationship between school size and bullying involvement. Wolke et al. (2001) compared German and English schools and reported that there was no relationship between school size and involvement in bullying. In relation to class size, there was no relationship in Germany, but there was more victimization in English smaller classrooms. A systematic review of contextual factors related to bullying showed inconclusive results when studying the relationship between school size and bullying (Machado Azeredo et al. 2015). Overall, it seems that children could be equally well protected from bullying in larger and smaller schools and classrooms.

A study with US elementary school teachers (Dake et al. 2003) concluded that most of them tried to manage bullying situations by having serious talks with the children involved and did not use many other strategies. On the other hand, teachers found that the best way to deal with bullying was to contact the parents of the perpetrators, supervise more, and discuss the issue with the perpetrators, victims, and their parents. In another study, also with US teachers (Yoon et al. 2016), participants were asked to watch videos of different bullying situations and suggest how they would respond to each of them. For the response to perpetrators, the most frequent suggestions were to involve adults and to discipline and reprimand the students. In case of the victims, the highest percentage of teachers would counsel them.

Some research focused on the relationship between these management strategies and involvement in bullying. In a Dutch study (Van der Zanden et al. 2015), involving more adults (other teachers and parents) in managing bullying was found to predict less perpetration and victimization, whereas disciplining the perpetrator predicted more victimization. Kochenderfer-Ladd and Pelletier (2008) reported that separating students involved in bullying was related to less victimization and encouraging the victim to avoid the perpetrator was related to more victimization. Punishing the perpetrator was not significantly related to the level of victimization. A longitudinal study with US teachers (Troop-Gordon and Ladd 2015) showed that advocating assertiveness in the victims by teachers was related to more perpetration and victimization. Nevertheless, this relationship was very complex, given that interaction analyses showed that advocating assertiveness by teachers was related to higher perpetration in highly aggressive girls but lower perpetration in highly aggressive boys. In children with a high level of victimization, there was a decrease in victimization when teachers advocated assertiveness. Separating students predicted lower perpetration and reprimanding the bullies predicted more perpetration. According to the systematic review conducted by Machado Azeredo et al. (2015), class management and norms are related to lower levels of bullying. Gregory et al. (2010) reported that managing school discipline was related to lower levels of victimization and perpetration.

4.5 Relationships Among Members of the School Community

4.5.1 *Family–Child Relationships*

Families are the most immediate context in which children are born and brought up, and relationships among family members influence what happens in schools. For this reason, some studies focused on these relationships and their link to bullying. A longitudinal study with twins (Bowes et al. 2009) showed that childhood maltreatment by parents predicted involvement in any bullying role. It was also found that not having stimulating activities with a mother predicted bully-victim status, and perpetration was predicted by domestic violence and a low level of maternal affection. Espelage et al. (2000) found that positive adult models predicted lower perpetration whereas being hit after breaking rules at home and spending time without adult supervision predicted more perpetration. Parenting styles and discipline were also related to bullying in Spanish adolescents (Gomez-Ortiz et al. 2016). In boys, the promotion of autonomy, communication, and affection predicted a lower level of perpetration, whereas physically and psychologically aggressive disciplinary practices predicted more perpetration. In girls, victimization was predicted by a lower level of disclosure to parents, indirectly by low affection and communication, and also by high psychologically aggressive disciplinary practices.

Research with Italian adolescent boys (Baldry and Farrington 2005) reported that a conflicting parenting style predicted a higher level of perpetration. Having parents who showed high support and a low punitive style was a protective factor against victimization. Nevertheless, having parents who scored low on conflict and high on support increased the risk of perpetration, a relationship that could possibly be explained by a more general permissive parenting style. Another study with middle school Italian children found that perpetration was related to having authoritarian parents (punitive, strict, and unsupportive) and being in disagreement with the parents (Baldry and Farrington 2000).

A Spanish study demonstrated that family cohesion, that is, support, help, and commitment of family members, is linked to lower levels of relational victimization (Cava et al. 2010). Students with mothers who were overprotective and anxious about their children were more victimized (Georgiou 2008). Nevertheless, a longitudinal study showed that victimization predicted more psychological maternal control, but victimization was not predicted by this control (Ma and Bellmore 2012). Another study with Spanish adolescents concluded that children who were involved in bullying (without distinguishing the roles) reported less parental affection, communication and disclosure, and lower humor and autonomy (Gomez-Ortiz et al. 2014).

Some studies also examined the relationship between school bullying and bullying among siblings. In a study with US middle school children, Duncan (1999) reported that most of the perpetrators and bully/victims in schools perpetrated bullying also on their brothers and sisters. A study with secondary school students

in Israel found that children who were victimized by their siblings were more frequently victims of physical, verbal, or relational bullying in schools (Wolke and Samara 2004). Among UK young adolescents (Tippett and Wolke 2015), there was a significant relationship between being a victim of sibling aggression and being a victim of school bullying (but not a perpetrator). It was also found that being a perpetrator of sibling aggression was related to perpetration and bully-victim status (but not to victimization) in school.

4.5.2 Relationships Among the Students

Based on meta-analytic findings (Cook et al. 2010), the influence of peers who reinforce negative behaviors and display antisocial conduct is related to higher levels of bullying perpetration. At the same time, peer status, including low rejection and isolation and high popularity and likeability, is linked to lower victimization and to bully-victim status. Espelage et al. (2000) asked students whether their friends were encouraging them to destroy property, behave against the law, were in a gang or hit somebody. High scores on this dimension predicted a higher level of bullying perpetration.

In their classical study on bullying as a group process, Salmivalli et al. (1996) reported that the social status of the children involved in the phenomenon was related to their roles. Victims were more rejected (nominated as least liked) and less accepted (nominated as most liked), and the same was true for boys who were perpetrators. Perpetrators who were girls were both more rejected but at the same time more accepted. Other studies revealed that perpetrators were more popular but disliked (Caravita et al. 2009; Pouwels et al. 2016). An analysis of more complex acceptance and rejection patterns in late elementary and middle schools in the Netherlands showed gender differences (Veenstra et al. 2010). Students who bullied other same-sex classmates were rejected by the same-sex classmates but, if they bullied other-sex students, they were rejected by other-sex students. Boys who bullied boys were more accepted by girls, but girls who bullied girls were less accepted by both sexes. Victims of same-sex perpetrators were rejected by same-sex students.

It was shown that affiliation to school, that is, having good relationships and friendship with classmates, was associated with lower relational victimization (Cava et al. 2010). A comparison of seven different countries (Eslea et al. 2004) showed that, in most of the cases, victims and bully-victims were more lonely during playtime and had fewer friends than uninvolved children. Perpetrators' scores were similar to those of uninvolved students. Another study with US children (Bollmer et al. 2005) found that a high quality of friendship in children with externalizing behavior, which was related to higher levels of perpetration, was a moderator that attenuated this relationship. Therefore, friendship quality may have acted as a protective factor. On the other hand, it did not attenuate the relationship between a high level of internalizing problems and victimization. According to a longitudinal study conducted by Boulton et al. (1999) with UK early adolescents,

having a reciprocal best friend in the classroom predicted less peer nomination as victims and also lower victimization. The students with the highest number of nominations as victims were those who had no best friends.

A peer network analysis showed that children form friendships connected to their bullying roles (Espelage et al. 2007; Salmivalli et al. 1997). Salmivalli et al. (1997) found high, significant, and positive correlations between bullying roles in friends. They also concluded that victims made more friends with other victims and also defenders, whereas perpetrators were friends with reinforcers and assistants. In girls, perpetrators and victims were sometimes friends. Espelage et al. (2007) reported that bullies usually form friendships with bullies, whereas children who are not involved in perpetration are usually friends with other non-perpetrator students. Similarly to Salmivalli et al. (1997), a study of Taiwanese middle school children showed that, although rarely, some victimized students nominated their aggressors as friends and vice versa (Wei and Jonson-Reid 2011).

4.5.3 *Teacher–Student Relationships*

Some studies focused on relationships among the teachers and the students as a factor linked to the involvement in bullying. A project conducted in Taiwanese middle schools (Wei et al. 2010) found that teacher support predicted less verbal and physical bullying while teacher maltreatment predicted more verbal bullying. Low teacher support was also related to more bullying according to the systematic review conducted by Machado Azeredo et al. (2015). Caring and support from the teachers were associated with less perpetration and victimization in a study conducted by Gregory et al. (2010). A students' perceived connectedness to the teachers (defined as fair treatment, interest shown by the teachers in students' wellbeing, getting along, being listened to, and receiving help) was related to lower levels of school bullying in Canadian adolescents (Konishi et al. 2010).

Research with Dutch elementary school pupils (Van der Zanden et al. 2015) discovered that perpetration was predicted by teachers being less helpful, more uncertain in different tasks, and dissatisfied. Victimization was predicted by lower helpfulness and leadership in teachers and more uncertainty. A study conducted with Spanish adolescents (Casas et al. 2015) focused on positive and negative teacher management in the classroom. Positive management was defined as good relationships with students, other teachers and families, valuing and reinforcing the work done by the students, and teacher involvement in activities. Negative management was defined as unequal treatment of students, unjust rules and punishment, apathy, and low commitment. The results showed that positive management predicted lower levels of victimization and perpetration, whereas negative management predicted higher levels on both dimensions.

A study conducted with Italian early adolescents focused on students' perceptions of being encouraged by their teachers to express their opinions in class (Nation et al. 2008). This predicted a lower level of bullying perpetration in all age

groups and lower victimization or bully-victim status in younger students. In US elementary and middle schools, teacher support was related to lower levels of victimization and also buffered the relationship between being victimized and having a lower quality of life (Flaspohler et al. 2009). Therefore, it may have acted as a protective factor. In Italian early adolescents, teacher unfairness predicted more perpetration (Lenzi et al. 2014).

4.6 Promoting a Positive Context, School Climate, and *Convivencia*

This literature review shows that a positive context, school climate, and *convivencia* can protect children from being involved in bullying. Based on these findings, it is reasonable to suggest that policy and practice should promote safety in school and outside school. Improving life conditions in neighborhoods and fighting poverty can also be effective. Inequalities were found to be related to more bullying and, therefore, more equality should be promoted.

Specific actions should be taken to promote safety in schools and outside schools. Each educational setting should also have whole-school anti-bullying policies and teachers should carefully organize and manage schools and classrooms to prevent bullying. Many specific actions related to the contextual factors described in this chapter were used in anti-bullying programs and are described in Chap. 5.

Positive relationships among the members of the school community and school *convivencia* should be promoted to protect children against bullying. Social support from teachers, friends, families, couples, and professionals, during and after victimization, were related to higher levels of resilience, self-esteem, and life satisfaction (Beltrán-Catalán et al. 2015). Positive relationships among teachers and students are crucial, and teachers should offer students their help, support, and affection. The literature review described in this chapter shows that it could be useful to conduct parent training programs in which mothers and fathers are taught how to manage their children's behavior in a democratic way, full of affection, good communication, and with rules that need to be followed (e.g., Piquero et al. 2016). Parents could also acquire skills to foster children's autonomy, supervising but without being overprotective. Special attention should also be paid to high quality nonviolent relationships among siblings.

Similarly, it is desirable to promote good relationships among students. Children should acquire skills which could help them to achieve high peer status, being liked, and not rejected. Since peer influence is also important, it could be helpful to separate the groups with antisocial peers and promote affiliation to prosocial children. Having good quality friendships protects children against being involved in bullying. Thus, activities and spaces should be organized in a way that would promote relationships among all the children and give opportunities to initiate and maintain friendships.

Although more research on the topic is still needed, it is reasonable to suggest that a combination of these factors could protect children against being involved in bullying. The contribution of only one factor is usually found to be low and no single action would be enough to fight this complex kind of aggression. On the other hand, coordinated, systematic, and continuous work that would tackle all factors at the same time would probably be the most effective.

4.7 Summary

The studies reviewed in this chapter show that contextual factors are very important in protecting children against bullying, given the continuous interaction between the individuals and their social and physical environment. Among these factors, a positive school climate including its organization, norms, values, interpersonal relationships, and safety was associated with lower rates of bullying. Although scientific research on the quality of anti-bullying policies and their relation to involvement in bullying is still scarce, the investigations included in this chapter show that it could be useful to improve these policies in all schools. It should be also taken into account that an anti-bullying policy should not just be a document filled in for administrative reasons but a real guidance and plan for action. Research reveals that children can be protected against bullying equally well in big and small classrooms and schools. Independently of the school or classroom size, it is important to organize facilities and activities effectively. An adequate teaching and learning physical environment that guarantees that students feel comfortable is important.

The studies included in this chapter show that good family relationships can be protective against bullying. Punitive, overprotective, and authoritarian parenting is usually found to be related to more bullying. Bullying among siblings is also linked to more bullying in school. On the other hand, good communication and affection, the promotion of autonomy, and positive home discipline management protect children against this kind of aggression.

The research studies reviewed here reveal that the negative influence of anti-social peers is related to more involvement in bullying, whereas the positive influence of prosocial peers can protect children against bullying. Being liked by classmates, accepted and not rejected, is also related to lower levels of involvement in bullying. Although friends can sometimes hurt, good quality friendships and having a best friend were repeatedly found to protect against victimization.

It is clear that a good quality of the teacher–student relationships can protect children from being involved in bullying. Caring, support, and connectedness with the teachers were related to less bullying. Democratic teachers, who promote a student’s autonomy and are fair in their rules and treatment of the students, help to protect children against this kind of aggressive behavior. Negative classroom

management, focused mostly on punishing bad behaviors, does not seem to be very effective in eliminating bullying. On the other hand, positive discipline, with clear and just rules, tends to protect children against bullying. All members of the school community should collaborate in maintaining order and safety.

References

- Baldry, A. C., & Farrington, D. P. (2000). Bullies and delinquents: Personal characteristics and parental styles. *Journal of Community & Applied Social Psychology*, 10, 17–31.
- Baldry, A. C., & Farrington, D. P. (2005). Protective factors as moderators of risk factors in adolescence bullying. *Social Psychology of Education*, 8, 263–284.
- Beltrán-Catalán, M., Zych, I., & Ortega-Ruiz, R. (2015). El papel de las emociones y el apoyo percibido en el proceso de superación de los efectos del acoso escolar: un estudio retrospectivo. *Ansiedad y Estrés*, 21, 219–232.
- Bollmer, J. M., Milich, R., Harris, M. J., & Maras, M. A. (2005). A friend in need—The role of friendship quality as a protective factor in peer victimization and bullying. *Journal of Interpersonal Violence*, 20, 701–712.
- Boulton, M. J., Trueman, M., Chau, C., Whitehand, C., & Amatya, K. (1999). Concurrent and longitudinal links between friendship and peer victimization: Implications for befriending interventions. *Journal of Adolescence*, 22, 461–466.
- Bowes, L., Arseneault, L., Maughan, B., Taylor, A., Caspi, A., & Moffitt, T. E. (2009). School, neighborhood, and family factors are associated with children's bullying involvement: A nationally representative longitudinal study. *Journal of the American Academy of Child and Adolescent Psychiatry*, 48, 545–553.
- Bradshaw, C. P., Waasdorp, T. E., Debnam, K. J., & Johnson, S. L. (2014). Measuring school climate in high schools: A focus on safety, engagement, and the environment. *Journal of School Health*, 84, 593–604.
- Bradshaw, C. P., Waasdorp, T. E., Goldweber, A., & Johnson, S. L. (2013). Bullies, gangs, drugs, and school: Understanding the overlap and the role of ethnicity and urbanicity. *Journal of Youth and Adolescence*, 42, 220–234.
- Caravita, S. C. S., Di Blasio, P., & Salmivalli, C. (2009). Unique and interactive effects of empathy and social status on involvement in bullying. *Social Development*, 18, 140–163.
- Casas, J. A., Ortega-Ruiz, R., & Del Rey, R. (2015). Bullying: The impact of teacher management and trait emotional intelligence. *British Journal of Educational Psychology*, 85, 407–423.
- Cava, M. J., Musitu, G., Buelga, S., & Murgui, S. (2010). The relationship of family and classrooms environment with peer relational victimization: An analysis if their gender differences. *The Spanish Journal of Psychology*, 13, 156–165.
- Chalmers, C., Campbell, M. A., Spears, B. A., Butler, D., Cross, D., Slee, P., et al. (2016). School policies on bullying and cyberbullying: Perspectives across three Australian states. *Educational Research*, 58, 91–109.
- Cook, C. R., Williams, K. R., Guerra, N. G., Kim, T. E., & Sadek, S. (2010). Predictors of bullying and victimization in childhood and adolescence: A meta-analytic investigation. *School Psychology Quarterly*, 25, 65–83.
- Córdoba, F. (2013). *El constructo convivencia escolar en Educación Primaria: naturaleza y dinámicas*. Córdoba: Servicio de Publicaciones de la Universidad de Córdoba.
- Cordoba Alcaide, F., Del Rey Alamillo, R., Casas Bolaños, J. A., & Ortega Ruiz, R. (2016). Valoración del alumnado de primaria sobre convivencia escolar: El valor de la red de iguales. *Psicoperspectivas*, 15, 79–90.
- Dake, J. A., Price, J. H., Telljohann, S. K., & Funk, J. B. (2003). Teacher perceptions and practices regarding school bullying prevention. *Journal of School Health*, 73, 347–355.

- Del Rey, R., & Ortega, R. (2008). Bullying en los países pobres: prevalencia y coexistencia con otras formas de violencia. *International Journal of Psychology and psychological therapy*, 8, 39–50.
- Del Rey, R., Ortega-Ruiz, R., & Feria, I. (2009). Convivencia escolar: fortaleza de la comunidad educativa y protección ante la conflictividad escolar. *Revista interuniversitaria de formación del profesorado*, 66, 159–180.
- Due, P., Merlo, J., Harel-Fisch, Y., Damsgaard, M. T., Mag scient soc, Holstein, B. E., Mag scient soc, Hetland, J., Currie, C., Gabhainn, S. N., Gaspar de Matos, M., & Lynch, J. (2009). Socioeconomic inequality in exposure to bullying during adolescence: A comparative, cross-sectional, multilevel study in 35 countries. *American Journal of Public Health*, 99, 907–914.
- Duncan, R. D. (1999). Peer and sibling aggression: An investigation of intra- and extra-familial bullying. *Journal of Interpersonal Violence*, 14, 871–886.
- Eslea, M., Menesini, E., Morita, Y., O'Moore, M., Mora-Merchan, J. A., Pereira, B., et al. (2004). Friendship and loneliness among bullies and victims: Data from seven countries. *Aggressive Behavior*, 30, 71–83.
- Espelage, D. L., Bosworth, K., & Simon, T. R. (2000). Examining the social context of bullying behaviors in early adolescence. *Journal of Counseling and Development*, 78, 326–333.
- Espelage, D. L., Green, H. D., & Wasserman, S. (2007). Statistical analysis of friendship patterns and bullying behaviors among youth. *New Directions for Child and Adolescent Development*, 118, 61–75.
- Flaspohler, P. D., Elfstrom, J. L., Vanderzee, K. L., Sink, H. E., & Birchmeier, Z. (2009). Stand by me: The effects of peer and teacher support in mitigating the impact of bullying on quality of life. *Psychology in the Schools*, 46, 636–649.
- Georgiou, S. N. (2008). Bullying and victimization at school: The role of mothers. *British Journal of Educational Psychology*, 78, 109–125.
- Glew, G. M., Fan, M. Y., Katon, W., & Rivara, F. P. (2008). Bullying and school safety. *Journal of Pediatrics*, 152, 123–128.
- Goldweber, A., Waasdorp, T. E., & Bradshaw, C. P. (2013). Examining the link between forms of bullying behaviors and perceptions of safety and belonging among secondary school students. *Journal of School Psychology*, 51, 469–485.
- Gomez-Ortiz, O., Del Rey, R., Casas, J. A., & Ortega-Ruiz, R. (2014). Parenting styles and bullying involvement. *Cultura y Educacion*, 26, 132–158.
- Gomez-Ortiz, O., Romera, E. M., & Ortega-Ruiz, R. (2016). Parenting styles and bullying. The mediating role of parental psychological aggression and physical punishment. *Child Abuse and Neglect*, 51, 132–143.
- Gregory, A., Cornell, D., Fan, X. T., Sheras, P., Shih, T. H., & Huang, F. (2010). Authoritative school discipline: High school practices associated with lower bullying and victimization. *Journal of Educational Psychology*, 102, 483–496.
- Holt, T. J., Turner, M. G., & Exum, M. L. (2014). The impact of self control and neighborhood disorder on bullying victimization. *Journal of Criminal Justice*, 42, 347–355.
- Kochenderfer-Ladd, B., & Pelletier, M. E. (2008). Teachers' views and beliefs about bullying: Influences on classroom management strategies and students' coping with peer victimization. *Journal of School Psychology*, 46, 431–453.
- Konishi, C., Hymel, S., Zumbo, B. D., & Li, Z. (2010). Do school bullying and student-teacher relationships matter for academic achievement? A multilevel analysis. *Canadian Journal of School Psychology*, 25, 19–39.
- Lenzi, M., Vieno, A., Gini, G., Pozzoli, T., Pastore, M., Santinello, M., et al. (2014). Perceived teacher unfairness, instrumental goals, and bullying behavior in early adolescence. *Journal of Interpersonal Violence*, 29, 1834–1849.
- Ma, T. L., & Bellmore, A. (2012). Peer victimization and parental psychological control in adolescence. *Journal of Abnormal Child Psychology*, 40, 413–424.

- Machado Azeredo, C., Rinaldi, A. E. M., Leite de Moraes, C., Bertazzi Levy, R., & Rossi Menezes, P. (2015). School bullying: A systematic review of contextual-level risk factors in observational studies. *Aggression and Violent Behavior, 22*, 65–76.
- Nation, M., Vieno, A., Perkins, D. D., & Santinello, M. (2008). Bullying in school and adolescent sense of empowerment: An analysis of relationships with parents, friends, and teachers. *Journal of Community and Applied Social Psychology, 18*, 211–232.
- National School Climate Center (n.d.). *School climate*. Retrieved June 3, 2016, from <http://www.schoolclimate.org/>
- Ortega-Ruiz, R. (2007). La convivencia: un regalo de la cultura a la escuela. *Idea La Mancha: Revista de Educación de Castilla-La Mancha, 4*, 50–54.
- Ortega-Ruiz, R., Del Rey, R., & Casas, J. A. (2013). La Convivencia escolar: clave en la predicción del bullying. *RIEE. Revista Iberoamericana de Evaluación Educativa, 6*, 91–102.
- Ortega-Ruiz, R., & Zych, I. (Eds.). (2016). *Convivencia escolar: Manual para docentes*. Madrid: Grupo 5.
- Piquero, A. R., Jennings, W. G., Diamond, B., Farrington, D. P., Tremblay, R. E., Welsh, B. C., et al. (2016). A meta-analysis update on the effects of early family/parent training programs on antisocial behavior and delinquency. *Journal of Experimental Criminology, 12*, 229–248.
- Pouwels, J. L., Lansu, T. A. M., & Cillessen, A. H. N. (2016). Participant roles of bullying in adolescence: Status characteristics, social behavior, and assignment criteria. *Aggressive Behavior, 42*, 239–253.
- Romera, E. M., Del Rey, R., & Ruiz, R. O. (2011). Prevalence and differentiating aspects related to gender with regard to the bullying phenomenon in poor countries. *Psicothema, 23*, 624–629.
- Salmivalli, C., Huttunen, A., & Lagerspetz, K. M. J. (1997). Peer networks and bullying in schools. *Scandinavian Journal of Psychology, 38*, 305–312.
- Salmivalli, C., Lagerspetz, K., Bjorkqvist, 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.
- Samara, M., & Smith, P. K. (2008). How schools tackle bullying, and the use of whole school policies: Changes over the last decade. *Educational Psychology, 28*, 663–676.
- Smith, P. K., Kupferberg, A., Mora-Merchan, J. A., Samara, M., Bosley, S., & Osborn, R. (2012). A content analysis of school anti-bullying policies: A follow-up after six years. *Educational Psychology in Practice, 28*, 47–70.
- Smith, P. K., Smith, C., Osborn, R., & Samara, M. (2008). A content analysis of school antibullying policies: Progress and limitations. *Educational Psychology in Practice, 24*, 1–12.
- Thapa, A., Cohen, J., Guffey, S., & Higgins-D'Alessandro, A. (2013). A review of school climate research. *Review of Educational Research, 83*, 357–385.
- Tippett, N., & Wolke, D. (2014). Socioeconomic status and bullying: A meta-analysis. *American Journal of Public Health, 104*, E48–E59.
- Tippett, N., & Wolke, D. (2015). Aggression between siblings: Associations with the home environment and peer bullying. *Aggressive Behavior, 41*, 14–24.
- Troop-Gordon, W., & Ladd, G. W. (2015). Teachers' victimization-related beliefs and strategies: Associations with students' aggressive behavior and peer victimization. *Journal of Abnormal Child Psychology, 43*, 45–60.
- 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.
- US Department of Education. Safe and Supportive Schools (n.d.). Retrieved June 1, 2016, from <http://safesupportiveschools.ed.gov/index.php?id=33>
- Van der Zanden, P. J. A. C., Denessen, E. J. P. G., & Scholte, R. H. J. (2015). The effects of general interpersonal and bullying-specific teacher behaviors on pupils' bullying behaviors at school. *School Psychology International, 36*, 467–481.
- Varjas, K., Henrich, C. C., & Meyers, J. (2009). Urban middle school students' perceptions of bullying, cyberbullying, and school safety. *Journal of School Violence, 8*, 159–176.

- Veenstra, R., Lindenberg, S., Munniksmma, A., & Dijkstra, J. K. (2010). The complex relation between bullying, victimization, acceptance, and rejection: Giving special attention to status, affection, and sex differences. *Child Development, 81*, 480–486.
- Wei, H. S., & Jonson-Reid, M. (2011). Friends can hurt you: Examining the coexistence of friendship and bullying among early adolescents. *School Psychology International, 32*, 244–262.
- Wei, H. S., Williams, J. H., Chen, J. K., & Chang, H. Y. (2010). The effects of individual characteristics, teacher practice, and school organizational factors on students' bullying: A multilevel analysis of public middle schools. *Children and Youth Services Review, 32*, 137–143.
- Wolke, D., & Samara, M. M. (2004). Bullied by siblings: Association with peer victimisation and behaviour problems in Israeli lower secondary school children. *Journal of Child Psychology and Psychiatry, 45*, 1015–1029.
- Wolke, D., Woods, S., Stanford, K., & Schulz, H. (2001). Bullying and victimization of primary school children in England and Germany: Prevalence and school factors. *British Journal of Psychology, 92*, 673–696.
- Woods, S., & Wolke, D. (2003). Does the content of anti-bullying policies inform us about the prevalence of direct and relational bullying behaviour in primary schools? *Educational Psychology, 23*, 381–402.
- Yoon, J., Sulkowski, M. L., & Bauman, S. A. (2016). Teachers' responses to bullying incidents: Effects of teacher characteristics and contexts. *Journal of School Violence, 15*, 91–113.

Chapter 5

Protecting Children Through Anti-bullying Interventions

5.1 Effective Components of Anti-bullying Programs

As described in Chap. 2, systematic reviews and meta-analyses have been conducted on different topics related to bullying and anti-bullying interventions. Among them, the most comprehensive searches and analyses were carried out by Farrington and Ttofi (2009), who reviewed 53 evaluations published in 89 reports. They found that, after these anti-bullying interventions, overall, bullying perpetration decreased about 20–23%, and bullying victimization dropped about 17–20%. Thus, anti-bullying programs can protect children from this kind of aggression. Nevertheless, not all programs or components are equally effective. This chapter will review important anti-bullying interventions conducted in different geographic areas mostly at a national or regional level with large samples and rigorous designs (see also Baldry and Farrington 2007).

According to the meta-analysis conducted by Farrington and Ttofi (2009), certain components of anti-bullying programs are effective in reducing perpetration or victimization. Figure 5.1 shows the components that were found to work better than others in reducing perpetration, victimization, or both.

Farrington and Ttofi (2009) found that there were some components that worked best in reducing both perpetration and victimization. Among them, parent training, in which information about bullying and anti-bullying programs was provided, was found to be effective. More intensive and longer programs (for both teachers and students) worked best. Cooperative group work among experts in which information was exchanged, common aims were established or solutions to different problems were discussed, was also useful. Disciplinary methods involving the elaboration and application of new rules, including sanctions for bullying were also effective in reducing perpetration and victimization.

Some features were found to be effective in reducing perpetration or victimization only. The decrease in perpetration was greater in interventions that included teacher training and a whole-school anti-bullying policy with classroom rules,

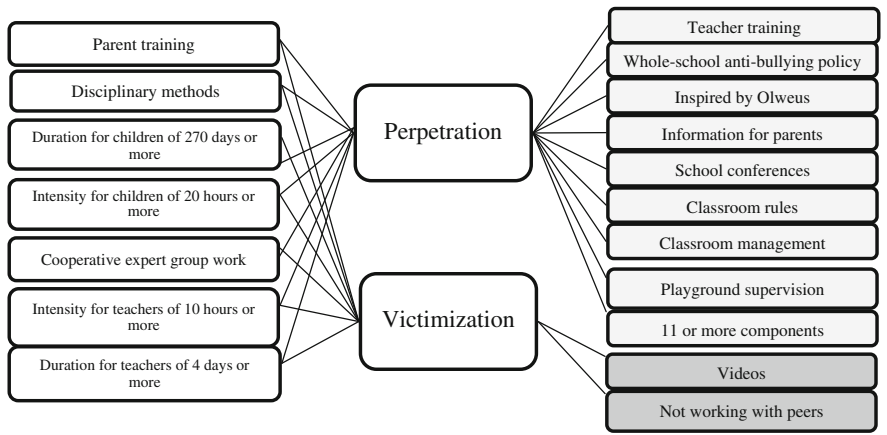


Fig. 5.1 Effective components of anti-bullying programs according to the meta-analysis conducted by Farrington and Ttofi (2009)

adequate classroom management, and playground supervision. These effective programs also included training for teachers, information for parents, and school conferences. Interventions with more components, and those inspired by Olweus, were also more effective in reducing perpetration. In the case of victimization, visualizing videos was an effective component, and programs that included work with peers (such as mediation or mentoring) were found to be less effective than those without this component.

According to pedagogical criteria (Cornejo Chávez and Redondo Rojo 2007), these components can be grouped into two levels: school management and school curriculum. School management is understood as changes in human and material resources, including new tasks for personnel and new ways of organizing the work. This also includes the creation of specific contexts or changes in the physical environment. School curriculum, on the other hand, refers to the content of the programs and different teaching and learning methods and strategies. It also includes specific objectives and evaluation of the results. In the following sections, interventions in ten different countries are described taking these dimensions into account. Detailed descriptions of some of these programs can be found in Smith et al. (2004a) and Farrington and Ttofi (2009); only a summary of each intervention is presented in this chapter.

5.2 Olweus Bullying Prevention Program

This program was first conducted in Norway and later adapted and implemented in different countries around the world. It was the first national anti-bullying intervention in the world, conducted in the 1980s, and supported by the Norwegian

Ministry of Education (Olweus 1994; Olweus and Limber 2010). There are many reports of different versions of this program, but this chapter will focus on the version evaluated in Bergen. The program was conducted in 42 primary and secondary schools with an age cohort design with a pre-test, a post-test and a one year follow-up (Olweus 1993). The age cohort design meant that children of each age before the intervention were compared with different children of the same age after the intervention.

The Olweus program was a whole-school intervention organized in three different levels—school, classroom and individual. Reducing bullying became one of the most important objectives in these schools and the physical environment was analyzed and improved, including common spaces such as corridors, playgrounds, or classrooms. Hot spots and hot times (i.e., places and moments with a high occurrence of bullying episodes) were identified and their supervision and surveillance were increased.

There were also some changes in the organization of human resources. A group for the development of a positive school context was created, and there was also a specific coordination committee that included teachers, school administrators, and representatives of parents and students. Family–school relationships were promoted through Parent–Teacher Association meetings and parent circles. Parents were given information through meetings and booklets.

School personnel were trained and provided with a handbook on bullying that contained details about the intervention. Specific training was delivered to the school coordinators who were responsible for the implementation and worked collaboratively with the teachers. The teachers maintained weekly meetings to discuss the implementation of the program.

Each teacher promoted positive classroom relationships through specific anti-bullying rules designed jointly with the students. Nonviolent sanctions for bullying behaviors that violated those rules were established and applied. Students were given information about the nature, dynamics, and consequences of bullying in an active, attractive, cooperative and participatory way (e.g., through videos, role-playing, and leisure activities).

At the individual level, teachers had serious talks with perpetrators, victims, and bystanders. Sanctions were applied in the case of perpetrators, emotional support and social skills were promoted in the case of victims, and bystanders were encouraged to intervene as defenders. The parents of involved children were also asked to help. According to Olweus and Limber (2010), the program was very successful, with more than a 50% decrease in the prevalence of perpetrators and more than a 40% decrease in the prevalence of victims after the Oslo evaluation between 1999 and 2000.

5.3 The Sheffield Project

The Sheffield project was conducted in the UK in the early 1990s by Smith and colleagues (Smith 1999; Smith and Sharp 1994; Smith et al. 2004b). It included 23 primary and secondary schools with more than 7000 students. It used a cohort design with pre-test, post-test and a follow-up. It was conducted with a whole-school policy approach.

This intervention involved all members of the school community, including teachers, parents, students, and other school personnel. School management changes affected, among other features, playgrounds, and lunch breaks. Lunchtime supervisors were trained and their relationships with students and teachers were fostered. There was also specific training for playground supervision including, among other things, distinguishing between playful fighting and real fighting, and improving the quality of play, facilities, and positive behavior.

The program started with a visit of the head teachers to the University and a one-day meeting with the researchers to introduce its main components. Afterwards, a series of further meetings and training for school personnel (including teachers and supervisors) was held before and during the intervention. Different curriculum-based strategies were then put into practice by the teachers. The contents were related to knowledge about bullying, the emotional impact on the victim, and possible solutions if bullying occurred. Classes were framed to work cooperatively and positive values were enhanced. Different strategies such as drama, role-playing, literature reading, and videos were also used. There were also other components aimed at improving the student's response to bullying situations. These included promoting assertiveness in victims, discussions with perpetrators (the Pikas method), school "courts" and counseling groups of students. These curriculum-based strategies and individual work were optional.

The results of the Sheffield project varied among the schools (Smith et al. 2004b). There was a 15% decrease in victimization in primary schools (and not much change in secondary schools). There was also a 12% decrease in perpetration in primary and secondary schools.

5.4 KiVa

The word KiVa means "nice" in Finnish and it is also an acronym of the term "Kiusaamista Vastan" which means "against bullying" (Kärnä et al. 2011). KiVa was an intervention implemented in Finland by Salmivalli et al. (2010) in different grades and school levels. It has also been applied in different countries around the world. In this chapter, we will focus on the intervention conducted in 39 schools distributed throughout Finland with more than 4000 children aged between 10 and 12 years (Kärnä et al. 2011). This evaluation was a randomized experiment (which ensured the equivalence of intervention and control condition) with a pre-test,

measurement in the middle of the school year, and a post-test. KiVa included some universal and indicated actions. Remarkably, as many as 78 schools were randomly assigned to intervention or control conditions.

The program was based on studies conducted by Salmivalli et al. (1996) on bullying as a group process in which students adopt roles of victims, perpetrators, and different types of bystanders (outsiders, reinforcers of bullies, assistants of bullies, and defenders of the victim). Perpetrators are children who try to achieve high group status by bullying other children. Thus, KiVa promotes the actions of the bystanders who are encouraged to defend the victim and not to reinforce the bully. Therefore, perpetrators would not get the social reinforcement and status that they desire, and they would lose their interest in continuing the aggression.

KiVa involved some changes in school management. Networks of three schools were created to share experiences, ideas, and advice during three meetings throughout the academic year attended also by researchers. Playground supervision was increased, and teachers were given special vests to become more visible. An internet forum was also created, and materials were given to teachers and families.

The teachers were trained by the researchers during two full days and then they administered the program to the students for 20 h. The contents of these lessons included knowledge about bullying, enhancing empathy, helping the victim, and enhancing social and emotional skills. The classroom rules were also elaborated, through an active methodology (individual and group work) using materials such as cartoons and a videogame. The indicated actions involved creating a team of three teachers and the classroom teachers who dealt with bullying cases. The intervention included discussions with children involved in bullying and encouraging high-status prosocial classmates to help victims. According to Kärnä et al. (2011), and taking account of the fact that bullying decreased also in the control schools, there was a decrease of 30% in victimization and 17% in perpetration in the intervention schools compared to the controls.

5.5 SAVE

SAVE (an acronym of Seville Anti-Violence in Schools in Spanish) was an intervention conducted in Spain by Ortega-Ruiz and colleagues (Ortega and Del Rey 2001; Ortega et al. 2004). It was designed from an ecological perspective and involved five primary and secondary intervention schools with more than 700 students (and an equivalent control group). It had a pre-test (intervention schools), post-test (intervention and control schools) design.

The intervention started with an analysis of the school environment and interpersonal relationships. The project was included in the school policy that was approved and supported by all the members of the school community. Teachers were trained during a 20 h seminar and, afterwards, teachers designed their own anti-bullying projects according to the SAVE model, supervised by the researchers.

Teachers worked in groups of four to five, holding meetings every two weeks, and the representatives of these groups met the researchers once every two months.

Changes in the curriculum focused on prevention and there was also direct intervention with students involved in bullying. The intervention included democratic classroom management through clear and explicit rules that focused on positive interpersonal relationships. Students worked in cooperative groups. Specific contents of the program included education on prosocial attitudes and values and emotional competence. This was achieved through play, stories, role-playing, and other materials and techniques designed by the teachers. The direct intervention with students involved in bullying included fostering social support (mostly from their peers), raising self-esteem, and fostering assertiveness, and empathy. According to Ortega et al. (2004), the percentage of victims and bully/victims decreased more than 50%, and the percentage of perpetrators decreased about 15%, as a result of the intervention.

5.6 Toronto Anti-bullying Intervention

This intervention was conducted in three Canadian elementary schools in Toronto (Pepler et al. 1994, 2004) with about 1000 students. It was implemented throughout three years (one school in year 1, two schools in year 2, and three schools in year 3) and schools in the waiting list served as controls in year 1 and year 2. It was a multimodal program (including school, parent, classroom, and individual levels) that used an ecological whole-school perspective and was inspired by the Olweus Bullying Prevention Program.

The main components of the Toronto program included staff training, improving codes of behavior, and playground supervision. Administrators and teachers were encouraged to establish and promote standards of behavior and react if cases of bullying occurred in their schools. Communication among parents and schools was enhanced, especially when their children were involved in bullying. There were specific information nights in which parents were informed about the program. Some strategies and methodologies included drama and assignments on bullying for the students. According to Pepler et al. (2004), the results varied greatly among the schools and different measurement instruments. In general, the program was mostly effective in decreasing both victimization and perpetration.

5.7 Donegal and ABC Anti-bullying Programs

The Donegal anti-bullying program was conducted in Ireland at a regional level by O'Moore and Minton (2004) and it was followed by the ABC intervention, which was a nationwide version of the intervention (Minton and O'Moore 2008). The Donegal intervention took place in 42 primary schools, and more than 2000

students, enrolled in 22 schools, completed a pre-test and a post-test evaluation. The ABC intervention was carried out in 68 schools of which an evaluation of four schools was available (including a pre-test and a post-test) and analyzed. Both programs had a whole-school approach and were very similar in nature.

The interventions started with a training of teacher representatives (11 teachers in Donegal and 32 in ABC). Trained teachers became coordinators of networks formed by three to five schools. These trained teachers provided help and support to all members of the school communities, including boards of management, staff, parents, and pupils.

Specific materials were provided, including packs for teachers and parents. Students were also provided with books about bullying prevention and advice on how to respond to bullying situations. Schools adopted anti-bullying policies that included specific procedures on reporting, investigating, recording and sanctioning bullying incidents. Curriculum contents, such as prosocial behavior, social and emotional skills, and nonviolent conflict resolution, were promoted through general conferences and group classroom-specific activities, including the elaboration of posters, paintings, music, drama, film scripts, and role-playing. Students were encouraged to adopt active roles in bullying detection and prevention.

According to O'Moore and Minton (2004), the Donegal intervention led to a 20% decrease in victimization (50% in the case of frequent victimization) and a 17% decrease in perpetration (70% in the case of frequent perpetration). The results of the ABC intervention were inconclusive, and that program was less successful. Minton and O'Moore (2008) attributed these lower success rates to a lower degree of monitoring in the case of ABC, with training at a summer school during a short period of time (compared with a series of weekends in Donegal). Moreover, network working groups were spread around the country and were held via e-mails or telephone in ABC (compared with in person meetings in Donegal).

5.8 Bulli & Pupe (Bullies and Dolls)

Bulli and Pupe was conducted in Italy (Baldry 2001; Baldry and Farrington 2004) with 131 students in three middle and secondary schools (and an equivalent control group). It was conducted with a pre-test, post-test experimental design with random assignment to the intervention or control group.

This program was delivered by the researchers throughout three weekly sessions (9 h). Students were given a booklet and watched three videos that explained three parts of the booklet. The first part focused on the concept of bullying, the second part on the relationship between domestic violence and bullying, and the third part on the consequences of bullying in adult life. Besides watching the videos, teaching and learning took place with an active methodology, including group discussions and role-playing.

Peer support for the victims was promoted. Students were also encouraged to empathize with the victims and improve their perspective taking skills. According

to Baldry and Farrington (2004) this program had desirable effects on older students but also possible undesirable effects on younger students. The authors speculated that the program might have worked better with older students because of the cognitive skills it required, while younger students might have reported more bullying after the intervention because they became more sensitized to the topic of bullying.

5.9 School-Wide Positive Behavioral Interventions and Supports (PBIS)

PBIS are a set of behavioral interventions designed to modify undesirable behaviors in schools (Horner et al. 2010) and are implemented in educational settings all over the US. This intervention was also used to decrease bullying (Bradshaw 2013) and a randomized controlled trial with 31 high schools was conducted to evaluate its effectiveness (Bradshaw et al. 2015).

School personnel received training and materials and then implemented the program in the schools under the supervision of a coach (one for every three schools, working two days per week in each school). School personnel then worked in teams who also attended annual summer training. There was a specific procedure for monitoring of implementation fidelity.

This program was conducted on three levels. A universal school-wide level consisted of changing school policies and establishing rules that were known and respected by all members of the school community. Adherence to these rules was reinforced by different rewards, prizes, or privileges. Violations of these rules were followed by consistent negative consequences. Selective level components were used with students who did not respond to the first level. Indicated level components were used with students who did not respond to the first and the second levels. The curriculum design was based on data collected in each school and there were no specific components designed beforehand.

It was found that schools with a higher prevalence of bullying implemented more components of the program than schools with lower rates of bullying (Bradshaw et al. 2015). The results regarding changes in bullying are still being collected.

5.10 Viennese Social Competence (ViSC)

This intervention was implemented on many different occasions in Austrian schools. A large scale evaluation program was conducted in 13 schools and there was also an equivalent control group (Grading et al. 2016). This involved a pre-test, post-test and follow-up design with a longer term follow-up.

In this programs, researchers trained coaches who trained teachers who conducted this program in schools with the students. Teacher training included knowledge about the nature of bullying, addressing cases of bullying, and school level prevention. Interventions in schools were conducted with an ecological whole-school approach and included individual and universal components. Students were encouraged to take responsibility for their social environment and interactions and to actively contribute to the improvement of these. There were also specific components aimed at fostering social and emotional skills, such as emotional management, assertiveness training, and coping strategies.

A specific handbook was provided and the curriculum was organized in 13 units (of two hours each). Active methods and strategies, such as group work, role-playing, games, and discussions were used. Some of the contents included analyses of social situations and knowledge about the fact that these situations can be understood in many different ways. Afterwards, students participated in creative group projects on bullying prevention (e.g., songs, videos, or newspapers).

According to Strohmeier et al. (2012), this program was effective in reducing bullying perpetration, but preliminary results showed that victimization rates did not change. There was a decrease in cyberbullying (perpetration and victimization) (Gradinger et al. 2016) and detailed results regarding bullying are still being collected.

5.11 The Friendly Schools Project

This intervention was implemented in 15 elementary schools in Australia, with more than 1000 students aged between 8 and 9 years old and an equivalent control group (Cross et al. 2004, 2011). It was a 3-year randomized controlled trial with a pre-test and a post-test. It was designed and implemented as a whole-school intervention.

The project included three main components: a whole-school policy, a family intervention and a classroom curriculum. Specific committees for coordinating the program in each school were created and received four-hour training. They were also provided with program manuals that contained examples, ideas and strategies that could be helpful in implementing the anti-bullying policy.

Teachers were given structured manuals and received training (six hours a year) and provided the students with a specific curriculum that included nine activities in about eight hours per year. The contents focused on understanding bullying, reporting this kind of aggression, adequate responses and support for victimized students. Students received booklets containing specific information about the program. Parents were also involved in this intervention and were given specific material on how they could help if their child was involved in bullying.

According to the results reported by Cross et al. (2011), the effects differed depending on the time point and frequency of bullying. Overall, students in the intervention group (compared to controls) reported witnessing fewer episodes of

bullying, had lower victimization rates, and had a higher likelihood of reporting bullying after the program. There were no significant effects on perpetration.

5.12 Summary

Meta-analytic findings show that interventions can effectively reduce bullying (Farrington and Ttofi 2009) and a lot of knowledge on characteristics and components of effective programs has been gained. Given that bullying is a very complex phenomenon, it is very difficult to eradicate. Therefore, complex, active, and long-term school solutions are necessary, with great effort and involvement of all members of the school community.

Certain components of anti-bullying interventions were found to be more effective than others. In these interventions, schools need to create a culture of peace and implement policies against aggression. Specific rules against bullying are helpful in fostering desirable behaviors. It is also important to take specific measures in school management that involve creating anti-bullying committees and working groups. It is useful to modify contexts and physical environments, for example, by improving facilities or playground supervision. Specific curriculum changes, that introduce materials and contents to increase students' awareness of bullying, their social and emotional competencies, and their responses to bullying situations, are also necessary. Encouraging peers to help victims and discouraging them from reinforcing the aggressive behaviors of the perpetrators were also included in the effective programs. These contents are mostly delivered with active, attractive, participatory and collaborative strategies and methodologies. The involvement of families is also an important component of these interventions.

In this chapter, we described 10 important anti-bullying programs that have been conducted in different countries. Although there are many interventions that have been proved to be effective in decreasing bullying, there is no recipe or established formula that can be applied to every school in every context. At the same time, it is not recommended to "reinvent the wheel" and there are many programs or components with proven effectiveness. Thus, it is recommended to build on these empirically proven interventions and, after a rigorous evaluation of each school and context, adapt them to the particular needs and circumstances of the school.

References

- Baldry, A. C. (2001). *Bullying in schools: Correlates and intervention strategies* Ph.D. thesis. Cambridge, UK: Cambridge University.
- Baldry, A. C., & Farrington, D. P. (2004). Evaluation of an intervention program for the reduction of bullying and victimization in schools. *Aggressive Behavior*, 30, 1–15.
- Baldry, A. C., & Farrington, D. P. (2007). Effectiveness of programs to prevent school bullying. *Victims and Offenders*, 2, 183–204.

- Bradshaw, C. P. (2013). Preventing bullying through positive behavioral interventions and supports (PBIS): A multitiered approach to prevention and integration. *Theory into Practice*, 52, 288–295.
- Bradshaw, C. P., Pas, E. T., Debnam, K. J., & Johnson, S. L. (2015). A Focus on implementation of positive behavioral interventions and supports (PBIS) in high schools: Associations with bullying and other indicators of school disorder. *School Psychology Review*, 44, 480–498.
- Cornejo Chávez, R., & Redondo Rojo, J. M. (2007). Variables y factores asociados al aprendizaje escolar. Una discusión desde la investigación actual. *Estudios Pedagógicos*, 33, 155–175.
- Cross, D., Hall, M., Hamilton, G., Pintabona, Y., & Erceg, E. (2004). Australia: The friendly school project. In P. K. Smith, D. J. Pepler, & K. Rigby (Eds.), *Bullying in schools: How successful can interventions be?*. Cambridge, UK: Cambridge University Press. 187–210.
- Cross, D., Monks, H., Hall, M., Shaw, T., Pintabona, Y., Erceg, E., et al. (2011). Three-year results of the friendly schools whole-of-school intervention on children's bullying behaviour. *British Educational Research Journal*, 37, 105–129.
- Farrington, D. P., & Ttofi, M. M. (2009). School-based programs to reduce bullying and victimization. *Campbell Systematic Reviews*, 6, 1–148.
- Grading, P., Yanagida, T., Strohmeier, D., & Spiel, C. (2016). Effectiveness and sustainability of the ViSC Social Competence Program to prevent cyberbullying and cyber-victimization: Class and individual level moderators. *Aggressive Behavior*, 42, 181–193.
- Horner, R. H., Sugai, G., & Anderson, C. M. (2010). Examining the evidence base for schoolwide positive behavior support. *Focus on Exceptional Children*, 42, 1–14.
- Kärnä, A., Voeten, M., Little, T. D., Poskiparta, E., Kaljonen, A., & Salmivalli, C. (2011). A large-scale evaluation of the KiVa anti-bullying program. *Child Development*, 82, 311–330.
- Minton, S. J., & O'Moore, A. M. (2008). The effectiveness of a nationwide intervention programme to prevent and counter school bullying in Ireland. *International Journal of Psychology and Psychological Therapy*, 8, 1–12.
- O'Moore, A. M., & Milton, S. J. (2004). Ireland: The Donegal primary school antibullying project. In P. K. Smith, D. J. Pepler, & K. Rigby (Eds.), *Bullying in schools: How successful can interventions be?* (pp. 275–288). Cambridge, UK: Cambridge University Press.
- Olweus, D. (1993). *Bullying at school: What we know and what we can do*. New York: Blackwell.
- Olweus, D. (1994). Annotation—Bullying at school—Basic facts and effects of a school-based intervention program. *Journal of Child Psychology and Psychiatry and Allied Disciplines*, 35, 1171–1190.
- Olweus, D., & Limber, S. P. (2010). The Olweus Bullying Prevention Program: Implementation and evaluation over two decades. In S. R. Jimerson, S. M. Swearer, & D. L. Espelage (Eds.), *Handbook of bullying in schools: An international perspective* (pp. 377–402). New York: Routledge.
- Ortega, R., & Del Rey, R. (2001). Aciertos y desaciertos del proyecto Sevilla Anti-violencia Escolar (SAVE). *Revista de Educación*, 324, 253–270.
- Ortega, R., Del Rey, R., & Mora-Merchan, J. A. (2004). SAVE model: An antibullying intervention in Spain. In P. K. Smith, D. J. Pepler, & K. Rigby (Eds.), *Bullying in schools: How successful can interventions be?* (pp. 167–186). Cambridge, UK: Cambridge University Press.
- Pepler, D. J., Craig, W. M., O'Connell, P., Atlas, R., & Charach, A. (2004). Making a difference in bullying: Evaluation of a systemic school-based program in Canada. In P. K. Smith, D. J. Pepler, & K. Rigby (Eds.), *Bullying in schools: How successful can interventions be?* (pp. 125–140). Cambridge, UK: Cambridge University Press.
- Pepler, D. J., Craig, W. M., Ziegler, S., & Charach, A. (1994). An evaluation of an antibullying intervention in Toronto schools. *Canadian Journal of Community Mental Health*, 13, 95–110.
- Salmivalli, C., Kärnä, A., & Poskiparta, E. (2010). From peer putdowns to peer support: A theoretical model and how it translated into a national anti-bullying program. In S. R. Jimerson, S. M. Swearer, & D. L. Espelage (Eds.), *Handbook of bullying in schools: An international perspective* (pp. 441–454). New York: Guilford.

- Salmivalli, C., Lagerspetz, K., Bjorkqvist, 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.
- Smith, P. K. (1999). England and Wales. In P. K. Smith, Y. Morita, J. Junger-Tas, D. Olweus, R. Catalano, & P. Slee (Eds.), *The nature of school bullying: A cross-national perspective* (pp. 68–90). London and New York: Routledge.
- Smith, P. K., Pepler, D. J., & Rigby, K. (Eds.). (2004a). *Bullying in schools: How successful can interventions be?*. Cambridge, UK: Cambridge University Press.
- Smith, P. K., & Sharp, S. (Eds.). (1994). *School bullying: Insights and perspectives*. London: Routledge.
- Smith, P. K., Sharp, S., Eslea, M., & Thompson, D. (2004b). England: the Sheffield project. In P. K. Smith, D. J. Pepler, & K. Rigby (Eds.), *Bullying in schools: How successful can interventions be?* (pp. 99–123). Cambridge, UK: Cambridge University Press.
- Strohmeier, D., Hoffmann, C., Schiller, E. M., Stefanek, E., & Spiel, C. (2012). ViSC social competence program. *New Directions for Youth Development*, 133, 71–84.

Chapter 6

Protecting Bullies and Victims from Long-term Undesirable Outcomes

6.1 Background

This chapter has two aims: first to review evidence on the later life consequences of school bullying and second, to review what is known about protective factors that interrupt the continuity from school bullying to later life outcomes. This chapter first presents evidence on the detrimental impact of school bullying on the healthy psychosocial development of children. Given the more limited literature on the development of children involved in specific bullying roles (such as bystanders and defenders), we focus on pure bullies, pure victims, and bully-victims. Relevant scientific evidence is presented based on individual studies and, notably, from systematic and meta-analytic reviews of the literature. This chapter documents a significant continuity between school bullying and internalizing and externalizing problems in adult life. Therefore, the second part of this chapter reviews protective factors that interrupt this continuity based on the most up-to-date scientific evidence (Ttofi et al. 2014b).

Bullying continues to be a serious problem, plaguing school students in both developed and developing countries (Liang et al. 2007; Smith et al. 1999). Early longitudinal research highlighted the negative impact of school bullying on children's internalizing (e.g., depression) and externalizing (e.g., offending) behavior (e.g., Farrington 1993; Olweus 1991), and various reviews, described below, have synthesized research on the topic.

School bullying is not just a school phenomenon that affects children during their school years. Current evidence suggests that it has long-term effects (Farrington et al. 2012) and, more importantly, that these effects are independent and, potentially, causal (Arseneault et al. 2010). For example, Kim et al. (2006) investigated the causal time ordering between bullying and psychopathological behaviors based on a 10-month follow-up of almost 2000 students in South Korea. They discovered that social problems increased the risk of becoming a victim or a bully-victim, but these associations disappeared after controlling for baseline

bullying status. However, 10 months later, individuals who were victims at baseline showed an increased risk of social problems, those who were perpetrators had increased aggression, and bully-victims had increased aggression and externalizing problems, providing clear evidence regarding the direction of effects.

6.2 Antisocial Behavior, Externalizing Problems, Violence, and General Offending

Existing research has established a significant association between school bullying and externalizing problem behaviors. For example, a systematic review and meta-analysis of 13 cross-sectional studies (Valdebenito et al. 2015) found a strong relationship between bullying perpetration and drug use, even after adjusting for confounding variables. For example, if a quarter of children were bullies and a quarter were drug users, the effect size found in this study would correspond to 41% of bullies being also drug users, compared with 20% of non-bullies. Victims of school bullying also had a higher probability of taking drugs compared to noninvolved children.

The association between involvement in school bullying and drug use is statistically significant, based on meta-analytic results from prospective longitudinal studies. Specifically, Ttofi et al. (2016a) synthesized data from nine prospective longitudinal studies and found that students who bullied were at least twice as likely to use drugs later in life. However, when analyses controlled for preexisting baseline risk factors, the adjusted summary effect size was markedly reduced, suggesting a modest but significant effect of bullying perpetration on drug use. This meta-analysis of longitudinal studies highlighted the even smaller number of studies (six) on the association between victimization and drug use, which made it difficult to calculate a weighted mean effect size.

The above findings are consistent with existing research on the strong association between youth aggression, peer victimization, and externalizing problem behaviors, although further research is needed on the overlap between aggression and victimization (i.e., the bully-victims) and how this category is linked to externalizing problems in the long run. Aggressive children who are rejected by their peers are at increased risk for behavior problems prior to middle school (Bierman et al. 1993; Bierman and Wargo 1995). In fact, the predictive relationship between early aggression and peer rejection and later externalizing behavior problems has been documented with regard to male students (Coie et al. 1995). Children who are both rejected and aggressive are more likely than their nonaggressive well-liked peers to develop biased social information processing, involving a tendency to attribute hostile intentions to their classmates (Dodge 1980; Dodge and Frame 1982). It is plausible that this hostile attributional style increases the likelihood that they will respond toward other children in a retaliatory aggressive

manner, therefore reinforcing the vicious cycle of aggression and victimization and, subsequently, impeding their healthy psychosocial development.

Children who are involved in bullying also have a higher probability of being involved in offending and antisocial behavior in adult life. For example, based on UK results from the Cambridge Study in Delinquent Development, Farrington and Ttofi (2011) found that school bullies were twice as likely to be convicted for violent offenses at 15–20 years of age, even after controlling for prior childhood troublesomeness, childhood antisociality, and teacher-reported aggressive behavior. In another longitudinal study in New Zealand, Gibb et al. (2011) reported that childhood bullies were almost three times as likely to have convictions in adult life compared with non-bullies, even after controlling for gender, IQ, deviant peer affiliations, and a parental history of criminal offending. The equivalent results for victims were nonsignificant.

Ttofi et al. (2011b) synthesized all available evidence on the association between bullying perpetration and offending in adult life, while Farrington et al. (2012) updated the results by investigating the association between victimization and later offending. Bullying perpetration at school was a significant predictor of offending up to about six years later, even after controlling for other major childhood risk factors. For bullied children, the results were more encouraging, because the long-term prospective link between victimization and offending later in life was very small. Ttofi et al. (2012) also investigated the long-term association between school bullying and violent offending, based on 15 prospective longitudinal studies. Bullying perpetration at school was a significant predictor of violence an average of six years later in life, with an effect size which suggests that bullying perpetration increased the risk of later violence by about two-thirds. The summary effect size for bullying victimization versus violence was markedly smaller but still statistically significant.

While it is clear that bullying perpetration predicts later antisocial behavior, it is not clear that this relationship is causal. It could reflect the presence of an underlying personality trait, or bullying could lead to antisocial behavior in a developmental sequence. More longitudinal research is needed to specify precisely why bullying perpetration predicts later antisocial behavior.

6.3 Anxiety and Depression

Children who are involved in school bullying have a higher probability of becoming anxious and depressed adults compared to their noninvolved counterparts. For example, based on data from the “Boy to a Man” Finnish Longitudinal Study, Klomek et al. (2008) found that boys who were identified as pure bullies at age 8 were three times as likely to be depressed ten years later compared to noninvolved peers, even after controlling for depression at age 8. The results were equally strong for bully-victims but, surprisingly, not for pure victims.

In another study in Finland, the Adolescent Mental Health Cohort, Kaltiala-Heino et al. (2010) found a strong association between victimization and depression, with bullied adolescent boys having nearly five times higher odds of becoming depressed two years later. This relationship held up even after controlling for demographic factors such as parental education and family structure. The associations were also strong, but nonsignificant, for bullied girls. Interestingly, male bullies were also more likely to be depressed later in life but this was not true for female bullies.

The above results are consistent with numerous studies that suggest a long-term link between involvement in bullying and later mental health problems, such as withdrawn behavior (Shakoor et al. 2011), self-esteem problems (Lösel and Bender 2011; Ozdemir and Stattin 2011), anticipation of failure (Ozdemir and Stattin 2011), comorbid depression and anxiety disorder (Pirkola et al. 2005), and even psychosis (Arseneault et al. 2011).

A special issue of the *Journal of Aggression, Conflict, and Peace Research* investigated the association between school bullying and anxiety, depression, and general mental health (Ttofi et al. 2011a). Within this project, peer-reviewed papers with longitudinal data analyses were analyzed to study the association between school bullying (perpetration and victimization) and various internalizing (e.g., anxiety, depression) problems. This special issue followed the activities of a two-year international research network, in which principal investigators and research groups from 29 longitudinal studies participated by providing published and unpublished data in line with the aims of the project (see Farrington et al. 2012, Table 4, for a list of participants).

Many of the papers in the special issue provided evidence of the strong association of school bullying with both depression and anxiety in adult life, with the two health indices being highly correlated (Brady and Kendall 1992). For example, bullying perpetration significantly predicted anxiety and depression, as did victimization for German students in the Erlangen-Nuremberg Development and Prevention Project (Lösel and Bender 2011). The same was true for Swiss students in the z-proso longitudinal study (Averdijk et al. 2011).

Existing meta-analyses on the association between school bullying and depression in adult life (Farrington et al. 2012; Ttofi et al. 2011c) concluded that bullying victimization was a significant predictor of depression up to about seven years later, even after controlling for other major childhood risk factors. Bullied children were roughly twice as likely to be depressed in adult life. Interestingly, school bullies had a significantly higher probability of being depressed later in life compared with noninvolved children, although the magnitude of the summary effect size was quite small.

Gini and Pozzoli (2013) have synthesized all available evidence on bullying versus psychosomatic problems based on 24 cross-sectional studies and six longitudinal studies. They found that bullied children and adolescents were twice as likely as non-bullied children to experience psychosomatic problems during their school years. Notably, longitudinal studies provided clear evidence regarding the long-term effect of victimization experiences, with bullied children being twice as

likely to suffer later psychosomatic problems such as headaches, stomach pains, sleeping problems, etc.

In the Gini and Pozzoli (2013) meta-analysis of cross-sectional studies, the magnitude of the effect size significantly decreased with an increase in the proportion of female participants in the study sample, suggesting gender-specific effects and the possibility that girls are more resilient than boys. It is plausible to hypothesize that this is because female students have higher social and cognitive skills during childhood and preadolescence compared to male students (Bjorkqvist et al. 1992), although, admittedly, gender differences diminished at older ages (Sutton et al. 1999a, b).

The gender-specific results of Gini and Pozzoli's work are consistent with findings from an earlier meta-analytic review (Else-Quest et al. 2006) on gender differences in temperament among children aged three to 13. This found that boys scored lower than girls in effortful control (and sub-factors such as inhibitory control and perceptual sensitivity), consistent with the greater incidence of externalizing disorders among boys. Interestingly, Else-Quest et al. (2006) also investigated gender differences in "surgency," a personality construct that reflects the personality traits of social inhibition, sociability, dominance, and energy level. Their meta-analytic review found that boys scored higher on the overall factor of surgency (and sub-factors such as high-intensity pleasure), consistent with their greater involvement in active rough-and-tumble play.

While it is clear that victimization predicts later depression, it is not clear that victimization has a causal effect. As pointed out with perpetration, victimization and depression could both be symptoms of the same persisting underlying personality construct, or victimization could lead to depression in a developmental sequence.

6.4 Suicidal Ideation and Suicide Attempts

Findings from the existing literature indicate that problems experienced by perpetrators and victims of bullying are not just minor difficulties but include a wide range of serious mental health problems, including increased self-injurious behavior and suicidal ideation. Data from the E-risk study (Fisher et al. 2012), for example, showed that exposure to frequent bullying in 12-year-old children predicted higher rates of self-harm, even after taking account of prior emotional problems. Victimized twins were more likely to self-harm than their non-victimized identical co-twins, suggesting a direct causal link between bullying victimization and self-harm. The potentially causal effect of victim experiences on self-harm is an important finding as it has been suggested that victim experiences and self-harm are significant contributors to the risk of suicide (Kim et al. 2009).

Very few longitudinal studies have investigated the impact of school bullying on suicidal ideation and suicide attempts. A study of a random and representative sample of 2907 South Australian adults (Roeger et al. 2010) found that bullying victimization at school was associated with increased adult suicidal ideation, with

victims suffering double the odds of suicidal ideation compared to non-victims, even after controlling for both depression and socio-demographic variables.

As another example, a Finnish study of 5302 children born in 1981 and followed up to age 25, based on official medical records (Klomek et al. 2009), provides evidence about the gender-specific effect of victimization on suicidal attempts. With regard to male participants, pure victims were roughly three times as likely to have attempted suicide, but the results were nonsignificant. For female participants, the negative impact of victimization experiences was stronger and statistically significant, with pure victims having five times the odds of suicidal attempts. Male bully-victims also had an increased risk of suicidal attempts but results for their female counterparts were not available because of low numbers in this category. Bullying perpetration was not significantly associated with increased suicidal ideation, which is understandable in light of the smaller association of bullying perpetration with internalizing, compared with externalizing, problem behaviors (Arseneault et al. 2010; Ttofi et al. 2011b).

A narrative review by Klomek et al. (2010) identified the lack of longitudinal research on the association between school bullying and suicidal ideation and suicide attempts. The limited number of studies made comparisons between studies difficult, because of marked differences in the ages of participants and in survey methods. Their review suggests, however, that there is an increased probability of suicidality associated with bullying behavior in the existing longitudinal studies. The results from longitudinal studies could not be synthesized. However, Van Geel et al. (2014) synthesized the evidence on suicidal ideation tendencies among victims of school bullying, based on 34 cross-sectional reports with a total of 284,375 participants. They found that victimization was significantly related to suicidal ideation, with bullied children being almost three times as likely, compared with non-bullied children, to have considered suicide.

Similar results were found for suicide attempts among children and adolescents, with analyses on both outcome measures not being moderated by sex, age, or study quality. Interestingly, Van Geel et al. (2014) concluded that cyberbullying was more strongly related to suicidal ideation than was traditional bullying, which is a worrying finding given the increase in cyberbullying incidents across countries (Cassidy et al. 2013).

6.5 Protective Factors that Interrupt the Continuity from School Bullying to Later Life Outcomes

As shown in this chapter, previous longitudinal research has demonstrated the long-term adverse effects of bullying on the healthy psychosocial development of youth. Not all children involved in school bullying, however, go on to experience adjustment difficulties. Many bullies and victims function as well as the average child who is not involved in bullying (Baldry and Farrington 2005). The resilience

that these children display in the long run should be viewed as an end product of buffering processes that do not eliminate risks (in this case, involvement in bullying incidents) and stress in their lives (here, bullying-related stressors), but that allow these children to cope effectively with problems (Werner 2005).

Most intervention research in the area of school bullying has followed a risk-focused approach, aiming to investigate prevalence rates and associated risk factors for both bullies and their victims (a deficit-orientated approach), with little attention paid toward strength-oriented models and more positive aspects of development (Ttofi and Farrington 2012). Bridging the polarization between deficit-oriented and strength-oriented models could enhance research and practice by emphasizing shared risk and protective factors and considering their interconnectedness and common causal pathways (Guerra and Bradshaw 2008). This is an approach that would arguably facilitate comprehensive intervention planning (Rhee et al. 2001).

A recent special issue of the *Journal of School Violence* (Ttofi et al. 2014b) brought together longitudinal research teams from across the world, with the aim of investigating protective factors that interrupt the continuity from school bullying (perpetration and victimization) to internalizing and externalizing problems in adult life. The special issue also featured a systematic review on this topic by Ttofi et al. (2014a) and the discussion below presents results from that review. Protective factors from the individual, family, school, neighborhood, and other domains can confer resilience on children who are involved in bullying incidents. Examples within each domain are described below.

With regard to the individual domain, earlier research shows that good academic performance can have a protective effect for both bullies and victims. For example, based on data from the International Youth Development Project in Australia, Hemphill et al. (2014) found that among adolescent (age 16–17) school bullies, those who had good academic performance were less likely to report violent antisocial behavior at age 18–19 compared to those bullies who had poor academic performance. Good academic performance was also protective for adolescent victims, with bullied high academic performance youth scoring lower on depression (at age 18–19) compared with bullied poor academic performance youth.

Similar results were obtained in the Australian Temperament Project (Vassallo et al. 2014), with adolescent school bullies (at age 13–14) scoring lower on antisocial behavior (at age 19–20) and adolescent school victims (at age 13–14) scoring lower on depression (at age 19–20) than their counterparts, as long as they had higher scores on “understanding class work” and “social skills.” It could be argued that good academic performance, understanding class work, and good social skills could all be seen as proxy measures of intelligence, which has been found to confer resilience on individuals at risk (Ttofi et al. 2016b). The protective effect of intelligence in interrupting the continuity from school bullying (perpetration and victimization) to internalizing and externalizing problems in adult life was also evident in longitudinal data from Scotland (McVie 2014) and Germany (Lösel and Bender 2014). Based on these findings, it could be argued that attention should be paid to the cognitive development of high-risk individuals, such as school bullies,

victims and bully-victims, via intellectual enrichment and other individual and school programs (Farrington et al. 2016).

Earlier longitudinal research has shown that strong support and positive relationships in the family and school can confer resilience on school bullies and victims. Parental involvement in a child's life (e.g., "asking the child about his/her day at school") was particularly protective against adolescent antisocial behavior (at age 14) for male and female childhood bullies (at age 19) in the Erlangen-Nuremberg Development and Prevention Study, and this was a consistent finding for both self-reported and mother-reported data (Lösel and Bender 2014). Opportunities for prosocial involvement in the family (e.g., "my parents ask me what I think before family decisions affecting me are made") were also protective for school bullies against the development of antisocial behavior in the International Youth Development Study (Hemphill et al. 2014).

Active involvement in family life could promote close and warm relationships among family members, another factor that is particularly protective against the negative impact of school bullying. For example, based on data from the E-Risk longitudinal study in the UK (Bowes et al. 2010), both maternal and sibling warmth, as well as a positive home atmosphere, were protective against emotional problems for victims of school bullying. Bullied twins with high scores on these protective factors had fewer emotional problems than their co-twins who scored lower on these explanatory variables.

Having good relationships outside the family environment is also protective against the negative effects of school bullying. For example, in the z-proso longitudinal study in Switzerland (Averdijk et al. 2014), bullied children who had good relationships with their teachers scored lower in anxiety and depression a year later compared with bullied children who had bad relationships with their teachers. Getting along with the teacher also had a protective effect for bullied Australian children according to Vassallo et al. (2014), although effect sizes were not statistically significant.

Various other protective factors against the impact of bullying perpetration on externalizing problems have been investigated, such as attending a low-delinquency rate school (Ttofi and Farrington 2016), low antisocial peer affiliations (Vassallo et al. 2014), and positive neighborhood features (Hemphill et al. 2014), and these are described in detail in the relevant systematic review by Ttofi et al. (2014a).

6.6 Summary

Involvement in bullying has very serious and damaging consequences for victims, bullies, bully/victims, and for society as a whole. Various systematic and meta-analytic reviews have highlighted these negative long-term effects of school bullying and they were reviewed in this chapter. Research shows that children who are involved in school bullying are more likely to develop psychosocial problems (such as anxiety, depression, and somatic problems) later in life, with the effect

being stronger for victims and bully-victims. Bullies, on the other hand, are more likely to follow an antisocial path later in life and have problems with the law.

New promising studies are being conducted to discover factors that interrupt the continuity from school bullying to later damaging outcomes. In this chapter, we reviewed individual, family, school, neighborhood, and other factors that enhance resilience against negative consequences of bullying. Among these factors, good academic performance, positive family relationships, good relationships with teachers, affiliation to prosocial peers and positive neighborhood features were found to interrupt the continuity from bullying to later negative life consequences.

Given the negative long-term links, effective bullying prevention programs should be promoted. Bullying prevention could be seen as a form of crime prevention and as an effective way of promoting public health. Future bullying prevention initiatives should focus not only on targeting risk factors for involvement in school bullying, but also on enhancing those protective factors that confer resilience on bullies, victims, and bully-victims against the detrimental effects of school bullying. Resilience research within the context of school bullying is still in its infancy, and future research efforts should be invested in expanding this promising new area of research.

References

- Arseneault, L., Bowes, L., & Shakoor, S. (2010). Bullying victimization in youths and mental health problems: 'Much ado about nothing'? *Psychological Medicine*, 40, 717–729.
- Arseneault, L., Cannon, M., Fisher, H. L., Polanczyk, G., Moffitt, T. E., & Caspi, A. (2011). Childhood trauma and children's emerging psychotic symptoms: A genetically sensitive longitudinal cohort study. *American Journal of Psychiatry*, 168, 65–72.
- Averdijk, M., Eisner, M., & Ribeaud, D. (2014). Do social relationships protect victimized children against internalizing problems? *Journal of School Violence*, 13, 80–99.
- Averdijk, M., Müller, B., Eisner, M., & Ribeaud, D. (2011). Bullying victimization and later anxiety and depression among pre-adolescents in Switzerland. *Journal of Aggression, Conflict and Peace Research*, 3, 103–109.
- Baldry, A. C., & Farrington, D. P. (2005). Protective factors as moderators of risk factors in adolescence bullying. *Social Psychology of Education*, 8, 263–284.
- Bierman, K. L., Smoot, D. L., & Aumiller, K. (1993). Characteristics of aggressive-rejected, aggressive (nonrejected), and rejected (nonaggressive) boys. *Child Development*, 64, 139–151.
- Bierman, K. L., & Wargo, J. B. (1995). Predicting the longitudinal course associated with aggressive-rejected, aggressive (nonrejected), and rejected (nonaggressive) status. *Development and Psychopathology*, 7, 669–682.
- Bjorkqvist, K., Lagerspetz, K. M. J., & Kaukiainen, A. (1992). Do girls manipulate and boys fight? Developmental trends in regard to direct and indirect aggression. *Aggressive Behavior*, 18, 117–127.
- Bowes, L., Maughan, B., Caspi, A., Moffitt, T. E., & Arseneault, L. (2010). Families promote emotional and behavioural resilience to bullying: Evidence of an environmental effect. *Journal of Child Psychology and Psychiatry*, 51, 809–817.
- Brady, E. U., & Kendall, P. C. (1992). Comorbidity of anxiety and depression in children and adolescents. *Psychological Bulletin*, 111, 244–255.

- Cassidy, W., Faucher, C., & Jackson, M. (2013). Cyberbullying among youth: A comprehensive review of current international research and its implications and application to policy and practice. *School Psychology International*, 34, 575–612.
- Coie, J., Terry, R., Lenox, K., Lochman, J., & Hyman, C. (1995). Childhood peer rejection and aggression as predictors of stable patterns of adolescent disorder. *Development and Psychopathology*, 7, 697–713.
- Dodge, K. A. (1980). Social cognition and children's aggressive behavior. *Child Development*, 51, 162–170.
- Dodge, K. A., & Frame, C. L. (1982). Social cognitive biases and deficits in aggressive boys. *Child Development*, 53, 620–635.
- Else-Quest, N. M., Hyde, J. S., Goldsmith, H. H., & Van Hulle, C. A. (2006). Gender differences in temperament: A meta-analysis. *Psychological Bulletin*, 132, 33–72.
- Farrington, D. P. (1993). Understanding and preventing bullying. *Crime and Justice*, 17, 381–458.
- Farrington, D. P., Lösel, F., Ttofi, M., & Theodorakis, N. (2012). *School bullying, depression and offending behaviour later in life: An updated systematic review of longitudinal studies*. Stockholm: Swedish National Council for Crime Prevention.
- Farrington, D. P., & Ttofi, M. M. (2011). Bullying as a predictor of offending, violence and later life outcomes. *Criminal Behaviour and Mental Health*, 21, 90–98.
- Farrington, D. P., Ttofi, M. M., & Lösel, F. (2016). Developmental and social prevention. In D. Weisburd, D. P. Farrington, & C. Gill (Eds.), *What works in crime prevention and rehabilitation: Lessons from systematic reviews* (pp. 15–76). New York: Springer.
- Fisher, H. L., Moffitt, T. E., Houts, R. M., Belsky, D. W., Arseneault, L., & Caspi, A. (2012). Bullying victimisation and risk of self harm in early adolescence: Longitudinal cohort study. *British Medical Journal*, 344, e2683.
- Gibb, S. J., Horwood, J., & Fergusson, D. M. (2011). Bullying victimization/perpetration in childhood and later adjustment: Findings from a 30 year longitudinal study. *Journal of Aggression, Conflict and Peace Research*, 3, 82–88.
- Gini, G., & Pozzoli, T. (2013). Bullied children and psychosomatic problems: A Meta-analysis. *Pediatrics*, 132, 720–729.
- Guerra, N. G., & Bradshaw, C. P. (2008). Linking the prevention of problem behaviors and positive youth development: Core competencies for positive youth development and risk prevention. *New Directions for Child and Adolescent Development*, 122, 1–17.
- Hemphill, S. A., Tollit, M., & Herrenkohl, T. I. (2014). Protective factors against the impact of school bullying perpetration and victimization on young adult externalizing and internalizing problems. *Journal of School Violence*, 13, 125–145.
- Kaltiala-Heino, R., Frojd, S., & Marttunen, M. (2010). Involvement in bullying and depression in a 2-year follow-up in middle adolescence. *European Child and Adolescent Psychiatry*, 19, 45–55.
- Kim, Y. S., Leventhal, B. L., Koh, Y. J., & Boyce, W. T. (2009). Bullying increased suicide risk: Prospective study of Korean adolescents. *Archives of Suicide Research*, 13, 15–30.
- Kim, Y. S., Leventhal, B. L., Koh, Y. J., Hubbard, A., & Boyce, W. T. (2006). School bullying and youth violence—Causes or consequences of psychopathologic behavior? *Archives of General Psychiatry*, 63, 1035–1041.
- Klomek, A. B., Sourander, A., & Gould, M. (2010). The association of suicide and bullying in childhood to young adulthood: A review of cross-sectional and longitudinal research findings. *Canadian Journal of Psychiatry-Revue Canadienne De Psychiatrie*, 55, 282–288.
- Klomek, A. B., Sourander, A., Kumpulainen, K., Piha, J., Tamminen, T., Moilanen, I., et al. (2008). Childhood bullying as a risk for later depression and suicidal ideation among Finnish males. *Journal of Affective Disorders*, 109, 47–55.
- Klomek, A. B., Sourander, A., Niemela, S., Kumpulainen, K., Piha, J., Tamminen, T., et al. (2009). Childhood bullying behaviors as a risk for suicide attempts and completed suicides: A population-based birth cohort study. *Journal of the American Academy of Child and Adolescent Psychiatry*, 48, 254–261.

- Liang, H. L., Flisher, A. J., & Lombard, C. J. (2007). Bullying, violence, and risk behavior in South African school students. *Child Abuse and Neglect*, 31, 161–171.
- Lösel, F., & Bender, D. (2011). Emotional and antisocial outcomes of bullying and victimization at school: A follow-up from childhood to adolescence. *Journal of Aggression, Conflict and Peace Research*, 3, 89–96.
- Lösel, F., & Bender, D. (2014). Aggressive, delinquent, and violent outcomes of school bullying: Do family and individual factors have a protective function? *Journal of School Violence*, 13, 59–79.
- McVie, S. (2014). The impact of bullying perpetration and victimization on later violence and psychological distress: A study of resilience among a Scottish youth cohort. *Journal of School Violence*, 13, 39–58.
- Olweus, D. (1991). Bully/victim problems among school children: Basic facts and effects of a school-based intervention program. In D. J. Pepler & K. H. Rubin (Eds.), *The development and treatment of childhood aggression* (pp. 411–448). Hillsdale, NJ: Erlbaum.
- Ozdemir, M., & Stattin, H. (2011). Bullies, victims, and bully-victims: A longitudinal examination of the effects of bullying victimization experiences on youth well-being. *Journal of Aggression, Conflict and Peace Research*, 3, 97–102.
- Pirkola, S., Isometsa, E., Aro, H., Kestila, L., Hamalainen, J., Veijola, J., et al. (2005). Childhood adversities as risk factors for adult mental disorders: Results from the Health 2000 Study. *Social Psychiatry and Psychiatric Epidemiology*, 40, 769–777.
- Rhee, S., Furlong, M. J., Turner, J. A., & Harari, I. (2001). Integrating strength-based perspectives in psychoeducational evaluations. *The California School Psychologist*, 6, 5–17.
- Roeger, L., Allison, S., Korossy-Horwood, R., Eckert, K. A., & Goldney, R. D. (2010). Is a history of school bullying victimization associated with adult suicidal ideation? A South Australian population-based observational study. *Journal of Nervous and Mental Disease*, 198, 728–733.
- Shakoor, S., Jaffee, S. R., Andreou, P., Bowes, L., Ambler, A. P., Caspi, A., et al. (2011). Mothers and children as informants of bullying victimization: Results from an epidemiological cohort of children. *Journal of Abnormal Child Psychology*, 39, 379–387.
- Smith, P. K., Morita, Y., Junger-Tas, J., Olweus, D., Catalano, R., & Slee, P. (Eds.). (1999). *The nature of school bullying: A cross-national perspective*. London: Routledge.
- Sutton, J., Smith, P. K., & Swettenham, J. (1999a). Bullying and ‘theory of mind’: A critique of the ‘social skills deficit’ view of anti-social behaviour. *Social Development*, 8, 117–127.
- Sutton, J., Smith, P. K., & Swettenham, J. (1999b). Social cognition and bullying: Social inadequacy or skilled manipulation? *British Journal of Developmental Psychology*, 17, 435–450.
- Ttofi, M. M., Bowes, L., Farrington, D. P., & Lösel, F. (2014a). Protective factors that interrupt 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.
- Ttofi, M. M., & Farrington, D. P. (2012). Risk and protective factors, longitudinal research and bullying prevention. *New Directions for Youth Development*, 133, 85–98.
- Ttofi, M. M., & Farrington, D. P. (2016). What factors protect adolescent bullies from developing into criminal and violent offenders? In A. Kapardis & D. P. Farrington (Eds.), *The psychology of crime, policing and courts* (pp. 44–56). London: Routledge.
- Ttofi, M. M., Farrington, D. P., & Lösel, F. (2011a). Editorial: Health consequences of school bullying. *Journal of Aggression, Conflict and Peace Research*, 3, 60–62.
- Ttofi, M. M., Farrington, D. P., & Lösel, F. (2012). School bullying as a predictor of violence later in life: A systematic review and meta-analysis of prospective longitudinal studies. *Aggression and Violent Behavior*, 17, 405–418.
- Ttofi, M. M., Farrington, D. P., & Lösel, F. (2014b). Interrupting the continuity from school bullying to later internalizing and externalizing problems: Findings from cross-national comparative studies. *Journal of School Violence*, 13, 1–4.
- Ttofi, M. M., Farrington, D. P., Lösel, F., Crago, R. V., & Theodorakis, N. (2016a). School bullying and drug use later in life: A meta-analytic investigation. *School Psychology Quarterly*, 31, 8–27.

- Ttofi, M. M., Farrington, D. P., Lösel, F., & Loeber, R. (2011b). The predictive efficiency of school bullying versus later offending: A systematic/meta-analytic review of longitudinal studies. *Criminal Behaviour and Mental Health*, 21, 80–89.
- Ttofi, M. M., Farrington, D. P., Lösel, F., & Loeber, R. (2011c). Do the victims of school bullies tend to become depressed later in life? A systematic review and meta-analysis of longitudinal studies. *Journal of Aggression, Conflict and Peace Research*, 3, 63–73.
- Ttofi, M. M., Farrington, D. P., Piquero, A. R., Lösel, F., DeLisi, M., & Murray, J. (2016b). Intelligence as a protective factor against offending: A meta-analytic review of prospective longitudinal studies. *Journal of Criminal Justice*, 45, 4–18.
- Valdebenito, S., Ttofi, M., & Eisner, M. (2015). Prevalence rates of drug use among school bullies and victims: A systematic review and meta-analysis of cross-sectional studies. *Aggression and Violent Behavior*, 23, 137–146.
- 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.
- Vassallo, S., Edwards, B., Renda, J., & Olsson, C. A. (2014). Bullying in early adolescence and antisocial behavior and depression six years later: What are the protective factors? *Journal of School Violence*, 13, 100–124.
- Werner, E. E. (2005). What can we learn about resilience from large-scale longitudinal studies? In S. Goldstein & R. B. Brooks (Eds.), *Handbook of resilience in children* (pp. 91–105). New York: Kluwer Academic/Plenum.

Chapter 7

Conclusions

Research on bullying started in the 1970s, and there are now thousands of studies on its nature, dynamics, correlates, and predictors (Zych et al. 2015). Taking into account the complex nature of the phenomenon and differences in methodologies across the studies, its prevalence is very difficult to compare among contexts and countries. Nevertheless, it can be concluded that bullying is an important and prevalent type of violence that occurs all over the world.

Meta-analytic and empirical research on bullying provides valuable information about variables related to low levels of bullying that can potentially protect children from being involved in this kind of aggression. In this book, we focused on personal and contextual characteristics, anti-bullying programs and long-term consequences, together with factors that interrupt the continuity from school bullying to later negative life outcomes. Although bullying is a very complex phenomenon that is very difficult to eradicate, a lot of knowledge on the topic has been gathered, and nowadays it is possible to protect children from bullying and its consequences. To achieve this, bullying should be tackled from an ecological, systemic and dynamic perspective.

Regarding individual factors, there is no specific profile of children who are involved in bullying. However, there are some personal characteristics that have been discovered in different studies. These factors were divided into emotional, social, and moral competencies. These three domains are interconnected and there is a significant overlap among them. In Chap. 3, we described different studies showing that moral disengagement is a strong predictor of bullying perpetration and that emotional competencies are related to lower involvement in bullying. Thus, being skillful with emotions, understanding moral principles, and knowing that no justification or excuse could be valid to neutralize these principles seem to protect children from bullying. The findings regarding social skills are contradictory. Some studies report that perpetrators show deficits in social skills, whereas others suggest that they have good social skills that are used to manipulate others. Bullies and bully/victims show lower levels of empathy, whereas victims have the same level of empathy as non-victims. Social skills employed in a positive and prosocial way

should be enhanced to protect children from bullying. Although more prospective longitudinal studies are needed, it can be concluded that promoting social, emotional, and moral competencies can help to protect children from involvement in bullying. Positive peer interpersonal interactions are crucial for the acquisition of these skills, and therefore teachers should create contexts in which children can interact and play. Teachers should also act as models of prosocial behavior.

Given that bullying is a complex phenomenon that can be approached from ecological, systemic, and interactive perspectives, the presence of personal protective factors does not guarantee low levels of involvement. As described in Chap. 4, living in a safe neighborhood and being enrolled in a safe school are important factors that are related to low bullying. A positive school-wide climate (Ortega-Ruiz and Zych 2016), and whole-school anti-bullying policy are helpful in reducing bullying. Research has also shown that school and classroom management, with clear behavior rules and nonpunitive disciplinary methods, create a context with a low level of aggressive behavior. Prosocial and positive interpersonal relationships among all members of the school community, including students, teachers, families, and other school personnel, all united and committed to fight against this kind of aggression, are associated with low bullying. Coordinated, systematic, and continuous interventions, that tackle as many personal and contextual factors as possible, would be the most effective in reducing bullying.

As described in Chap. 5, hundreds of anti-bullying programs have been conducted in different geographic areas. A meta-analysis of these programs shows that, overall, they are effective in decreasing both perpetration and victimization (Farrington and Ttofi 2009). The most effective components of successful programs, and ten interventions implemented in different countries, are described in Chap. 5. Although there is no “silver bullet” for bullying prevention, effective programs can be applied after a careful evaluation and can be adapted to each context. Specific features of school management, such as implementing specific policies and rules, supervising common areas, or creating specific committees and working groups, were found to be effective. Also, curriculum changes such as enhancing social and emotional skills, coping and response to bullying situations, and encouraging peers to intervene to help victims, were frequently included in effective interventions.

Prospective longitudinal studies described in Chap. 6 show that bullying has damaging consequences for children involved in it and also for the whole society. Research shows that victimization is related to depression later in life, while perpetration predicts later violence and delinquency. Chapter 6 highlighted the long-term adverse effects of school bullying (perpetration and victimization) on the healthy psychosocial development of children and presented examples of protective factors (within the individual, family, and school domains) that confer resilience on both school bullies and victims. These factors fall into the personal, family, school, and neighborhood domains. Among them, good academic performance and intelligence, coping with stress, good family relationships, and positive relationships with teachers were found to interrupt the continuity from bullying to later damaging outcomes. Positive neighborhoods were also found to be important, together with

affiliation to prosocial peers. Future research should shed light on the exact protective mechanisms that link these variables and promote overall resilience (Masten et al. 1990). This could be achieved more convincingly based on within-individual analyses (Farrington 1988) of longitudinal data with multiple waves, so that changes within the individual in protective factors could be compared with later within-individual changes in negative outcomes.

The findings described throughout this book have important implications for research, policy, and practice. Many factors have been related to bullying, but new research challenges include disentangling factors that predict this kind of aggression, factors that are predicted by this type of aggression, and factors that co-occur with bullying. New longitudinal studies of bullying are urgently needed. Research shows that protecting children from bullying is possible, and that it would be useful if policy makers established specific policies, priorities, and funding schemes that would help to eradicate this extremely damaging type of aggression. This would benefit individuals, communities and societies, and would also save money and sometimes even lives if future depression and delinquency are prevented. Teachers and other school personnel should receive specific training to understand what factors can protect children from bullying and how to implement effective anti-bullying programs. It is important to apply this knowledge to foster healthy and happy schools and societies. A great deal has been learned about how to protect children against bullying and its consequences, and the time is surely ripe for policy-makers to make a major effort to reduce bullying. The benefits would clearly outweigh the costs.

References

- Farrington, D. P. (1988). Studying changes within individuals: The causes of offending. In M. Rutter (Ed.), *Studies of psychosocial risk: The power of longitudinal data* (pp. 158–183). Cambridge, UK: Cambridge University Press.
- Farrington, D. P., & Ttofi, M. M. (2009). School-based programs to reduce bullying and victimization. *Campbell Systematic Reviews*, 6.
- Masten, A. S., Best, K., & Garmezy, N. (1990). Resilience and development: Contributions from the study of children who overcome adversity. *Development and Psychopathology*, 2, 425–444.
- Ortega-Ruiz, R., & Zych, I. (Eds.). (2016). *Convivencia escolar: Manual para docentes*. Madrid: Grupo 5.
- Zych, I., Ortega-Ruiz, R., & Del Rey, R. (2015). Scientific research on bullying and cyberbullying: Where have we been and where are we going. *Aggression and Violent Behavior: A Review Journal*, 24, 188–198.