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## Against the turning away:

## Understanding the relationships of bystander motivation and behaviors to school bullying

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## Against the turning away

Understanding the relationships of bystander motivation and behaviors to school bullying

NATHANIEL OLIVER IOTTI

DEPARTMENT OF PSYCHOLOGY | FACULTY OF SOCIAL SCIENCES | LUND UNIVERSITY





Against the turning away



# Against the turning away :

Understanding the relationships of bystander motivation  
and behaviors to school bullying

Nathaniel Oliver Iotti



**LUND**  
UNIVERSITY

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**MADE IN SWEDEN** 

*For all the dreamers who are made to feel like idiots*



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## Abstract

Research on school bullying has devoted a considerable amount of attention to investigating the roles of bystanders – the students who witness bullying or know that it is occurring – in bullying episodes. Numerous findings have shown that peer intervention is essential for reducing bullying behaviors; consequently, subsequent studies have examined which factors contribute to increasing the number of students who defend their peers. Although motivation is known to play a significant role in human behavior, it has been largely unexplored in bullying research, save for some promising findings that support its relevance for understanding and altering bystander behaviors in bullying episodes. The aim of this dissertation is to better understand students' motivation to defend victims of bullying through three empirical studies.

Studies I and II investigated the relationship between motivation and participant roles in bullying and cyberbullying to clarify which types of motivation to defend are most related to defending behaviors among students, and whether age, gender, or nationality plays a role in motivation to defend. Study I also examined how motivation profiles related to student–teacher relationships, to understand which profiles were associated with positive student–teacher relationships. Finally, study III examined the relationship between autonomy-supportive parenting practices and students' motivation to defend victims, to understand whether specific parenting practices were associated with more favorable types of motivation. It also explored whether factors such as reactance, depression, anxiety, and stress mediate this interaction.

Study I used a person-centered approach to identify four latent motivational profiles among respondents and found significant differences in victimization rates, participant roles, and student–teacher relationship quality among these profiles. Differences in age and nationality, but not gender, were also found among the profiles. Study II found a positive association between autonomous motivation to defend and defender behavior, and a negative association between autonomous motivation to defend and pro-bully and passive behavior in cyberbullying. The study also found a positive association between extrinsic motivation and pro-bully and passive behavior in cyberbullying; however, there was not a significant association between extrinsic motivation and defender behavior. Although older age was associated with increased passive and lower defender behavior in cyberbullying, no significant gender differences were found. Study III found a positive association between autonomy-supportive parenting and autonomous motivation to defend and a negative association between autonomy-supportive parenting and extrinsic motivation to defend, as well as partial mediation of these associations by reactance. Reactance was also positively associated with extrinsic motivation and negatively associated with autonomous motivation to defend.

Autonomy-supportive parenting was negatively associated with reactance, depression, stress, and anxiety. However, no evidence was found of depression, stress, and anxiety mediating the association between autonomy-supportive parenting and motivation to defend. These variables were also not directly associated with motivation to defend, with the exception of anxiety, which was found to have a small positive association with autonomous motivation to defend. Study III also highlighted some gender differences in type of motivation and levels of anxiety, depression, stress.

Overall, the findings of this dissertation corroborate that there is an association between autonomous motivation to defend and defending behaviors, and between controlled motivation and passive and pro-bully behaviors in bystanders of bullying and cyberbullying. The findings also confirm that autonomy-supportive parenting practices are related to greater autonomous prosocial motivation and lower controlled motivation, reactance, and mental health complaints among young people. Moreover, autonomous motivation was associated with positive student–teacher relationships and controlled motivation with negative student–teacher relationships, which supports self-determination theory’s postulation that only autonomy-supportive contexts and practices can support integrated self-regulation, promote wellbeing, and improve performance. The dissertation highlights potential differences in motivation to defend according to age, gender, and culture/nationality, with older age being related to lower autonomous prosocial motivation; girls displaying higher autonomous prosocial motivation and experiencing poorer mental health compared to boys; and Swedish students possessing greater controlled prosocial motivation than Italian students. This dissertation calls attention to the importance of investigating motivational factors for understanding why, when, and how students defend peers who are being bullied in person or online.

## Populärvetenskaplig sammanfattning

Forskning om mobbning i skolan har ägnat avsevärd uppmärksamhet åt att undersöka vilken roll åskådare (elever som bevitnar mobbning eller vet att den pågår) spelar i att påverka antalet mobbningsfall. Omfattande forskningsfynd har visat att ingripande från kamrater är väsentligt för att minska mobbningsbeteenden och följaktligen har efterföljande studier sökt avgöra vilka faktorer som bidrar till att öka antalet elever som försvarar sina kamrater. Trots att motivation har visats spela en viktig roll i att utveckla och påverka mänskligt beteende, har denna variabel förblivit till stor del outforskad i mobbningsforskningen; med undantag av några få lovande forskningsresultat som stöder dess relevans för att förstå och förändra åskådarbeteenden i mobbningsfall. Målet med denna avhandling är därför att genom tre empiriska studier förbättra vår förståelse för elevers motivation att försvara mobbningsoffer.

Studie I och II undersökte relation mellan motivation att försvara offret och deltagarroller vid mobbning och nätmobbning för att klargöra vilka typer av motivation som relaterar mest till försvarsbeteenden bland elever och huruvida dessa är relaterade till faktorer såsom ålder, kön eller nationalitet. Studie I undersökte även om det fanns en association mellan motivationsprofiler och relationen mellan elever och lärare för att förstå vilka profiler som visar starkast samband med positiva relationer mellan elever och lärare samt vilka profiler som inte gör det. Slutligen undersökte studie III relationen mellan autonomistödjande förhållningssätt till föräldraskap och elevers motivation att försvara offer, för att utforska huruvida specifika förhållningssätt till föräldraskap hade en association till elevers anammande av mer gynnsamma motivationstyper och om faktorer såsom reaktans, depression, ångest och stress medierade denna association.

Studie I använde en personcentrerad ansats för att identifiera fyra latenta motivationsprofiler bland respondenterna och fann signifikanta skillnader mellan profilerna i grad av utsatthet, deltagarroller och relationskvalitet inom en elev-lärrarrelation. Studien fann även att profilerna skiljde sig åt gällande ålder och nationalitet, men fann ingen skillnad baserat på kön. Studie II fann en positiv association mellan autonom motivation att försvara och försvararbeteenden samt en negativ association mellan autonom motivation att försvara och mobbarstöttande samt passiva beteenden vid cybermobbning. Studie II såg också en positiv association mellan yttre motivation och mobbarstöttande samt passivt beteende vid cybermobbning, men fann ingen signifikant association mellan yttre motivation och försvararbeteende vid cybermobbning. Trots att högre ålder var associerat med ökat passivt beteende och minskat försvararbeteende vid cybermobbning så hittades inga signifikanta könsskillnader. Studie III fann en positiv association mellan autonomistödjande förhållningssätt till föräldraskap och autonom motivation och en negativ association mellan autonomistödjande förhållningssätt till föräldraskap och



yttre motivation att försvara, samt stöd för att reaktans delvis medierar denna association. Reaktans var även positivt associerat med yttre motivation och negativt associerat med autonom motivation att försvara. Autonomstödjande förhållningssätt till föräldraskap var negativt associerat med reaktans, depression, stress och ångest. Studien fann dock ingen evidens för att depression, stress eller ångest medierade association mellan autonomstödjande förhållningssätt till föräldraskap och motivation att försvara. Ingen evidens hittades heller för en direkt association mellan motivation och depression eller stress, däremot visade ångest en svag positiv association med autonom motivation att försvara. Studie III tydliggjorde även vissa könsskillnader gällande typ av motivation och nivåer av ångest, depression och stress.

De sammanlagda fynden av den här avhandlingen stödjer att det finns en association mellan autonom motivation och försvararbeteenden samt mellan kontrollerad motivation och passiva eller mobbarstöttande beteende bland betraktare av mobbning och cybermobbning. Fynden bekräftar även att autonomstödjande förhållningssätt till föräldraskap är relaterade till högre autonom, pro-social motivation och lägre kontrollerad motivation, reaktans och problem med mental hälsa bland unga. Därtill stödjer fynden om en association mellan positiva elev-lärorelationer och autonom motivation de prediktioner som görs av Självbestämmandeteorin om att enbart autonomstödjande kontexter och praktiker kan stötta integrerad självreglering, gynna välmående och förbättra prestation. Slutligen bidrar avhandlingen med några preliminära fynd gällande skillnader i motivation, där indikationer hittades att högre ålder kan vara relaterad till lägre autonom, pro-social motivation, att flickor kan uppvisa högre autonom, pro-social motivation och uppleva sämre mental hälsa jämfört med pojkar samt att svenska elever kan inneha högre kontrollerad, pro-social motivation än italienska elever. Den här avhandlingen uppmärksammar vikten av att undersöka motivationsfaktorer för att förstå varför, när och hur elever kan försvara sina kamrater som utsätts för mobbning personligen eller på nätet.

# List of Papers

## *Paper I*

Jungert, T., Holm, K., Iotti, N. O., Longobardi, C. (2021). Profiles of bystanders' motivation to defend school bully victims from a self-determination perspective. *Aggressive Behavior, 47*, 78-88. doi: 10.1002/ab.21929

## *Paper II*

Iotti, N. O., Menin, D., & Jungert, T. (2022). Early Adolescents' Motivations to Defend Victims of Cyberbullying. *International Journal of Environmental Research and Public Health, 19*(14). doi: 10.3390/ijerph19148656

## *Paper III*

Iotti, N. O., Menin, D., Longobardi, C., & Jungert, T. (2023). Investigating the effects of autonomy-supportive parenting practices on Italian young adolescent students' motivation to defend victims of bullying: findings on the mediating roles of reactance, depression, anxiety, and stress. *Frontiers in Psychology, 14*. doi: 10.3389/fpsyg.2023.1156807

## Abbreviations

AIC	Akaike Information Criterion
BIC	Bayesian Information Criterion
BLRT	Bootstrap Likelihood Ratio Test
CFA	Confirmatory Factor Analysis
DASS	Depression Anxiety and Stress Scale
GCOS	General Causality Orientation Scale
GSHS	Global School-based Student Health Survey
HBSC	Health Behavior in School-aged Children study
IPV	Intimate Partner Violence
ISS	Istituto Superiore di Sanità [Italian National Institute of Health]
MANOVA	Multivariate analysis of variance
MDS	Motivation to Defend Scale
ML	Maximum Likelihood estimator
PIRLS	Progress in International Reading Literacy Study
PISA	Programme for International Student Assessment
SABIC	Sample-size Adjusted Bayesian Information Criterion
SDT	Self-Determination Theory
SEM	Structural Equation Modeling
SFS	Svensk författningssamling [Swedish Code of Statutes]
SPARTS	Student Perception of Affective Relationship with Teacher Scale
SRD	Social Reasoning Developmental model
UNESCO	United Nations Educational, Scientific, and Cultural Organization
UNICEF	United Nations Children's Fund
WHO	World Health Organization
WLSMV	Weighted Least Squares Means and Variance adjusted estimator

# Introduction

School bullying has been a matter of increasing international concern over the past 50 years, with many researchers seeking explanations for why, when, and how it occurs and how to tackle it (e.g., Chang, 2021; Hymel & Swearer, 2015; Smith, 2011; Volk et al., 2017). Considerable attention has been given to developing initiatives that promote safer and more inclusive school environments and increase the number of students who defend peers from bullying (Bezerra et al., 2023; Cornu et al., 2022). Indeed, peer intervention is considered essential in reducing bullying behaviors (Kärnä et al., 2013; Ma et al., 2019; Salmivalli et al., 2011) because adults cannot always be available to supervise (Fekkes et al., 2005) and may not even recognize bullying behaviors that occur in their presence (Ellwood & Davies, 2010; Slattery et al., 2019).

Motivation plays a significant role in human behavior (Deci & Ryan, 2015), and there are promising findings that support its relevance to understanding bystander behaviors in bullying episodes (Iotti et al., 2019; Jungert & Perrin, 2019; Jungert et al., 2016, 2021). However, motivational factors, particularly motivation to defend, have remained largely unexplored in bullying research. Therefore, the overarching aim of this dissertation is to improve our understanding of students' motivation to defend victims of bullying.

## Structure of the dissertation

I begin by defining the concept of bullying and reviewing current criticisms and debates surrounding this definition. Subsequently, I explore recent global and national prevalence rates for victimization and perpetration and discuss the impacts of bullying on students, before reviewing the importance of participant roles in bullying and the factors that influence them using two theoretical frameworks. Next, I delineate the concept of motivation according to self-determination theory (SDT) and briefly discuss the factors that support autonomous motivation in students. This is done to provide a rationale for the studies included in the dissertation and to specify the research gaps that they seek to address. Subsequently, I present the aims of the dissertation, summarize the three empirical studies that make up this dissertation, and provide a general discussion of covering theoretical contributions,

practical implications, strengths and limitations, ethical considerations, and suggestions for future research. The final section of the dissertation contains the three published empirical studies.

## Bullying

### Definition

Bullying is generally defined in the Western research tradition as the repeated intentional aggression of someone who cannot easily defend themselves (Olweus, 1993). Broken down, this definition is characterized by the following three criteria: (i) intention; (ii) repetition; and (iii) power imbalance in favor of the perpetrator(s). Occasionally, a fourth criterion is added: the behavior occurs in the absence of apparent provocation (Smith, 2011).

Bullying behaviors are varied and can be classified into three categories (Smith, 2011): physical (e.g., hitting, kicking, or shoving), verbal (e.g., degrading comments, name-calling), and indirect (e.g., social exclusion, spreading rumors). Cyberbullying (i.e., bullying that occurs through electronic forms of communication) has been recognized as a particular form of bullying that can be both verbal and indirect (e.g., Tokunaga, 2010; Smith, 2012). For cyberbullying, the criteria of repetition and power imbalance are considered less relevant and have therefore been revised (e.g., Olweus & Limber, 2018; Slonje et al., 2013). In particular, repetition is difficult to assess because a single act of cyberbullying can be shared and viewed repeatedly by others, generating a snowball effect with the potential of reaching a larger audience than originally intended. It can also be difficult to remove offensive posts or messages once they have been generated and shared. Therefore, researchers have argued that repetition should not be considered as a core criterion of cyberbullying, but rather a subsidiary (Smith, 2011). Moreover, the power imbalance in cyberbullying is more related to differences in technological abilities and anonymity between perpetrators and victims, rather than differences in physical or verbal skills and popularity, which are used to assess the presence of this criterion in the case of traditional bullying (Smith, 2011).

### *Criticisms and debates concerning the Olweus definition*

Despite widespread adoption of Olweus' definition and its criteria, not everyone agrees with it. Across the more than 50 years of bullying research, there has been considerable debate around the conceptualization of bullying and criteria used to assess it, in particular how to distinguish bullying from behaviors such as peer aggression and harassment (Cascardi et al., 2014; Cornell et al., 2006). Although Olweus' criteria were specifically aimed at setting bullying apart from instances of

peer aggression and harassment, this has proven to be quite difficult in practice for a number of reasons.

### *Intentionality*

The criterion of intentionality can be difficult to determine because there can be disagreements among the actors, recipients, and observers (Chang, 2021; Slattery et al., 2019). That is, whose perception is considered most valid for decisions around intentionality? A somewhat unfortunate verbal interaction between peers can be interpreted as harmful by its recipient even though the actor had no intention of causing harm. Conversely, a student might target a peer with demeaning comments, with an intent to cause harm, but the recipient might think that these are jokes and not feel harmed by the interaction. Moreover, observers, such as teachers, often encounter difficulties when attributing intentionality to the exchanges that they witness and are prone to drawing incorrect conclusions (e.g., Ellwood & Davies, 2010; Osler, 2006). Because of the practical difficulties of determining intentionality, some researchers have suggested focusing on the harm or negative effect experienced by the recipient (e.g., Gladden et al., 2014; Guerin & Hennessy, 2002). However, as pointed out by Chang (2021), this does not solve the issue completely because recipients might not be aware of being harmed and perpetrators might not be aware that the outcome of their actions is harmful, especially in complex social situations where certain potentially harmful behaviors (e.g., teasing, sarcastic comments, or dark humor) are accepted by group consensus.

### *Repetition*

Assessing repetition has also proven problematic because researchers have not reached a consensus on which parameters should be used to determine the intensity and duration of bullying (Chang, 2021). Furthermore, because repetition focuses on the interactions between a particular target and their aggressor(s), it does not consider perpetrators who regularly bully different peers (Kofoed & Staksrud, 2019). The issue is complicated by the fact that Olweus himself (1993) conceded that single episodes of harmful behavior could also constitute bullying, although, as pointed out by Volk and colleagues (2017), he decided to keep the repetition criterion to differentiate bullying from instances of peer aggression or harassment. Additionally, as discussed above, repetition is not a core criterion in the case of cyberbullying (Smith, 2011).

### *Power imbalance*

Power imbalance is the feature that most distinguishes bullying from other aggressive behaviors (Volk et al., 2017), to the extent that Smith and Sharp (1994) proposed defining bullying as the “systematic abuse of power.” Nevertheless, determining the presence of a power imbalance can be difficult because power is

highly variable, is difficult to measure, and cannot always be reduced to differences in physical and psychological factors or social status, as in the case of cyberbullying (Chang, 2021). Moreover, the existence of bully-victims (i.e., individuals who bully others and are bullied themselves) complicates the assessment of a power imbalance because these students appear to simultaneously have more power than their victims and less power than their bullies (Volk et al., 2017).

#### *Are we talking about the same thing?*

Besides the complexities of defining and assessing each bullying criterion, there is a documented lack of agreement between researchers, students, parents, and school staff on what constitutes bullying, with respondents often omitting or placing different emphasis on one or more of the core criteria (e.g., Hellström et al., 2015; Slattery et al., 2019; Smorti et al., 2003; Vaillancourt et al., 2008; Volk et al., 2017). Moreover, students' definition of bullying varies across age groups, with younger students differentiating mostly between aggressive and non-aggressive physical behaviors, but overlooking verbal and indirect forms of bullying, and older students being able to identify and differentiate between more forms of bullying behaviors (e.g., Smith et al., 2002; Younan, 2018).

#### *Lost in translation*

The concept of bullying has been criticized for being culturally biased, as it places excessive emphasis on individual psychological factors and not enough emphasis on social and situational factors (Canty et al., 2016). Although behaviors that can be considered bullying are present in virtually all cultures (Volk et al., 2012), the use of the term “bullying” and its conceptualization are very much rooted in an Anglo-Saxon and Northern European context (Canty et al., 2016; Smith, 2011). This can be attributed to the historical development of the field, which started in Northern Europe and spread to Anglo-Saxon countries first, before reaching the rest of the world (Smith, 2011). It is reasonable to assume that it was not difficult to find equivalent terms for *mobbning* among other Germanic languages, such as English. However, due to the privileged position of the English language in scientific discourse, researchers from other language families have mostly attempted to import and adapt the English term to their contexts (Smith et al., 2002). This has proven problematic because of linguistic and cultural differences, with several languages not having a direct translation of the word and either resorting to importing the foreign term and its definition directly, or using the words in their native language that best reflected the English term, sacrificing some nuance in the process (Canty et al., 2016). Although an exact and precise translation of the term across all languages is not possible, the differences in interpretation can become especially apparent and problematic when conducting cross-national or cross-cultural studies, and when comparing their findings (Smith et al., 2002). The case of bullying research in Japan is often used as an example of the cultural differences that exist in

this field. The term *ijime* is used as the closest translation for bullying in Japanese; however, the concept of *ijime* is not completely equivalent to bullying because it places less emphasis on physical aggression and significantly more emphasis on social manipulation and exclusion, which are types of aggression more commonly associated with women in the Western context (Smith et al., 2002). The stronger emphasis on the social context and on forms of social aggression, and the fact that *ijime* is not theorized or discussed in gendered terms (Walton, 2005), set it apart from the Western concept of bullying (Canty et al., 2016).

### *Individual or group phenomenon?*

The debate on whether bullying should be regarded as an individual or a group phenomenon has existed since the beginning of the field and continued into the present day, undergoing a series of transformations along the way (Smith, 2011). The Swedish physician Peter Paul Heinemann (1969, 1972) is regarded as the first scholar to have used the term *mobbing* to describe a form of collective aggression among children in which the group would target an individual perceived as different. Heinemann also drew connections between this group process and larger social issues such as oppression, racism, and genocide, attempting to frame bullying as a social problem (Larsson, 2008, 2012). However, Olweus (1978) disagreed, arguing that conceptualizing bullying as a group behavior would place excessive emphasis on temporary and situational factors, contribute to pathologizing victims, and shift the focus from aggressive individuals to homogeneous groups, therefore diffusing or concealing responsibility. According to Canty and colleagues (2016), Olweus' decision to view bullying as an individual phenomenon was influenced by his agreement with the theoretical framework of personality trait psychology and the idea that bullying was an uncommon and deviant behavior that could be traced to latent individual characteristics that would manifest in certain conditions. Accordingly, the first two decades of bullying research mostly focused on bullies and victims, identification of the factors that put individuals at risk of becoming either bully or victim, and expanding the definition of bullying to accommodate indirect and relational forms, in line with evolving research on aggression (Smith, 2011). A significant methodological shift occurred in the mid-1990s with the introduction of participant roles in bullying (Salmivalli et al., 1996; more below), which expanded the concept and once again shifted the focus to group processes. The considerable body of research that followed the introduction of participant roles, which was partially stimulated by the increased public attention and concern about bullying (Hymel & Swearer, 2015), provided further evidence for viewing bullying as a complex group phenomenon that could be influenced by numerous social factors, such as peer group norms, school climate, and family and community characteristics (Swearer & Hymel, 2015). However, this deepening understanding of bullying since the late 1990s also had the effect of further highlighting the problematic and unresolved aspects of the original definition. Recently, a working group of



international experts convened by UNESCO and the World Anti-Bullying Forum (2021, 2023) proposed that the definition of school bullying be revised as follows:

“School bullying is a damaging social process that is characterized by an imbalance of power driven by social (societal) and institutional norms. It is often repeated and manifests as unwanted interpersonal behavior among students or school personnel that causes physical, social, and emotional harm to the targeted individuals or groups, and the wider school community.”

This new definition adopts a more holistic and sociological approach to bullying and attempts to address several of the issues that have emerged through the years: (a) it clearly defines bullying as a social process; (b) it links power imbalances to the broader social and institutional norms that exist in schools, education systems, and societies; (c) it focuses on the various types of personal harm experienced by targets and not on the aggressive behavior of perpetrators; (d) it reduces the importance of repetition while still allowing for its use as a criterion, and (e) it also recognizes the harmful effect that bullying has on the wider school community. Unfortunately, it might be difficult for researchers to work with this definition because its deliberately broad formulation does not contain sufficient or clear indications for how power imbalance and harm should be determined.

#### *Why is this important?*

Although it is unlikely that a universal consensus on the definition of bullying and its related criteria will ever be reached, an awareness of the debates within the field can have concrete and lasting implications. When researchers and participants do not agree on what constitutes bullying, it challenges the definition’s validity (DeLara, 2012; Volk et al., 2017). When researchers do not agree among themselves on how bullying should be measured, it challenges the validity of findings across different studies, makes investigating prevalence rates particularly difficult, and creates significant issues when evaluating interventions or implementing policies (Volk et al., 2017). It is no easy task to find a balance between definitions that are too narrow to reflect the phenomenon under study but are straightforward to measure, and broader definitions that seek to incorporate all aspects of the phenomenon but are virtually impossible to operationalize and measure. Nevertheless, it remains extremely important to find this balance. As Cascardi and colleagues (2014) have argued, a lack of consensus on definitions and the use of excessively broad definitions that blur the boundaries between bullying and other types of peer aggression, creates significant problems for legislators, prosecutors, and schools. If we agree with Olweus (1993) that children have a “fundamental democratic right” to not be bullied, then we need to find better solutions to tackle school bullying. Reconsidering how we measure it seems like an important place to start.

## **Prevalence of bullying**

As previously discussed, measuring the prevalence of bullying is not a straightforward procedure. Several factors can influence prevalence findings: A researcher's choice of assessment method (e.g., observational, peer, or self-reports), the time span that students are asked to report on, what definition is used (e.g., bullying as an overall behavior vs. specific types of bullying), the way in which frequency is assessed (e.g., months, school terms, years, etc.), as well as individual and cultural characteristics will all contribute to the variability of our findings (Hymel & Swearer, 2015; Smith et al., 2013; Volk et al., 2017). Additional factors, such as the time of the year in which the data is collected (Smith, 2011) and the format in which the definition of bullying is provided, when it is provided, can also influence results (Younan, 2018). Therefore, I have decided to focus on the results of large-scale international surveys to provide comparable global, regional, and national-level prevalence rates for bullying and victimization.

According to a 2019 global report published by UNESCO, approximately 32% of students had been bullied by peers in the past month. The report was based on data drawn from the 2017 Global School-based Student Health Survey (GSHS) conducted by the World Health Organization (WHO), and the 2013/2014 Health Behavior in School-aged Children (HBSC) study, conducted by the HBSC Consortium. The HBSC covers countries in Europe, North America, and Israel, while the GSHS covers countries in other regions of the world. The data concerning bullying were supplemented with data drawn from the 2016 Progress in International Reading Literacy Study (PIRLS) and the 2015 Programme for International Student Assessment (PISA) surveys.

The report (UNESCO, 2019) found regional differences in frequency concerning types of bullying, with physical and sexual bullying (i.e., being made fun of with sexual jokes, comments, or gestures) being the two most frequent types of bullying in GSHS regions, and psychological bullying being the most frequent type of bullying in HBSC regions. Although boys and girls were equally likely to be bullied, boys were more likely to experience physical bullying and girls were more likely to experience psychological bullying. The report also found age differences concerning victimization, where younger students were more likely to report experiences of bullying, and victimization rates declined as students aged. Conversely, bullying perpetration did not appear to be influenced by age, with prevalence rates remaining relatively stable between different age groups.

### *Europe*

According to the UNESCO (2019) analyses, 25% of European students reported experiences of bullying, making Europe one of the regions with the lowest prevalence of bullying, compared to the global median of 32%. No significant

gender differences were found in victimization rates, but bullying perpetration appeared to be more prevalent among boys (33%) than among girls (19.2%). Psychological bullying was the most prevalent type of bullying experienced by European students (25.7% name-calling, 15.3% exclusion, and 19.5% spreading rumors or lies), followed by sexual bullying (11%) and physical bullying (10.4%). Although Europe is one region in which a significant and widespread decline in school bullying has been observed over the years, eight European countries in the sample reported an increase in bullying prevalence.

In Europe, 10.1% of students reported being cyberbullied via messages, and 8.2% reported being cyberbullied via pictures. Concerning gender differences, the report found that girls (11.7%) were more likely to be cyberbullied via messages than were boys (9.3%), and that boys (8.1%) were more likely to experience cyberbullying via pictures than were girls (7.5%). Moreover, older students appeared to be more exposed to cyberbullying in the HBSC countries where significant age differences were found. The report also identified cyberbullying as a growing problem, despite its relatively low prevalence compared to other types of bullying, because it found that the percentage of children (ages 11–16 years) from seven European countries who reported experiences of cyberbullying had increased from 7% to 12% between 2010 and 2014.

### *Sweden and Italy*

According to recent data from Sweden (Folkhälsomyndigheten, 2022), 10% of girls aged 11–13 years and 6% of girls aged 15 years reported being bullied at school in the previous two months. Conversely, 4% of boys aged 11 years and 9% of boys aged 13–15 years reported being bullied at school in the previous two months. Concerning bullying perpetration, approximately 2% of girls aged 11–15 years reported bullying others in the previous two months, 2% of boys aged 11 years and approximately 6% of boys aged 13–15 years reported bullying others in the previous two months. Compared to 2017/2018, victimization rates increased for both girls and boys aged 13–15 years, whereas they decreased for 11-year-old boys and girls. Perpetration rates remained stable among 11-year-olds of both genders and 13-year-old girls, but they increased among girls aged 15 years and boys aged 13–15 years.

Between 3% and 7% of Swedish students aged 11–15 years reported being cyberbullied in the previous two months, which has not increased since 2017/2018. Regarding cyberbullying perpetration, approximately 2% of boys aged 11 years and girls aged 11–15 years and approximately 7% of boys aged 13–15 years reported cyberbullying others in the previous two months. These rates are stable compared to 2017/2018, except for among 13-year-old boys, who reported an increase in cyberbullying perpetration (from 4% to 7%).

According to recent data from Italy (ISS, 2022), approximately 15% of students aged 11–15 years reported being bullied or cyberbullied in the previous two months. Girls aged 11–13 years have a slightly higher rate of victimization compared to boys (19.8% vs. 18.9% at age 11, and 17.3% vs. 14.6% at age 13) and victimization rates appear to decrease with age, from approximately 19% among 11-year-olds to 9% among 15-year-olds. These rates are stable compared to those reported in 2017/2018. Cyberbullying victimization is also more frequent among girls (17%) than among boys (13%), although it appears to decrease with age, from approximately 19% among 11-year-olds to 10% among 15-year-olds. Compared to 2017/2018, there has been a noticeable increase in cyberbullying victimization rates among 13- and 15-year-olds regardless of gender (from 8.5% to 16% among 13-year-olds and from 7.1% to 10% among 15-year-olds). Unfortunately, data on bullying and cyberbullying perpetration were not available.

The data from both countries confirm the trend observed by UNESCO (2019) that victimization decreases with age, but they also highlight gender differences in victimization rates, which were not found in the previous global report. Furthermore, although Italy has higher bullying and cyberbullying victimization rates than does Sweden, both countries reported an increase in bullying or cyberbullying victimization rates among older students (13–15 years) of both genders, with Sweden also reporting an increase in bullying and cyberbullying perpetration rates for this age range. Overall, the data show that students aged 13–15 years are at greater risk of being involved in bullying, both as victims and as perpetrators, thus suggesting that additional research within this age group is pertinent and necessary.

## **Consequences of bullying**

Bullying has been associated with a wide range of consequences. Victimization has been linked with negative health outcomes, such as increased psychosomatic problems (e.g., headaches, stomachaches, difficulties sleeping or concentrating), eating disorders, chronic illness, loneliness, depression, anxiety, low self-esteem, suicidal ideation and attempts (Beckman et al., 2012; Gini & Pozzoli, 2009; Hinduja & Patchin, 2018; Ortega et al., 2012; Reijntjes et al., 2010). Victimization can also lead to externalizing problems, such as increased aggressive behaviors and delinquency (Reijntjes et al., 2011). Students who are bullied tend to have higher levels of school-related fear, anxiety, or avoidance (Kumpulainen et al., 1998) and lower academic achievement; they are also less likely to continue their education after secondary school (UNESCO, 2019). Bullying perpetration, on the other hand, has been associated with increased psychosomatic and externalizing problems (Beckman et al., 2012; Gini & Pozzoli, 2009) as well as an increased likelihood of perpetrating intimate partner violence later in life (IPV; Fulu et al., 2013). Bullies,

victims, and bully-victims have higher rates of smoking, alcohol, and cannabis use than their uninvolved peers, and they are also more likely to engage in sexual intercourse at an earlier age compared to their peers (UNESCO, 2019).

However, it should be noted that the association between students' involvement in bullying and the negative outcomes listed previously is not straightforward, with several studies identifying factors that can influence it. For example, internalizing and externalizing problems were both antecedents and consequences of bullying victimization, suggesting a bi-directional relationship (Reijntjes et al., 2010, 2011). Factors such as perceived severity, frequency, duration, and type of bullying experienced were also found to influence outcomes (Gini et al., 2018; Hinduja & Patchin, 2018; Ortega et al., 2012), as were victims' individual characteristics, such as age, coping strategies, and resilience (Brighi et al., 2019; Raskauskas & Huynh, 2015; Troop-Gordon, 2017). Nevertheless, bully-victims consistently appear to be the most vulnerable to negative outcomes (Beckman et al., 2012; Hinduja & Patchin, 2018; Van Cleave & Davis, 2006).

The negative effects of bullying are not limited to the students who are directly involved, but also their peers: School environments perceived as unsafe or lacking in discipline were associated with lower levels of academic achievement (UNESCO, 2019), while mere exposure to bullying can have negative effects on bystanders' mental health, including higher levels of depression, phobic anxiety, paranoid ideation, interpersonal sensitivity, feelings of guilt and helplessness, and suicidal ideation (Doumas & Midgett, 2021; Hutchinson, 2012; Rivers et al., 2009; Rivers & Noret, 2013).

## **Participant roles**

As previously mentioned, bullying is now considered a social process that extends beyond perpetrators and targets, involving several witnesses, or bystanders, in the majority of cases (Mazzone, 2020). Bystanders, commonly defined as students who witness bullying or know that it is occurring (Polanin et al., 2012; Thornberg et al., 2021; Twemlow et al., 2004), can take on a variety of roles, such as actively assisting bullies once the aggression has started (assistants); supporting the bullying indirectly by laughing or cheering (supporters); stepping in to defend, comfort, or advocate for victims (defenders); or remaining passive and avoiding involvement (outsiders/passive bystanders, Salmivalli et al., 1996). These roles have also been observed in cyberbullying (Pozzoli & Gini, 2020; Wachs, 2012). Furthermore, bystanders have been found to take multiple and sometimes contrasting roles depending on personal and situational factors (Huitsing & Veenstra, 2012; Oh & Hazler, 2009; Paull et al., 2012; Sutton & Smith, 1999). Observational studies have shown that bystanders are present in 88% of school bullying episodes (Hawkins et al., 2001) and 76% of cyberbullying episodes (Vandebosch & Van Cleemput, 2009).

However, the same measurement issues with bullying prevalence rates can be applied to bystander involvement, meaning that the results vary greatly between studies – so some caution is advised.

Research has shown that bystanders can influence bullying significantly. When bystanders defend victims, they can successfully stop bullying episodes (Hawkins et al., 2001) as much as 50% of the time (Craig et al., 2000), as well as reduce their overall frequency (Salmivalli et al., 2011). Sainio and colleagues (2011) found that defenders can moderate the negative effects of victimization, as victims who were defended by at least one classmate had lower anxiety and depression and higher self-esteem than those who were not defended. Conversely, when bystanders support bullying, or remain passive, its frequency increases (Kärnä et al., 2011; Salmivalli et al., 2011). Class levels of pro-bullying behavior have been found to moderate the effect of individual moral disengagement on bullying (Bjärehed et al., 2019) as well as the positive association between trait aggression and bullying (Nocentini et al., 2013). Furthermore, Salmivalli (2014) suggested that the success of interventions could be increased by targeting bystanders rather than perpetrators because bystanders are considered more receptive to influence. Indeed, bystanders often report feeling conflicted about bullying and wanting to help (Boulton et al., 1999; Gini et al., 2008).

However, despite students' negative views of bullying and passive bystanding and their expressed desire to help, few actually intervene in favor of victims, with estimates of defending behavior ranging from 17% to 46% (Cappadocia et al., 2012; Ma et al., 2019). Interpretation of these results is complicated by the frequent lack of distinction between intent to defend and actual defending behaviors (Pozzoli & Gini, 2013). Nevertheless, because of the important role that bystanders play in reducing bullying, a significant amount of research has focused on the individual and situational factors that can influence their display of defending behaviors (for a review, see Bezerra et al., 2023; Gini et al., 2021; Lambe et al., 2019).

#### *Overview of the factors that influence bystander behavior*

The following situational factors have been found to influence bystanders' behavior.

**Degree of friendship with the victim or perpetrator(s).** Bystanders who are friends of the victim or belong to the same ingroup are more likely to defend them (Bellmore et al., 2012; DeSmet et al., 2012, 2014; Jones et al., 2012; Jungert & Perrin, 2019; Price et al., 2014; Pronk et al., 2013), whereas bystanders who do not know the victims or who have a low degree of identification/affiliation with them are less likely to defend them (Huang & Chou, 2010; Jones et al., 2012). Conversely, if bystanders are friends with the perpetrators, they are more likely to remain passive or even support the bullying (Jones et al., 2012; Macháčková et al., 2013). Bystanders are also more likely to

support the bullying if they have other bystander friends who support it, but are less likely to support the bullying if their friends show support for the victim (Bastiaensens et al., 2014, 2015).

**Evaluation of the situation.** When bystanders have knowledge of what bullying is and are aware of its effects on victims, they are more likely to intervene (Lambe et al., 2019). Bystanders are also more likely to intervene if they think that the situation is unfair, while they are less likely to intervene if they feel that the situation is unclear or if they blame the victim (DeSmet et al., 2012, 2014; Lambe et al., 2019; Thornberg & Wänström, 2018).

**Perceived severity of the incident.** Bystanders are more likely to intervene if they perceive the situation as particularly serious or even dangerous (Bastiaensens et al., 2014; Chen et al., 2016; DeSmet et al., 2012, 2014). This effect is also influenced by the degree of distress caused by the bullying, where bystanders are more likely to intervene if they perceive the victim as particularly distraught (Macháčková et al., 2015; Pronk et al., 2016). Furthermore, when victims ask for help or confront the perpetrator(s), bystanders are more likely to view the situation as serious and intervene, whereas if victims ignore the bullying or remain passive, bystanders are less likely to intervene (Holfeld, 2014; Macháčková et al., 2016).

**Bystander effect.** Bystanders' subjective perception of the number of witnesses present, regardless of their actual number, appears to influence the likelihood that they will help victims. When fewer witnesses are present, they tend to be more likely to act to defend (Allison & Bussey, 2016; Macháčková et al., 2015). However, this effect has been difficult to replicate in the case of cyberbullying and is believed to lose relevance when other individual and situational factors are considered (Allison & Bussey, 2016; Macháčková et al., 2015).

**Knowledge of intervention strategies.** Bystanders who feel that they possess specific skills or knowledge of effective and assertive intervention strategies are more likely to take action (DeSmet et al., 2016).

**Norms, social status, and social dynamics.** Bystanders belonging to peer groups whose norms support harassment appear to experience feelings of pride when associating with perpetrators (Jones et al., 2012; Price et al., 2014). Social and class norms, such as whether teachers expect students to report instances of bullying to them or whether peers expect to be comforted rather than defended when attacked, can influence how bystanders act (Barhight et al., 2017; DeSmet et al., 2014). Students who perceived that they were low in popularity and high in social preference were more likely to defend their peers (Pozzoli & Gini, 2021). Bystanders who experience social support (e.g., from their peers, families, or teachers) are also more likely to defend (Olenik-Shemesh et al., 2017; Wachs

et al., 2020). Conversely, bystanders may perceive pressure from their peers or families to intervene or remain passive when they witness bullying (Forsberg et al., 2018; Pozzoli & Gini, 2010).

**Fear of retaliation.** There is some evidence that fear of retaliation limits defending behaviors among bystanders (Van Cleemput et al., 2014), although this effect was not found in other studies (Macháčková et al., 2013).

A number of individual factors have also been found to influence bystander behavior:

**Empathy and altruism.** High levels of empathy are associated with defending victims (Barhight et al., 2017; Bellmore et al., 2012; Nickerson et al., 2015; Price et al., 2014), while lower levels of empathy are associated with passive bystanding (Rieffe & Camodeca, 2016) or supporting bullies (Demaray et al., 2016; Nickerson et al., 2015; Van Cleemput et al., 2014). Furthermore, higher levels of altruism were related to defending behaviors and contributed to inhibiting bullying perpetration (Crapanzano et al., 2011; Lodge & Frydenberg, 2005; Tani et al., 2003; Thornberg & Wänström, 2018).

**Moral disengagement.** Moral disengagement is defined as a set of socio-cognitive processes through which individuals disengage from moral behaviors and commit inhumane acts against others (Bandura, 1999, 2002). It has been associated with defending behaviors when present in low levels, but passive or bully support behaviors when present in high levels (Almeida et al., 2010; DeSmet et al., 2016; Thornberg & Jungert, 2013; Thornberg et al., 2015; Van Cleemput et al., 2014). However, the association between moral disengagement and passive bystanding requires further investigation because its levels among passive bystanders can vary significantly, as highlighted by Obermann's (2011) distinction between "unconcerned passive bystanders" and "guilty passive bystanders."

**Personal attitudes, self-efficacy, and anxiety.** Findings show that bystanders are more likely to defend victims when they have negative attitudes towards bullying or passive behaviors (Cappadocia et al., 2012; Pabian et al., 2016). Increased feelings of self-efficacy, or the belief in one's own capability to successfully organize and execute the actions required to obtain a desired result (Bandura, 1986), were positively associated with defending victims and negatively associated with passive bystander behavior (Gini et al., 2008; Pöyhönen et al., 2012; Thornberg & Jungert, 2013). Bystanders with higher levels of trait and social anxiety were more motivated to defend victims, especially when the victims belonged to their ingroup (Fischer et al., 2011; Jungert & Perrin, 2019; Wu et al., 2016).



**Previous experiences with bullying.** Students who had experienced victimization report higher motivation to defend victims (DeSmet et al., 2016; Song & Oh, 2017; Van Cleemput et al., 2014), whereas students who had previously bullied others are more likely to assist perpetrators and behave negatively (Barlińska et al., 2013; Song & Oh, 2017; Van Cleemput et al., 2014).

**Demographic variables.** Some studies have found that girls and younger students are more likely to defend victims (Bastiaensens et al., 2016; DeSmet et al., 2016; Van Cleemput et al., 2014), but this has not been confirmed in other studies (Barlińska et al., 2015; Camodeca et al., 2015). While older students appear to be more likely to behave as passive bystanders, there are mixed results concerning the presence of gender differences for this behavior (Pozzoli et al., 2012b; Thornberg & Jungert, 2013).

### **Useful theories for understanding and interpreting bystander behavior**

Because bullying is a complex social phenomenon, scholars (Swearer & Espelage, 2004; Swearer & Hymel, 2015) have argued that it is best understood through the lens of social-ecological theories, such as Bronfenbrenner's (1979) ecological systems theory. This theory (Bronfenbrenner, 1979) posits that human development is the result of a bidirectional interaction between individuals and the systems in which they operate, such as their homes, schools, communities, and societies. The environment in which children develop is conceptualized as a network of ecological subsystems centered on them.

First, there is the microsystem, which is closest to the child, and consists of factors such as the biological or temperamental characteristics of children and their caregivers and the type of attachment bond that they share. Moving outwards to the mesosystem, there are the interactions and relationships between the settings in which the child actively participates, such as their home, school, sports club, etc. Next are the exosystem and macrosystem, which include settings in which children do not actively participate that nevertheless influence their development, including larger societal and cultural factors. Finally, there is the chronosystem, which represents the fact that children's development and their environments are affected by the passing of time. According to ecological systems theory (Bronfenbrenner, 1979), the subsystems that are closest to children have the greatest influence on their development, whereas the subsystems that are furthest away exert less influence.

Social-ecological theories like that proposed by Bronfenbrenner (1979) are useful for understanding bystander behaviors in bullying because they consider that such behaviors cannot be reduced to individual characteristics or situational factors exclusively; they may only be comprehended when we consider the interactions between these elements in their varying degrees of abstraction, thus providing a

helpful framework in which to place and interpret the individual and situational factors that I have listed previously.

Additionally, Palmer and colleagues (2021) suggested that bystander behaviors can be understood in terms of the social reasoning developmental (SRD) model (Killen & Rutland, 2011; Rutland & Killen, 2015). SRD is a theoretical framework that explains how children navigate complex social and moral situations, such as deciding whether they should stand up to bullying, by investigating their evaluations, reactions, and reasoning processes (i.e., judgments and justifications). According to the SRD model, children consider moral, group, and intergroup factors in their decision-making, the relative weight of which varies depending on children's age and level of development (Rutland & Killen, 2015).

This approach can be useful for understanding why instances of bullying can be considered acceptable and not be challenged even when young people explicitly state that they consider bullying harmful and morally wrong. Scholars argue that developmental changes in social experience (e.g., increased experience of group life and varied social contexts) and cognition (e.g., increased perspective taking abilities and understanding of groups norms and dynamics) that occur from late childhood (6–13 years) and throughout adolescence influence how young people reason about and evaluate bullying (Abrams et al., 2014; Rutland & Killen, 2015). Because group membership is highly valued during this developmental period, factors such as group norms, group identity, and issues of social status can outweigh individual moral concerns when evaluating bullying, thus increasing the likelihood of its acceptance (Palmer et al., 2015). There is also evidence that, as adolescents develop, they become more likely to tolerate certain forms of aggression (Mulvey et al., 2016), which could explain the increase in passive bystander behaviors that has been observed among older students (Pozzoli et al., 2012b; Thornberg & Jungert, 2013).

However, Palmer and colleagues (2021) have also argued that the greater understanding and attention to intergroup processes and group dynamics that develops as young people mature and age can lead to an increase in defending behaviors in certain contexts. Moreover, class norms that are not supportive of bullying are associated with greater defending and lower passive bystander behaviors (Salmivalli & Voeten, 2004; Thornberg et al., 2021), which further supports the idea that it is the quality of the context and its norms that influence students' evaluation of bullying and their response to it.

The SRD model's framework for understanding how young people reason about and navigate complex social situations manages to combine the available knowledge of young people's social developmental processes with that of how social contexts influence human behavior, making it useful for analyzing bystanders' diverse behaviors in bullying episodes. Researchers may also further distance themselves from deterministic notions of bystanders' reactions to bullying,

as the model recognizes that social contexts can be altered and that young people's increased capacity for social cognition as they age can be a positive asset for promoting defending behaviors.

## The importance of motivation

As I have discussed, of the numerous elements found to influence bystander behavior, complex social factors such as group norms and peer influence appear to have some of the strongest effects (Cook et al., 2010; Lambe et al., 2019). However, because environments and peers might not always be positive or supportive of tolerance, and because sometimes bullies themselves can leverage their power and popularity to set the class norms (Salmivalli, 2010), it has been suggested that bystanders can be protected from social pressure and moral disengagement when they have greater self-determination to defend victims of bullying (Jungert et al., 2016).

Self-determination theory (SDT; Deci & Ryan, 1985, 2000) is a general theory of human motivation that has shown promising findings when applied to the study of bystanders' motivation to defend victims of bullying (Iotti et al., 2019; Jungert & Perrin, 2019; Jungert et al., 2016, 2021). SDT does not view motivation as a unitary concept, but considers which factors motivate individuals in specific situations and moments (Deci & Ryan, 2000). According to SDT, motivation exists on a continuum of self-volition ranging from amotivation (i.e., the lack of motivation) to intrinsic motivation (i.e., the highest level of self-determined activity), with four distinct types of regulation in between: external, introjected, identified, and integrated (Ryan & Connell, 1989; Ryan & Deci, 2000). External regulation occurs when behaviors are motivated through concrete rewards or punishments; introjected regulation when behaviors are motivated by leveraging feelings such as shame, guilt, or pride; identified regulation when individuals attribute value to certain behaviors and accept them as their own; and integrated regulation when behaviors are not just valued and accepted but are fully assimilated into the self. Integrated and identified regulation are regarded as types of autonomous motivation, whereas introjected and external regulation are regarded as types of controlled motivation; however, introjected regulation possesses a degree of internalization that is not found in external regulation.

In general, autonomous motivation is considered preferable because of its association with higher quality behavior, experience, persistence, performance, and individual wellbeing, compared to controlled motivation (Deci & Ryan, 2015). The importance of autonomous motivation has been confirmed in both Eastern and Western cultures and, therefore, does not appear to be culture- or value-specific

(Deci & Ryan, 2015). Moreover, autonomous motivation has been associated with increased engagement in prosocial behaviors such as helping others (Weinstein & Ryan, 2010), volunteering, making charitable donations (Hardy et al., 2015), and defending victims of bullying (Iotti et al., 2019; Jungert & Perrin, 2019; Jungert et al., 2016, 2021).

## **Factors that support autonomous motivation**

Because most values and behavioral regulations are not automatically intrinsic to individuals, SDT has investigated the contextual factors that promote or hinder their internalization and integration (Deci & Ryan, 1985; Ryan & Deci, 2000). According to SDT, the process of internalization and integration is not a rigid sequence, nor does it develop in a single direction (Ryan, 1995): that is, individuals who engage in a new activity because they are extrinsically motivated do not necessarily go through the steps of introjection, identification, and integration before they become intrinsically motivated to pursue that activity. Conversely, individuals who are autonomously motivated to engage in an activity might “revert” to more external means of regulation if they are exposed to negative experiences that reduce the sense of value or enjoyment that they had originally attributed to said activity.

SDT posits that individuals can fully internalize and integrate values and behaviors only when their basic needs of autonomy (i.e., acting in line with their own preferences, making their own choices, and expressing their feelings freely), competence (i.e., feeling efficient, receiving positive feedback, and having the opportunity to develop new skills), and relatedness (i.e., sharing caring bonds and positive alliances with others) have been supported (Ryan & Deci, 2000). Consequently, environments and relationships that do not fulfill the aforementioned needs, or are excessively controlling, will not support or foster autonomous motivation (Deci & Ryan, 2000).

Fulfilling the need for relatedness is an important starting point for defending behavior because “the groundwork for facilitating internalization is providing a sense of belongingness and connectedness to the persons, group, or culture disseminating a goal” (Ryan & Deci, 2000, p. 64). Therefore, I will summarize the research that covers the main social actors in students’ lives and their effects on motivation and behavior.

### *Parents*

There is a large body of research investigating the effects of different parental attitudes, practices, and behaviors on young people’s development, given the fundamental role that parents and caregivers play in their children’s lives (e.g., Maccoby & Martin, 1983; Power, 2013; Zhang et al., 2023). According to Zhang

and colleagues (2023), parenting practices have been conceptualized in several ways, with some scholars preferring to focus on styles, or broad behavioral patterns (e.g., Baumrind, 1967), and other scholars choosing to focus on specific dimensions (e.g., Grolnick & Ryan, 1989).

Diana Baumrind (1967, 1991) is credited with conceptualizing parenting styles as authoritarian, authoritative, and permissive, depending on levels of warmth/support and control/discipline. Authoritarian parenting consists of low warmth/support and high control/discipline; authoritative parenting consists of high warmth/support and high control/discipline, and permissive parenting consists of high warmth/support and low control/discipline. Maccoby and Martin (1983) added a fourth style, neglectful parenting, which is characterized by low warmth/support and low control/discipline. Each parenting style is associated with different developmental and mental health outcomes (for a review, see Zhang et al., 2023). For example, Baldry and Farrington (2005) found that authoritarian parenting was related to greater involvement in bullying, while authoritative parenting was related to less involvement. Moreover, a study by Moreno-Ruiz and colleagues (2018) found that children of authoritarian parents were at greater risk of cybervictimization.

Other scholars have preferred to move away from styles and focus on specific dimensions of parenting instead, such as autonomy-support, control, or structure (e.g., Grolnick & Ryan, 1989; Soenens & Vansteenkiste, 2010). According to SDT, autonomy-supportive parenting entails valuing and using techniques that encourage children's independent problem solving, choice, and participation when regulating their behavior (Grolnick & Ryan, 1989), whereas controlling parenting entails using conditional affection, threats of punishment, or leveraging feelings such as guilt and shame to regulate their behavior (Joussemet et al., 2008; Soenens & Vansteenkiste, 2010). Autonomy-supportive parenting practices are preferable to controlling practices because they fulfill children's basic needs of autonomy, competence, and relatedness, thus providing better support for the internalization and integration of behaviors and values across various domains (Ryan & Deci, 2017). Studies have found that autonomy-supportive parenting is associated with increased academic achievement (Joussemet et al., 2005; Vasquez et al., 2016), involvement in prosocial behaviors (Gagné, 2003), and decreased engagement in bullying and cyberbullying behaviors (Hinduja & Patchin, 2022; Legate et al., 2019). However, no studies have investigated the association between SDT-defined parenting practices and bystander roles or motivation to defend victims of bullying.

Scholars have pointed out the considerable similarities between these typological and dimensional approaches in the study of parenting practices, as well as their respective strengths and weaknesses (Calders et al., 2020; Zhang et al., 2023). Typological approaches are considered more holistic, but might not be applicable to all cultures (Chao, 1994; Zhang et al., 2023); conversely, dimensional approaches

are more reductive (Calders et al., 2020), but may be less culture specific. Irrespective of the approach that researchers choose, which largely depends on their research question and the trade-offs they are willing to make, it has been consistently shown that elements such as warmth, structure, and autonomy-support, whether taken as separate dimensions or as characteristics of specific parenting styles, are the most beneficial to young people's development (Calders et al., 2020; Zhang et al., 2023).

### *Teachers*

Teachers play an important role in young people's development and perception of school climate (Bear et al., 2011; Deci & Ryan, 2015; O'Brennan & Furlong, 2010). Positive student–teacher relationships – characterized by the presence of warmth, care, respect, and support – have been associated with higher academic motivation and achievement (Banerjee & Halder, 2021; Sabol & Pianta, 2012), developmental adjustment (Cadima et al., 2010; Merritt et al., 2012), and psychological wellbeing (Sarkova et al., 2014). Furthermore, positive student–teacher relationships have been associated with lower levels of bullying victimization and perpetration (Lucas-Molina et al., 2015; Wang et al., 2015; Richard et al., 2012), as well as greater defending behaviors in bullying among Italian, Swedish, and German adolescents (Iotti et al., 2019; Jungert et al., 2016; Wachs et al., 2020; Thornberg et al., 2017). Conversely, negative student–teacher relationships – characterized by negativity, conflict, unpredictability, and disapproval (Sabol & Pianta, 2012) – have been associated with lower academic motivation and achievement (Roorda et al., 2021), decreased developmental adjustment (McGrath & Van Bergen, 2015), higher passive and pro-bully bystander behavior (Jungert et al., 2016), and a higher probability to be victims or bully/victims among Italian adolescents (Marengo et al., 2018).

Positive student–teacher relationships are related to better developmental outcomes because they fulfill students' needs of autonomy, competence, and relatedness (Deci & Ryan, 2015). For example, when teachers develop warm and caring relationships with their students, they support the need for relatedness; when teachers respect students, set clear behavioral expectations, and provide appropriate challenges as well as possibilities to exercise choice, they fulfill the needs of competence and autonomy. Negative student–teacher relationships do not fill these needs because conflict and disapproval do not support relatedness. Furthermore, student–teacher relationships that are excessively controlling or unpredictable do not allow students to feel autonomous or competent.

### *Peers*

Peer group norms (Jones et al., 2012; Price et al., 2014) and social pressure (Bastiaensens et al., 2016; Forsberg et al., 2018; Pozzoli & Gini, 2010) have been

found to influence bystander behavior. Specifically, rigid peer group norms and social pressure do not support the need for autonomy or competence because individuals feel pressured to comply with these norms. Moreover, when students do not fit group standards, or experience conditional inclusion, their need for relatedness is not fulfilled.

Although it might seem that SDT, social-ecological theories, and the SRD model focus on different sides of bystander behaviors, they all highlight and support the important role of relational factors and relationships in young people's development. Moreover, the theories emphasize that the interactions between individuals and their social environments are bidirectional. Therefore, I believe it meaningful to further the research the factors that support or hinder prosocial motivation among bystanders to school bullying because it might allow us to gain a better understanding of which social contexts better support it, as well as to explore in the future whether, and how, individual motivation plays a role in changing the social dynamics and environments that students participate in.

## Aims of the dissertation

Although motivation plays a significant role in developing and influencing human behavior (Deci & Ryan, 2015), and there are promising findings that support its relevance for explaining bystander behaviors in bullying episodes (Iotti et al., 2019; Jungert & Perrin, 2019; Jungert et al., 2016, 2021), this approach has remained largely unexplored in the field of bullying research. For example, it would be meaningful to examine whether findings on bystanders' motivation to defend victims of traditional bullying can be applied to cyberbullying. Furthermore, it would be interesting to investigate whether the distinction between autonomous and controlled motivation to defend is sufficient when researching bystander behavior, or whether different types of internalization could add meaningful nuance. There is also a need to explore the association between motivation to defend and bystanders' meaningful relationships with their parents or teachers. Finally, further information is required concerning the relation between factors such as age, gender, and, possibly, nationality, and prosocial motivation.

The general aim of this dissertation is to improve our understanding of students' motivation to defend victims of bullying. Specifically, the aim is to investigate the association between different types of motivation and participant roles in bullying (study I) and cyberbullying (study II). Additionally, I examine the relation between autonomy-supportive parenting practices and students' motivation to defend victims, to understand whether these practices are associated with more favorable motivation types, and to explore the possible mediating effects of factors such as

reactance, depression, anxiety, and stress (study III). I also explore the association between different motivational profiles and student–teacher relationships, with the intention of understanding which combinations are related to positive or negative outcomes (study I). Finally, the dissertation investigates the possible association of factors such as age, gender (studies I-III), and nationality (study I) with motivation to defend.





# Summary of studies

The overarching aim of this dissertation is to improve understanding of students' motivation to defend victims of bullying. Studies I and II explored the association of motivation to defend with participant roles in bullying and cyberbullying to clarify which types of motivation (based on SDT) are the most related with defending behaviors among students, and whether they are associated with factors such as age, gender, and nationality. Study I also examined how motivation profiles related to student–teacher relationships to understand which profiles were most associated with positive student–teacher relationships. Finally, Study III examined the relationship between autonomy-supportive parenting practices and students' motivation to defend victims, exploring whether specific parenting practices were associated with more favorable types of motivation and whether factors such as reactance, depression, anxiety, and stress mediate this interaction.

The section below summarizes and highlights key aspects of the three studies by presenting their backgrounds, aims, methods, results, and contributions.

## Study I (Jungert et al., 2021)

### **Background**

Study I identified motivational profiles of bystanders to school bullying based on ratings of self-reported motivation to defend victims, as defined by SDT. The study also aimed to investigate whether said profiles were differently related to students' self-reported participant roles in school bullying episodes, victimization rates, and student–teacher relationship quality. Finally, the study's results were compared among different age groups, genders, and two countries (Italy and Sweden).

### **Methods**

#### *Participants and procedure*

Study I was a cross-sectional survey study, with data gathered between the spring of 2015 and the spring of 2016 from 29 public schools and 100 classes in Italy and

Sweden. The final sample consisted of 1,800 students (46% male) between the ages of 10 and 18 years ( $M = 12.6$ ,  $SD = 1.74$ ).

The students were given approximately 20 minutes to fill out the survey in their classrooms during school hours. At least one researcher was present during data collection to aid participants and to provide clarifications when needed. The study received ethical approval from both the Italian and Swedish university institutional review boards. Consent was obtained from schools, parents/guardians, and students prior to data collection. Furthermore, the students were assured that participation in the study was voluntary, and that anonymity would be guaranteed.

### *Measures*

*Motivation to Defend.* The Motivation to Defend Scale (MDS; Jungert et al., 2016) was used to assess participants' motivation to defend victims during bullying episodes. The instrument comprises 13 items that are based on SDT (Deci & Ryan, 2000) and is available in both Italian and Swedish. Participants are asked to think of situations where they have witnessed another student being bullied and to report why they would help a victim. The MDS consists of four subscales that measure extrinsic, introjected, identified, and intrinsic motivation, respectively. Example items include "To be praised by a teacher" (extrinsic), "To avoid feeling guilty" (introjected), "Because I am the kind of kid who cares about others" (identified), and "Because I like to help other people" (intrinsic). Each item is answered on a 5-point Likert scale (1 = *totally disagree*, 5 = *totally agree*).

*Participant Roles.* A 15-item scale, available in Italian and Swedish (Jungert et al., 2016; Thornberg & Jungert, 2013), was used to measure participants' tendency to adopt various bullying-related roles in the last month (i.e., bully, pro-bully, outsider/passive bystander, and defender). Examples of the items evaluating these roles are "I tease some classmates, calling them nasty nicknames, threatening, or offending them" (bullying), "I laugh or cheer on the kids who tease or call a classmate nasty nicknames" (pro-bullying), "When a classmate is hit or pushed, I stand by and I mind my own business" (passive bystander), and "I defend classmates who are targeted by gossip or false rumors that are said behind their back" (defending). Participants are asked to indicate how frequently they have engaged in these behaviors during the last month on a 5-point Likert scale (1 = *it has never happened in the last month*, 5 = *multiple times per week*). Conversely, victimization during the current school year was measured by asking participants to answer *yes* or *no* to the statement "I have been bullied by classmates."

*Student-teacher relationships.* Student-teacher relationships were measured with the Student Perception of Affective Relationship with Teacher Scale (SPARTS; Koomen & Jellesma, 2015). The SPARTS is a 24-item self-report scale that measures students' perceptions of conflict (e.g., "I easily have quarrels with my

teacher”), closeness (e.g., “I feel relaxed with my teacher”), and negative expectations (e.g., “I feel sad if my teacher tells me that I do something wrong”) in their relationship with a specific teacher. Students are asked to rate the extent to which they think each statement applies to their relationship with their main/homeroom teacher on a 5-point Likert scale (1 = *no, that is not true*, 5 = *yes, that is true*).

### *Data analysis*

A latent profile analysis was conducted using the tidyLPA package (Rosenberg et al., 2019) in R (Version 3.3.2) to explore possible clusters of individuals with similar ratings on the motivational variables. The four motivation variables (i.e., extrinsic, introjected, identified, and intrinsic motivation) were used to classify participants with similar motivational profiles. The cluster solution was first constrained to two clusters, with additional clusters being added until no further improvement in fit was observed (Barnett et al., 2019). The Akaike information criterion (AIC), Bayesian information criterion (BIC), sample-size adjusted BIC (SABIC), entropy values, and the bootstrap likelihood ratio test (BLRT; Berlin et al., 2014; Celeux & Soromenho, 1996) were selected as measures to evaluate data fit. The final cluster classification was saved as a separate variable in the data set and used as a predictor in the subsequent analyses.

Two separate multivariate analyses of variance (MANOVA) were conducted in Jamovi (Version 0.9.6.1) to explore differences between the motivational profiles in relation to their adoption of participant roles during bullying episodes and student–teacher relationships. In the first analysis, the cluster variable was entered as the independent variable, and the four participant roles (i.e., bullying, pro-bullying, passive bystanding, and defending) were entered as dependent variables. In the second analysis, the student–teacher relationship dimensions (i.e., conflict, closeness, and negative expectations) were entered as dependent variables. Finally, a logistic regression analysis was used to explore whether the cluster classifications predicted bullying victimization. The cluster classifications were entered as predictors and the measure of bullying victimization (0 = no victimization, 1 = victimization) was entered as the dependent variable.

## **Results**

Four latent profiles were identified, representing respondents (a) high in prosocial motivation, (b) high in externally regulated extrinsic motivation, (c) intermediate in externally regulated extrinsic motivation, and (d) high in identified/introjected motivation. Most respondents belonged to the prosocial motivation group, and the remaining respondents were unevenly distributed among the other profiles, with the identified/introjected motivation group containing the smallest number of

individuals. No significant gender differences were found among the motivational profiles, with female and male participants appearing to be distributed evenly across all clusters. Regarding age differences, the study found that 14-year-olds were overrepresented in the intermediate externally regulated extrinsic group and had a lower representation in the prosocial motivation group. Additionally, Swedish students were more likely to belong to the high externally regulated extrinsic group, and Italian students were more likely to belong to the identified/introjected group.

Multivariate analyses showed that respondents' participant roles, rate of victimization, and perceived student–teacher relationship quality differed significantly among the motivational profiles. Respondents in the prosocial motivation group were more likely to be associated with defender roles and experienced victimization to a lesser extent than did the other profile groups. Conversely, students in the intermediate externally regulated extrinsic group were more likely to be associated with bully, pro-bully, and outsider participant roles, and they experienced victimization to a higher extent than did the other profile groups. Concerning student–teacher relationships, the prosocial motivation group reported the closest relationships with their teachers, while the intermediate externally regulated extrinsic group reported the most conflictual relationships.

## **Contributions**

This study complements and advances previous findings from variable-centered studies by identifying four distinct motivational profiles in our sample and investigating their relation to participant role choice, victimization rates, and student–teacher relationship quality, while also checking for age, gender, and national differences. Overall, these findings add nuance and complexity to current understanding of the mechanics of bystander motivation and participant roles.

The results suggest that because bystanders to bullying episodes can have profiles with different combinations of autonomous and controlled motivation to defend victims, these concurrent, and sometimes contrasting, types of regulation can still be associated with negative outcomes even when average levels of prosocial motivation are present. Additionally, the finding that 14-year-olds were overrepresented in the intermediate externally regulated extrinsic group might be explained by the results of previous studies on academic motivation, which indicated that younger students were more likely to belong to motivation groups characterized by high intrinsic and identified motivation, compared to older students, and that intrinsic motivation appeared to decline with age (e.g., Gottfried et al., 2001). Motivation to defend might follow a similar pattern. However, students in our sample who were older than 14 years were also represented in profiles that are more autonomously regulated, so this finding is not conclusive, and more research is required to clarify the relation between age and motivation. Our finding

that students in the prosocial motivation group reported the closest relationships with their teachers supports previous research by Jungert and colleagues (2016), which found that students who had higher prosocial motivation reported closer relationships with their teachers compared to their peers with lower prosocial motivation. Likewise, our finding that the intermediate externally regulated extrinsic group reported the most conflictual student–teacher relationships is in line with previous findings associating negative student–teacher relationships with externalizing and aggressive behaviors (Marengo et al., 2018; Roorda et al., 2014) and lower prosocial behavior (Birch & Ladd, 1998). Finally, the finding that Swedish students were more likely to belong to the high externally regulated extrinsic group and Italian students were more likely to belong to the identified/introjected group suggests that Italian students have stronger attitudes against bullying, as previously found in a study comparing Italian and Singaporean children (Pozzoli et al., 2012a). Alternatively, Italian students might have internalized their anti-bullying attitudes and prosocial values to a greater extent than did the Swedish students. Nevertheless, more research is needed to confirm and explain these national differences.

Overall, the study’s findings might help researchers and professionals improve the effectiveness of anti-bullying interventions by developing solutions that can be tailored to fit students’ individual needs and tendencies and that specifically target older students. However, because of the study’s cross-sectional design, temporal or causal relationships cannot be inferred, and the results would therefore benefit from future longitudinal or experimental investigations, as well as replication attempts in other samples and settings.

## Study II (Iotti et al., 2022)

### **Background**

Study II explores possible differences between early adolescents’ cyberbullying roles and their self-determined motivation to defend cyberbullying victims. More specifically, we investigated whether autonomous motivation to defend is positively associated with defending behaviors and negatively associated with pro-bullying and passive behaviors. We also investigated whether extrinsic motivation to defend is positively associated with pro-bullying and passive behaviors, and negatively associated with defending behaviors. Additionally, we examined whether previous findings of age and gender differences in participant roles and motivation types would be replicated in our sample. Finally, we investigated possible interactions between our study variables in a more exploratory fashion, as these had not been previously reported in the literature.

## Methods

### *Participants and procedure*

Study II was a cross-sectional study, with data gathered during April and May 2020 from six primary schools in a large Swedish city. Convenience sampling was conducted in each school with the assistance of class teachers, with students from 24 classes in grades 4–8 agreeing to participate. The final sample consisted of 460 students (57% girls) aged 11–15 years ( $M = 11.80$ ,  $SD = 1.08$ ); students from Grade 5 were the most represented in our sample (42%).

The students took approximately 10–20 minutes to fill out the survey in their classrooms during school hours. The study was approved by the Swedish Ethical Review Authority (dnr. 2019-04394). Moreover, consent was obtained from schools, parents/guardians, and the students themselves before data collection. Students were given the opportunity to ask questions and were assured that participation in the study was voluntary and anonymous, and that they could withdraw from the study at any time. The students who had not received consent from their parents or did not wish to participate were assigned a different task from their teachers.

### *Measures*

*Motivation to defend.* A 14-item version of the Motivation to Defend Scale (MDS; Jungert et al., 2016; Jungert & Perrin, 2019) was used to assess participants' motivation to defend victims of school bullying. Participants are asked to think of situations where they have witnessed another student being bullied and to report why they would help a victim. The MDS comprises four subscales that measure extrinsic, introjected, identified, and intrinsic motivation, respectively. Example items include “To become popular” (extrinsic), “Because I would feel like a bad person if I did not try to help” (introjected), “Because I think it is important to help people who are treated badly” (identified), and “Because I like to help other people” (intrinsic). Each item is answered on a 5-point Likert scale (1 = *totally disagree*, 5 = *totally agree*).

*Participant roles.* A pre-existing 15-item scale (Thornberg & Jungert, 2013) was adapted and used to measure participants' tendency to fit various cyberbullying-related profiles during a school year (i.e., pro-bully, passive bystander, and defender). Example items include “If I see that another student has been teased with nasty messages on the mobile or internet, I give a ‘thumbs up’ or otherwise ‘like’ the messages” (pro-bullying), “I did nothing special, but was passive” (passive bystander), and “I tried to get the bully/bullies to stop by telling them in some way” (defending). Each item is answered on a 5-point Likert scale (1 = *completely disagree*, 5 = *completely agree*).

### *Data analysis*

First, we merged the intrinsic and identified subscales to create the autonomous motivation subscale, in line with previous literature (Longobardi et al., 2020; Jungert & Perrin, 2019). Subsequently, we used confirmatory factor analysis (CFA) to assess the goodness of the factor structure and structural equation modeling (SEM) to test a model that included gender and age as exogenous variables, autonomous and extrinsic motivation as mediators, and the three participant roles as outcomes, using the distributionally-robust Maximum Likelihood estimator (ML). All analyses were carried out in R (Version 4.0.2) using the lavaan package (Rosseel, 2012).

### **Results**

The results of the CFA showed an adequate fit, with the factor loadings all significantly different from zero. We removed two items with loadings lower than 0.5 (i.e., item 3 from the extrinsic motivation subscale and item 2 from the autonomous motivation subscale).

The SEM results showed that autonomous motivation to defend was positively associated with defender behavior and negatively associated with pro-bully and passive behavior, while extrinsic motivation was positively associated with pro-bully and passive behavior but had no effect on defender behavior. Moreover, older age was positively associated with increased passive behavior and lower defender behavior. No gender differences in defender behavior could be found in our sample and, although girls were associated with lower extrinsic motivation to defend, the total effects of gender on pro-bully and passive behavior were not significant.

### **Contributions**

This study is the first to provide evidence for a strong positive association between autonomous motivation and defending behaviors in cyberbullying episodes. Conversely, extrinsic motivation was linked to greater pro-bully and passive behavior, which suggests that the behavior of students who score high in extrinsic motivation varies depending on their interpretation of each cyberbullying episode and their ability to anticipate possible social rewards or sanctions. These students' reliance on external factors can be considered a risk as it both decreases the likelihood that they will defend victims of cyberbullying, as well as increases the likelihood that they will remain passive or even join in the bullying in certain circumstances. Additionally, the study confirms previous findings of age differences in motivation and participant roles (e.g., Endresen & Olweus, 2001; Jungert et al.,



2021), as older students in our sample reported lower autonomous motivation to defend and higher passive bystander behavior.

These findings suggest that the association between bystanders' motivation to defend victims and their participant roles during cyberbullying episodes follows the same dynamics observed in studies on traditional bullying (Jungert et al., 2016). Furthermore, the results align with evidence on the overlap of bystander roles in traditional and cyberbullying (Pozzoli & Gini, 2020; Wachs, 2012), suggesting that said overlap extends to bystanders' motivation to defend victims as well. Overall, the findings on the relation between extrinsic motivation and pro-bully and passive behavior in cyberbullying can help researchers and professionals improve the effectiveness of prevention and intervention strategies by developing solutions aimed at increasing autonomous motivation in their target population as well as actively involving older students. However, because of the study's cross-sectional design, temporal or causal relationships cannot be inferred; there is again a need to explore the results further through longitudinal or experimental investigations, as well as replicate the findings in other samples and settings.

## Study III (Iotti et al., 2023)

### **Background**

Study III examined the association between autonomy-supportive parenting strategies and young adolescents' autonomous and extrinsic motivation to defend victims of bullying. Furthermore, the study explored whether factors such as reactance, depression, anxiety, or stress mediate this association, while controlling for gender differences.

### **Methods**

#### *Participants and procedure*

Study III was a cross-sectional study, with data gathered between December 2021 and May 2022, from a convenience sample of 32 classes taken from five middle schools in the metropolitan area of Turin, Italy. The final sample consisted of 578 students (52% boys) between the ages of 10 and 14 years ( $M = 11.8$ ,  $SD = 0.79$ ).

The students took approximately 20–30 minutes to complete the survey in their classrooms during school hours. Research assistants were present during data collection to aid participants and provide clarification when needed. The study received ethical approval from the University of Turin's institutional review board (prot. no. 291035). Principals, teachers, parents/guardians, and the students

themselves expressed written consent to participate, after being informed about the study and of their right to refuse or withdraw their consent at any time.

### *Measures*

*Autonomy-supportive parenting.* Autonomy-supportive parenting was measured with the General Causality Orientation Scale (GCOS; Deci & Ryan, 1985; Legate et al., 2019). The GCOS assesses parental tendencies to use autonomy-supportive vs. controlling parenting styles through 10 hypothetical bullying/cyberbullying scenarios. Adolescents are presented with two possible reactions to each scenario, one autonomy-supportive and one controlling, and they are asked to express how likely it is that their parents would react in that manner. Example scenarios include “Your parent just found out you have been using social media to post insulting messages about a schoolmate” or “Your parent noticed you went out of your way to include a shy classmate in a peer group.” Examples of parent reactions are “They would make me feel guilty for my behavior” (controlling) or “They would try to understand the way I feel about the situation” (autonomy-supportive). Each item is answered on a 6-point Likert scale (1 = *very unlikely*, 6 = *very likely*). The original scale was developed in English and was translated into Italian for this study following Van de Vijver and Hambleton’s (1996) established guidelines.

*Motivation to defend.* A 16-item Italian version of the MDS (Jungert et al., 2016; Iotti et al., 2022) was used to assess participants’ motivation to defend victims of bullying. Participants are asked to think of situations where they have witnessed another student being bullied and to report why they would help the victim. The MDS comprises four subscales that measure extrinsic, introjected, identified, and intrinsic motivation, respectively. Example items are: “In order to receive a reward” (extrinsic), “Because I would feel like a bad person if I did not try to help” (introjected), “Because I think it is important to help people who are treated badly” (identified), and “Because I like to help other people” (intrinsic). Each item is answered on a 5-point Likert scale (1 = *completely disagree*, 5 = *completely agree*).

*Depression, anxiety, and stress.* The Italian version of the 21-item Depression, Anxiety and Stress Scale (DASS-21; Lovibond & Lovibond, 1995; Bottesi et al., 2015) was used to measure participants’ psychological symptoms and distress. The DASS-21 is a self-report instrument widely used to measure stress, anxiety, and depression in children and adolescents. Each of the three subscales (i.e., depression, anxiety, and stress) contains seven items. Example items are “I found it hard to wind down” (stress), “I was aware of dryness of my mouth” (anxiety), and “I couldn’t seem to experience any positive feeling at all” (depression). Respondents are asked to indicate how much each statement applied to them over the past week on a 4-point Likert scale (1 = *did not apply to me*, 4 = *applied to me very much, or most of the time*).

*Reactance.* Participants' feelings of reactance towards a parent who is regulating their social behavior were measured with seven items adapted from the literature (Vansteenkiste et al., 2014; Legate et al., 2019). First, respondents are asked to read the following prompt: "When my (target parent) wants me to act in a certain way (e.g., being nice to others on social media), these conversations..." They are then asked to express how much they agree with a series of statements (e.g., "Make me think that I want to do exactly the opposite"). Each item is answered on a 5-point Likert scale (1 = *strongly disagree*, 5 = *strongly agree*). The original items were developed in English and were translated into Italian for the purposes of this study following Van de Vijver and Hambleton's (1996) established guidelines.

### *Data analysis*

First, we merged the intrinsic and identified subscales of the MDS to create the autonomous motivation subscale, in line with previous research (Jungert & Perrin, 2019; Iotti et al., 2022). Subsequently, we used CFA to assess the goodness of the factor structure and SEM to test four separate models using the distributionally-robust Weighted Least Squares Means and Variance adjusted estimator (WLSMV). The first, or main, model included parenting style as the exogenous variable, reactance as the mediator, and autonomous and extrinsic motivation to defend as outcomes. The remaining three models retained the same structure and featured depression, anxiety, or stress as the second mediator. All analyses were carried out in R (Version 4.2.2) using the lavaan package (Rosseel, 2012).

## **Results**

The results of the CFA showed a good fit, with factor loadings all significantly different from zero. Items with loadings lower than 0.4 were removed (i.e., item 10 from the autonomy-supportive parenting GCOS scale, item 5 on the extrinsic MDS subscale, and items 5–7 on the reactance scale).

The main model, with reactance as the mediator, showed a good fit. The SEM highlighted a positive association between autonomy-supportive parenting and autonomous motivation, which was weakly mediated by reactance. Autonomy-supportive parenting was negatively associated with reactance, which in turn was negatively associated with autonomous motivation. Conversely, autonomy-supportive parenting was negatively associated with extrinsic motivation and this relationship was partially mediated by reactance. Reactance was also positively associated with extrinsic motivation.

The three alternative models all showed acceptable fit. SEM highlighted that autonomy-supportive parenting was negatively associated with depression, stress, and anxiety, and that these factors did not mediate the association between

autonomy-supportive parenting and motivation to defend. Moreover, depression and stress were not associated with either autonomous or extrinsic motivation to defend, and anxiety only showed a small positive association with autonomous motivation to defend.

Finally, all models highlighted some gender differences, with girls showing higher levels of anxiety, depression, stress, and autonomous motivation to defend, and boys showing higher levels of extrinsic motivation to defend.

## **Contributions**

This study confirmed that there is a positive association between autonomy-supportive parenting practices and young people's motivation to defend. That autonomy-supportive parenting is related to less reactance in adolescents also confirms prior findings and supports the notion that such practices are less likely to provoke oppositional behaviors in young people. Moreover, the negative associations between autonomy-supportive parenting and depression, stress, and anxiety supports past findings of the possible protective effect of caring and supportive parenting strategies on young people's mental wellbeing.

Concerning the associations between our proposed mediators and extrinsic and autonomous motivation to defend, our findings are in line with SDT (Ryan & Deci, 2017): namely, that autonomous motivation affords greater stability and extrinsic motivation greater susceptibility to contingencies and external factors. The small positive association between anxiety and autonomous motivation to defend suggests that bystanders' emotional states can influence their willingness to intervene, as observed by other scholars (e.g., Fischer et al., 2011; Jungert & Perrin, 2019). The finding that extrinsic motivation was not associated with stress, anxiety, or depression has two possible interpretations. First, because our sample did not present high or pathologic rates of these factors, we might not have observed the association that would otherwise be present in populations with poorer mental health. Second, the current conceptualization of extrinsic motivation to defend could make it more susceptible to behavioral factors such as reactance than to psychological factors such as anxiety, depression, or stress, which might influence other forms of external regulation not considered in this study.

Finally, the gender differences in mental health and motivation observed in our sample corroborate, on the one hand, available evidence of a gender gap in internalizing mental health between boys and girls (e.g., Campbell et al., 2021), and, on the other hand, gender differences in prosocial motivation (e.g., Vansteenkiste et al., 2009), which were not confirmed in more recent studies (Iotti et al., 2022; Jungert et al., 2021). Therefore, more research is needed to verify the existence of gender differences in motivation.

In conclusion, the findings of this study may help researchers and professionals improve the effectiveness of prevention and intervention initiatives aimed at young adolescents by developing solutions that increase parental involvement in said initiatives and provide training in autonomy-supportive parenting practices, when necessary. However, because of the study's cross-sectional design, temporal or causal relationships cannot be inferred, and its results would benefit from future longitudinal investigations, as well as replication attempts in other samples and settings. Furthermore, future studies should include parent-child dyads and consider using qualitative or mixed-methods approaches to improve our current knowledge of the relation between parenting practices and youths' behaviors and motivation.

# Discussion

The general aim of this dissertation was to improve our understanding of students' motivation to defend victims of bullying by investigating the association between different types of motivation and participant roles in bullying (study I) and cyberbullying (study II). I also examined the relation between autonomy-supportive parenting practices and students' motivation to defend victims, accounting for the possible mediating roles of factors such as reactance, depression, anxiety, and stress (study III). Other aims were to analyze the association between different motivational profiles and student–teacher relationships (study I) and to investigate the possible association between factors such as age, gender (studies I-III), and nationality (study I) and motivation to defend.

Study I used a person-centered approach to identify four distinct profiles of bystander motivation to defend victims of bullying, based on SDT, and explored their association with participant roles and student–teacher relationship quality, while checking for differences by age, gender, and nationality (Italy vs. Sweden). Our results show that bystanders may exhibit profiles characterized by different combinations of autonomous and controlled motivation. Students in the autonomous/prosocial motivation group (73% of the sample) reported the highest levels of defending behavior, were the least victimized, and had the closest relationships with their teachers. Conversely, students in the intermediate extrinsic motivation group (19% of the sample) reported the highest levels of victimization, pro-bully and passive behavior, and the most conflictual relationships with their teachers. Students in the high extrinsic motivation group (7% of the sample) reported a similar pattern to the intermediate extrinsic motivation group, but they had lower mean levels of all the variables under consideration.

Overall, our findings confirm that autonomous and controlled motivation are largely orthogonal constructs, as postulated by SDT (Ryan & Deci, 2000). Moreover, the concurrence of autonomous and controlled types of motivation can be associated with negative outcomes despite the presence of average amounts of autonomous motivation. This is not surprising, given that during the process of identification and integration different types of regulation can coexist and that, as long as individuals continue to perceive some level of external control or pressure, they might not be able to advance or complete the process (Ryan & Deci, 2000). Therefore, it is reasonable to assume that whenever autonomous motivation is lower than controlled

motivation it will be overshadowed, leading to the negative outcomes that are associated with the latter. Moreover, the difference between the high and intermediate extrinsic motivation group did not just reside in their levels of extrinsic regulation, but also in the fact that the intermediate extrinsic motivation group had the lowest levels of introjected, identified, and integrated regulation across all profiles. Thus, it is not just the presence of different levels of autonomous or controlled prosocial motivation, but also the general absence of autonomous prosocial motivation, that is associated with the worst outcomes.

Our finding that students in the autonomous/prosocial motivation group reported the closest relationships with their teachers supports previous research (Jungert et al., 2016), which found that students who had higher prosocial motivation reported closer relationships with their teachers, compared to peers with lower prosocial motivation. Likewise, our finding that the intermediate extrinsic motivation group reported the most conflictual student–teacher relationships is in line with previous findings associating negative student–teacher relationships with externalizing and aggressive behaviors (Marengo et al., 2018; Roorda et al., 2014) and lower prosocial behavior (Birch & Ladd, 1998). Although the high extrinsic motivation group perceived the highest level of emotional distance in their student–teacher relationships, they still reported closer and less conflictual student–teacher relationships than did their peers in the intermediate extrinsic motivation group. Here, as well, we notice significant differences between the high and intermediate extrinsic motivation groups. Negative expectations, or emotional distance, are a relational factor that reflects students’ uncertain feelings about their relationship with the teacher (Koomen & Jellesma, 2015). Students who have negative expectations generally feel neglected by their teachers, and they can also experience anxiety or fearfulness in their student–teacher relationships (Koomen & Jellesma, 2015). Because students in the high extrinsic motivation group had the highest level of external regulation across all profiles, it is possible that they were more dependent on their teachers and thus perceived greater emotional distance, or developed negative expectations, when their needs were not met. Conversely, the relational factor of conflict is characterized by feelings of discordance, disapproval, and unpredictability (Koomen & Jellesma, 2015), and it has been associated with externalizing and aggressive behaviors (Marengo et al., 2018; Roorda et al., 2014), as mentioned previously. This suggests that the differences in student–teacher relationships found between the high and intermediate extrinsic motivation groups could have resulted from differences in behavioral characteristics among the profiles. Unfortunately, this explanation cannot be tested because we did not include other behavioral measures in the study. However, SDT (Deci & Ryan, 2015) would argue that student–teacher relationships characterized by high emotional distance and conflict are not able to fulfill the basic needs of relatedness or autonomy, and thus can only catalyze controlled motivation. Accordingly, it is not surprising that

the profiles with the highest levels of controlled motivation were associated with the most negative student–teacher relationships. Furthermore, social-ecological theory (Bronfenbrenner, 1979) would argue that possible differences in behavioral characteristics among the profiles would only partially explain this finding because it views student–teacher relationships as the result of complex bidirectional interactions between students’ and teachers’ individual temperaments, behavioral characteristics, and other individual and contextual factors. Nevertheless, our study design did not allow us to determine the direction of the observed associations and, therefore, we cannot disentangle the relation between motivational profiles, student–teacher relationships, and possible confounds, nor can we infer causality.

Study I also found that 14-year-olds were overrepresented in the intermediate extrinsic motivation group. This could be explained by the results of previous studies on academic motivation (e.g., Gottfried et al., 2001), which observed that autonomous motivation appears to decline with age and is more common in younger students. This finding suggests that autonomous motivation to defend follows a similar trend. However, the fact that profiles with higher autonomous motivation also included participants who were older than 14 years does not support this hypothesis, so more research is needed to verify the association between age and motivation to defend. Additionally, study I did not find gender differences among the motivational profiles, in contrast to previous findings of gender differences in academic motivation, where girls exhibited higher levels of autonomous motivation than did boys (Ratelle et al., 2007; Vansteenkiste et al., 2005, 2009). However, it should be noted that SDT views motivation as both global- and domain-specific (e.g., Ryan, 1995), meaning that findings on academic motivation might not be extendable to prosocial motivation, even though they can still be useful for understanding contextual and developmental influences on motivation.

Concerning cultural differences, Swedish students were more likely to belong to the high extrinsic motivation group and Italian students to the identified/introjected group. This is interesting considering that the identified/introjected group was the smallest profile found (2% of the sample). It suggests that Italian students might have stronger attitudes against bullying, as previously found in a study comparing Italian and Singaporean children (Pozzoli et al., 2012a). It may also indicate that Italian students have internalized their anti-bullying attitudes and prosocial values to a greater extent than did Swedish students. The finding is also surprising because, although Sweden and Italy display few differences in Hofstede’s (2001) cultural dimensions and have similar levels of quality of life (measured by gross domestic product per capita), education, and literacy (UNICEF, 2016), Sweden has historically been at the forefront of bullying research and included requirements for bullying prevention in its education laws (e.g., SFS, 2010:800) significantly earlier than did Italy (L.71/2017). The latter is one reason that we included a national comparison in this study, as we assumed that Swedish students had been sensitized



to bullying to a greater extent than had their Italian peers and were more likely to have internalized a motivation to defend victims. However, because we did not collect data on whether the schools had ongoing bullying prevention programs during the time of data collection, nor did we ask students if they were aware of or had participated in bullying prevention programs, we cannot make use of this information to clarify our findings. Another possible explanation is that because introjected regulation is characterized by feelings of guilt or shame, the differences between the two countries could be related to differences in religiosity, with Italy being more religious than Sweden (Pew Research Center, 2018), and religiosity being associated with greater feelings of guilt (Demaria & Kassinove, 1988).

Study II investigated the association between autonomous and extrinsic motivation to defend victims and Swedish adolescents' bystander behaviors in cyberbullying episodes. Our findings support the strong positive association between autonomous motivation and defending behaviors found in traditional bullying episodes (Jungert et al., 2016; Longobardi et al., 2020), and are the first to confirm its applicability to cyberbullying. Moreover, our results confirmed that extrinsic motivation was linked to greater pro-bully and passive behaviors, in line with previous findings on traditional bullying (Jungert et al., 2016) and align with available evidence on the overlap of bystander roles in traditional and cyberbullying (Pozzoli & Gini, 2020; Wachs, 2012), suggesting that said overlap might extend to bystanders' motivation to defend victims as well.

These results indicate that the behavior of students with high levels of extrinsic motivation is prone to vary depending on their interpretation of each cyberbullying episode and their ability to anticipate possible social rewards or sanctions. This behavior would be in accordance with the arousal: cost-reward model (Dovidio et al., 2017; Pilliavin et al., 1969), whereby bystanders evaluate the costs for helping or not helping victims and decide if, and how, they should intervene. In the case of cyberbullying, it might be hard to determine factors such as the seriousness of the bullying or the degree of distress of the victim, both of which may motivate helping (e.g., Bastiaensens et al., 2014; Macháčková et al., 2013). There is also a feeling of anonymity, which could reduce the perceived risk of sanctions and contribute to moral disengagement (e.g., Van Cleemput et al., 2014). Overall, then, it may be easy for individuals who rely on extrinsic motivation to remain passive, in order to minimize their involvement and avoid possible risks, such as being bullied themselves (Strindberg et al., 2020; Thornberg et al., 2018). However, these characteristics of cyberbullying could also create a situation in which bystanders identify possible rewards that come from participating in the bullying, such as acquiring social dominance (e.g., Volk et al., 2012, 2014), fitting in with a particular group, or experiencing feelings of pride (e.g., Jones et al., 2012), which could outweigh the risks and motivate them to assist the bullies. Therefore, students' reliance on external motivational factors can be considered a significant risk factor

because it both decreases the likelihood that they will defend victims of cyberbullying and increases the likelihood that they will remain passive or even join in the bullying in certain circumstances. This explanation also applies to study I's findings for the high and intermediate and extrinsic prosocial motivation profiles, providing additional clarification for their association with pro-bully and passive bystander behaviors in traditional bullying.

The results of study II also confirm previous findings of age differences in motivation (Gottfried et al., 2001; Jungert et al., 2021; Vansteenkiste et al., 2009) and participant roles (e.g., Endresen & Olweus, 2001), as older students in the sample reported lower autonomous motivation to defend and higher passive bystander behavior. Although our results showed that girls were less likely to report extrinsic motivation to defend, we could not find evidence of gender differences in cyberbullying participant roles, in line with previous findings (e.g., Van Cleemput et al., 2014).

Study III investigated the relationship between autonomy-supportive parenting strategies and Italian young adolescents' autonomous and extrinsic motivation to defend victims of bullying. The study also explored the possible mediating roles of factors such as reactance, depression, anxiety, or stress in this association, while controlling for gender differences.

The results of study III support the positive effect of autonomy-supportive parenting practices on young people's behavior (e.g., Gagné, 2003; Legate et al., 2019) and motivation (e.g., Banerjee & Halder, 2021; Joussemet et al., 2005; Jungert & Koestner, 2015; Katz et al., 2015). Specifically, we found that autonomy-supportive parenting was positively associated with autonomous motivation to defend and negatively associated with extrinsic motivation to defend. This finding supports the theory that autonomy-supportive practices foster autonomous motivation because they fulfill the needs of autonomy, competence, and relatedness, thus facilitating the internalization and integration of behaviors and values (Ryan & Deci, 2017). Although both associations were mediated by reactance, the mediation was stronger for extrinsic motivation. This result supports previous longitudinal findings by Legate and colleagues (2019) of a mediational pathway through which autonomy-supportive practices predict lower reactance and, consequently, lower engagement in problematic behaviors. A possible explanation for this pathway is that autonomy-supportive parenting is associated with lower reactance in young people because it uses strategies that are less likely to provoke oppositional behaviors, such as setting clear and logical expectations, involving children in the decision-making process, and giving them choices (Ryan & Deci, 2017; Vansteenkiste et al., 2014). Additionally, our findings suggest that the mediational pathway highlighted by Legate and colleagues (2019) might not just apply to bullying perpetration but also to prosocial motivation.

Study III further found that autonomy-supportive parenting was negatively associated with depression, stress, and anxiety, which supports evidence of the protective effect of caring and supportive parenting strategies on young people's mental wellbeing (e.g., Ortega et al., 2023; Rakhshani et al., 2022). However, none of these factors mediated the relationship between autonomy-supportive parenting and extrinsic or autonomous prosocial motivation, in contrast with our hypotheses; only anxiety was found to have a small negative association with autonomous motivation to defend.

Although these results seem counterintuitive, we argue that they are in line with SDT because they confirm the greater stability of autonomous motivation over extrinsic motivation (Ryan & Deci, 2017). In our study, autonomous motivation denotes a significant degree of internalization and integration of the values associated with defending victims, such that participants acknowledge that they would help a victim because they like helping others, or because they think that it is important to fight violence and injustice. When helping is so congruent with participants' values and needs that it is practically intrinsic, it is understandable that it would be less susceptible to factors such as depression and stress. However, the finding that anxiety had a small negative effect on autonomous motivation challenges this interpretation and supports the theory that emotional states play a role in influencing bystanders' willingness to intervene (Fischer et al., 2011; Hortensius & De Gelder, 2018). Whereas previous studies (Jungert et al., 2021; Jungert & Perrin, 2019) found both negative and positive associations between anxiety and autonomous motivation to defend, these associations may depend on the type of bullying being witnessed as well as whether bystanders and victims belong to the same ingroup. For example, Jungert and colleagues (2021) found that traditional bullying was associated with greater anxiety and autonomous motivation to defend, compared to cyberbullying, in a sample of Turkish young adolescent bystanders, while Jungert and Perrin (2019) found that Swedish adolescent bystanders high in trait anxiety reported more autonomous motivation to defend when victims belonged to their ingroup. Given that study III used a different measure of anxiety (i.e., the DASS-21, which measures state anxiety), did not differentiate between the type of bullying being witnessed, and did not provide hypothetical scenarios with different ingroup/outgroup combinations, the relationship between anxiety and autonomous motivation should be interpreted with caution. This finding also suggests that more research is required to understand why different types of bullying appear to have varying levels of association with anxiety.

Concerning that extrinsic motivation was not associated with stress, anxiety, or depression, we offer two possible interpretations. The first interpretation is that, because our sample did not present high or pathologic rates of these factors, we were not able to observe a relation that might exist in populations with poorer mental health. The second interpretation is that, although extrinsic motivation is highly

dependent on contingencies (Deci & Ryan, 2015; Ryan & Deci, 2000), the conceptualization of extrinsic prosocial motivation used in study III (i.e., defending victims to receive rewards from teachers, become more popular, or avoid punishment) could have made it more susceptible to behavioral factors such as reactance than to psychological factors such as anxiety, depression, or stress, which are more related to other forms of external regulation not considered in study III, such as introjected regulation (Ryan & Deci, 2000).

Study III also found that girls reported higher levels of stress, anxiety, and depression, compared to boys. This result supports the evidence of a gender gap in mental health, whereby girls show poorer internalizing mental health than do boys, and the gap appears to increase with age (Campbell et al., 2021; Cavallo et al., 2006; Torsheim et al., 2006). Additionally, girls in our sample reported higher levels of autonomous motivation to defend, compared to boys. This result supports previous findings of gender differences in prosocial motivation (e.g., Vansteenkiste et al., 2009) which however were not confirmed by studies I and II. Therefore, more research is needed to verify the existence of gender differences in motivation.

## Practical implications

The findings of this dissertation make several meaningful contributions to the available theoretical knowledge on bystanders' motivation to defend victims of bullying and can be used to improve anti-bullying prevention and intervention programs. Our results confirm the strong positive association between autonomous motivation and defending behaviors in bystanders to bullying, both offline and online. The motivational profile approach adopted in study I offers a useful framework for understanding the complex interplay between autonomous and controlled prosocial motivation, suggesting that motivational interventions might benefit from being tailored to the needs of specific profiles. For example, while some students might benefit from autonomy support from teachers, others might benefit from more structure, which can help counteract pro-bullying and passive bystander behavior by encouraging defender behavior. Moreover, our findings on the association between autonomy-supportive parenting strategies, positive student-teacher relationships, and autonomous prosocial motivation provide strong support for the adoption of whole-school approaches in bullying prevention, as well as expanding the role that teachers and parents have in them, especially for programs aimed at older students. Finally, initiatives that provide education and training in autonomy-supportive practices for teachers and parents should also be considered and implemented, when appropriate, due to the documented and significant positive effects that these practices have on young people's development, which are not limited to bullying prevention.

## Strengths and limitations

The three studies included in this dissertation have several strengths, such as the use of validated measures, separate and relatively large samples, and the inclusion of cross-national comparisons, which support the external and construct validity of our findings. Furthermore, study I was the first to carry out a person-centered analysis of motivational constructs drawn from SDT and their relation to bystanders' motivation to defend victims of bullying. Study II added new knowledge of motivation and its association with participant roles in cyberbullying, confirming its overlap with traditional bullying for the first time. Finally, study III was the first to investigate the association between parenting practices conceptualized by SDT and bystanders' motivation to defend victims of bullying.

However, the studies also have some limitations. Because all three studies adopted a cross-sectional design, it is not possible to infer temporal or causal relationships between the variables, nor can the presence of bidirectional effects be excluded. Furthermore, all three studies used self-report measures, which are sensitive to common method variance and to biases such as recall, social desirability, and perception. The risk of common method variance could have been reduced by adding parent or teacher reports, as well as peer nominations to our designs. However, parent and teacher reports would have required involving adult participants, and this would likely have lowered our final sample size significantly. Peer reports would have been an important addition to our design, but their use was ruled out for several reasons: first, peer reports can produce biased results because respondents tend to focus excessively on public and overt bystander behaviors (e.g., defenders who confront bullies directly, assistants who join in the physical aggression of a student), while neglecting more covert behaviors (e.g., defenders who comfort victims or report bullying to teachers, assistants who help bullies circulate rumors or negative posts about a student). Second, peer reports are susceptible to stereotypes and recall bias. Third, the use of peer reports in Sweden can generate ethical complications and is generally not viewed in a favorable manner.

We measured bystander roles (Studies I and II) by asking participants to refer to the current school year; recall bias could have been less likely if we had asked them to refer to a shorter window of time. We did not provide definitions of bullying and cyberbullying in our studies; thus, the likelihood of perception bias might be higher. Although social desirability cannot be excluded, the fact that we used anonymous questionnaires in all three studies might have lowered the risk for its occurrence. Finally, we measured participants' self-reported motivation to defend victims and not actual defending behaviors in our studies, so our findings should be interpreted with some caution. However, because previous research (Hardy et al., 2015) has found that autonomous motivation to engage in prosocial behaviors is associated

with actual prosocial behaviors, we contend that our findings are relevant. Finally, I should mention that our decision to not include additional variables that could have been of interest in our studies was influenced by the fact that we had to match our study designs with the needs of the schools (which were not willing to consent to multiple waves of data collection and requested that data collection events be as brief as possible) and the need to keep our surveys relatively short to accommodate students' different levels of development and attention.

## Ethical considerations

Because bullying can be considered a sensitive topic that might provoke feelings of discomfort among participants, and because all three studies involved minors, we took several precautions. Ethical approval was granted for each study from the competent Italian or Swedish authorities (study I, prot. no. 118643; study II, dnr. 2019-04394; study III, prot. no. 291035). Participants were informed about the studies and given the opportunity to ask questions. They were also assured that participation in the studies was voluntary and that they could withdraw their consent at any time without consequences. Participants were told that anonymity and confidentiality would be guaranteed and that no outside party would be allowed to access their answers. Participants were also informed that the aggregate data resulting from the studies would be used in scientific publications and presented at scientific conferences. Written consent was obtained from schools, teachers, parents/guardians, and the students themselves before data collection. Researchers, or research assistants, were present in the schools during data collection to provide help when necessary. Students who had not received consent from their parents or did not wish to participate themselves were assigned a different task from their teachers. Contact information for associations or services that could provide help or support in case participants experienced discomfort or negative feelings related to the research topic was provided in the information material that was distributed to participants at the beginning of the studies.

A more general ethical consideration concerns defending behaviors. As pointed out by Gini and colleagues (2021), although defending behaviors are widely encouraged because of their role in stopping or reducing bullying behaviors (Hawkins et al., 2001; Salmivalli et al., 2011) and in moderating the negative effects of victimization (Sainio et al., 2011), there is evidence that associate defending behaviors with psychosocial difficulties in both boys and girls, particularly in the event of a high level of bullying exposure (Lambe et al. 2017). Therefore, Gini and colleagues (2021) recommend exercising caution in encouraging defending behaviors until there is a better understanding of the negative outcomes associated with such behaviors and what contextual conditions reduce or remove the risk of harm for

defenders. I agree with Gini and colleagues, and argue that their considerations further support the importance of improving our knowledge of the individual and situational factors that influence bystander behaviors and their related outcomes. This will help in developing better research-based recommendations and prevention programs to support the wellbeing of all students.

## Conclusions and directions for future research

Overall, this dissertation verifies the strong positive association between autonomous prosocial motivation and defending behaviors in bystanders to bullying. It further extends this association to cyberbullying episodes as well. Moreover, the dissertation highlights the association between controlled motivation and passive and pro-bully bystander behaviors, thus confirming and expanding our knowledge of the negative outcomes that are related to this type of motivation for both traditional and cyberbullying. The dissertation also determined that autonomy-supportive parenting practices are associated with greater autonomous motivation to defend and lower controlled motivation, reactance, and mental health complaints among youths. Furthermore, the dissertation identified a link between autonomous prosocial motivation and positive student–teacher relationships, as well as between controlled prosocial motivation and negative student–teacher relationships. Therefore, our findings support SDT’s postulation that autonomy-supportive contexts and practices are best equipped to foster integrated self-regulation, promote wellbeing, and improve performance (Deci & Ryan, 2015; Ryan & Deci, 2000). Finally, the dissertation contributes tentative findings of age, gender, and cultural differences in bystanders’ prosocial motivation, with older age being related to lower autonomous prosocial motivation; girls displaying higher autonomous prosocial motivation and experiencing poorer mental health than boys; and Swedish students possessing greater controlled prosocial motivation than Italian students.

However, much remains to be explained. It would be important to test whether self-proclaimed motivation to defend predicts actual defending behaviors in bullying and cyberbullying episodes, using methods such as direct observations, peer nominations, or experimental vignettes. Moreover, it might be useful to carry out mixed-methods investigations to understand whether factors such as ingroup/outgroup membership, degree of friendship, experiences of previous bullying victimization/perpetration, and basic need fulfillment/neglect influence students’ autonomous or controlled motivation to defend victims of bullying and cyberbullying. It might also be meaningful to explore whether individuals possess general controlled or autonomous prosocial orientations, and whether factors such as individual traits, temperaments, or specific formative experiences influence their development. Likewise, it would be important to investigate whether motivation to

defend changes over time, and whether factors such as bullying prevention programs influence this process. Finally, there is a need for more research on the effect of relationships with meaningful adults, such as parents and teachers, on students' development of prosocial motivation in bullying contexts. It would be particularly important to investigate the direction of these effects and whether factors such as individual temperaments and behavioral characteristics can influence them. Likewise, it might be interesting to explore whether factors such as school resources, grade level, and class size influence the effect of student-teacher relationships on motivation. Overall, it is of paramount importance that we continue to deepen knowledge by integrating young people's own accounts and perceptions of parenting and teaching practices and their effect on behavior and motivation, which can be accomplished through the use of qualitative methodologies.





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