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What Would I Do and Why?: Adolescents' Moral Reasoning, Social Perspective-Taking
Competence, and Intended Action in Response to Witnessed Bullying

By

Emily Jean Campbell

A dissertation submitted in partial satisfaction of the

requirements for the degree of

Doctor of Philosophy

in

Education

in the

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of the

University of California, Berkeley

Committee in charge:

Professor Larry Nucci, Co-Chair
Professor Susan D. Holloway, Co-Chair
Professor Valerie B. Shapiro

Fall 2019

What Would I Do and Why?: Adolescents' Moral Reasoning, Social Perspective-Taking
Competence, and Intended Action in Response to Witnessed Bullying

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by

Emily Jean Campbell

Abstract

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Doctor of Philosophy in Education

University of California, Berkeley

Professor Larry Nucci, Co-Chair

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Why do people's moral judgments—what they decide is right or wrong—often fail to predict their actions? One prevalent example is the phenomenon of bullying: though the vast majority of young people judge bullying as wrong, a significant percentage of adolescents report having perpetrated bullying behavior, and even more have acted as bystanders, i.e., have witnessed bullying without intervening to stop it. Social domain theory (SDT) provides a framework for analyzing the reasoning behind such judgments, based on evidence that people distinguish between different domains of social knowledge—moral, conventional, personal, and prudential—when reasoning about social situations. More research is needed to investigate the relationships between domain-based socio-moral reasoning, social-emotional competencies such as perspective-taking, and intended action choices, especially among youth.

In this dissertation study, a secondary analysis using data from the larger National Professional Development and Evaluation Project, 1402 adolescent students (grades 9 and 10) drawn from 61 different high schools in 8 regions across the United States were asked to respond to a hypothetical bullying situation. In written survey-based responses, participating students rated potential reasons for a bystander to intervene in the situation and choices for how they could respond if they were to witness the situation themselves. Next, students were asked to select the single choice of action that they would be most likely to take, and then to explain in their own words why they would make that choice. The students also completed a measure of social perspective-taking competence. Using an SDT framework to examine the data, this study focused on three major research questions.

For the first research question, multilevel regression modeling, with students nested in schools, was used to relate students' reasoning and personal/contextual factors (gender, age, and perceived bullying prevalence) to their action choice ratings, and logistic regression was used to predict their selection of a "best" action choice. Results indicated that endorsement of moral reasoning was consistently positively related to the choice to

directly intervene to stop the bullying and negatively related to the choice to bystand, while endorsement of conventional reasoning was positively related to the choice to intervene indirectly (i.e., tell a teacher). Both males and students who perceived a greater prevalence of bullying at their school were significantly less likely to endorse/select either kind of intervention and significantly more likely to endorse/select bystanding and perpetration. The second research question involved coding students' free-response explanations for SDT domains cited and relating these to their action choices. Associations between moral/conventional reasoning and action choices mirrored those found in the first research question; additionally, students who chose bystanding often cited personal and prudential considerations, and some students mentioned relational and emotional concerns as well. Finally, the third research question used mediation analyses to test for indirect effects of moral reasoning on action choices through social perspective-taking competence, which was positively associated with moral reasoning and with the positive action choices, while negatively associated with the negative action choices. Significant indirect effects were found for three of the four action choices, supporting the idea that socio-moral reasoning and social-emotional competence work together to produce moral functioning.

Findings are discussed in terms of theoretical and methodological implications for research as well as potential implications for practice, such as for anti-bullying efforts in educational settings.

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Table of Contents

List of Tables and Figures.....	iv
Chapter 1: Introduction	1
1.1. Problem and Purpose.....	1
1.2 Moral and Social-Emotional Development in Education.....	3
1.3 Character as a Relational Developmental System.....	3
1.3.1 Social-emotional competencies.....	4
1.3.2 Socio-moral reasoning: Social Domain Theory (SDT).....	4
1.3.3 Other aspects of social judgments not separately addressed in SDT.....	6
1.3.4 Critical moral social engagement.....	7
1.3.5 Relationship with context.....	8
1.4 Response to Bullying as an Opportunity for Moral Functioning.....	8
1.4.1 Socio-moral reasoning and response to bullying.....	9
1.4.2 Social-emotional competence and response to bullying.....	10
1.4.3 Gender and response to bullying.....	10
1.4.4 Age and response to bullying.....	10
1.4.5 Perceived prevalence of bullying and response to bullying.....	10
1.5 Research Questions.....	11
Chapter 2: Methods	13
2.1 Data Source.....	13
2.2 Recruitment and Data Collection.....	13
2.3 The Current Study: Sample/Participants.....	14
2.4 The Current Study: Measures.....	16
2.4.1 Adapted Relationship Questionnaire.....	16
2.4.2 Choices in Context Measure.....	17
2.5 Analytic Strategies and Hypotheses.....	19
2.5.1 Research question 1.....	19
2.5.2 Research question 2.....	21
2.5.3 Research question 3.....	24
Chapter 3: Results	26
3.1 Preliminary and Descriptive Analyses.....	26
3.2 Prediction of Action Choices by Socio-moral Reasoning and Personal/Contextual Factors.....	29
3.2.1 Linear regression analyses.....	29
3.2.2 Logistic regression analyses.....	40
3.3 Analyses of Free-Response Explanations of Action Choices Using a Social Domain Theory Lens.....	42
3.3.1 Coding for considerations.....	42
3.3.2 Frequencies of considerations cited.....	43

3.3.3 Examples of each code and combination	44
3.3.4 Considerations cited by action choice selected	47
3.3.5 Relations of considerations cited to means/categories of major study variables	48
3.4 Relation of Social Perspective-Taking Competence to Socio-moral Reasoning and Action Choices	52
3.4.1 Prediction of SPT-IM score	52
3.4.2 Prediction of each action choice rating, mediated by SPT-IM score	53
Chapter 4: Conclusion	57
4.1 Discussion of Results	57
4.1.1 RQ1	57
4.1.2 RQ2	58
4.1.3 RQ3	61
4.2 Limitations and Future Directions	61
4.3 Implications for Research and Practice	65
4.3.1 Theoretical and methodological implications	65
4.3.2 Implications for educational settings and anti-bullying efforts	65
References	67
Appendices	72
Appendix A: Choices in Context Measure (CICM), Situation A	72
Appendix B: Adapted Relationship Questionnaire (RelQ-A)	74
Appendix C: Social Domain Theory Coding Guidelines	77

List of Tables and Figures

Tables

Table 1. Student Sociodemographic Information	14
Table 2. Distribution of Responses on CICM Items of Interest.....	26
Table 3. Correlations Among Major Variables.....	28
Table 4. Multilevel Linear Regression Model 1: Prediction of Action Choice Ratings by Socio-moral Reasoning Endorsement	30
Table 5. Multilevel Linear Regression Model 2: Prediction of Action Choice Ratings by Socio-moral Reasoning Endorsement with Control Variables	31
Table 6. Multilevel Linear Regression Model 3: Prediction of Action Choice Ratings by Personal/Contextual Factors	33
Table 7. Multilevel Linear Regression Model 4: Prediction of Action Choice Ratings by Personal/Contextual Factors with Control Variables.....	34
Table 8. Multilevel Linear Regression Model 5: Prediction of Action Choice Ratings by Socio-moral Reasoning Endorsement, Personal/Contextual Factors, and Significant Control Variables	36
Table 9. Multilevel Linear Regression Model 6: Addition of Interaction Terms (Perpetration Outcome Only)	38
Table 10. Logistic Regression: Prediction of Selection of Each Action Choice as “Best” Choice.....	40
Table 11. Counts and Percentages of Responses Citing Each Consideration Alone and in Each Combination	43
Table 12. Number and Percentage of Participants Who Cited Each Consideration, by Action Choice Selected.....	47
Table 13. <i>t</i> -tests for Differences in Means of Study Variables by Whether Each Consideration Was Cited in Free-Response Explanation	48
Table 14. Chi-Square Tests of Independence Between Categorical Study Variables and Whether Each Consideration Was Cited in Free-Response Explanation	50
Table 15. Multilevel Linear Regression: Prediction of SPT-IM Score by Socio-moral Reasoning, Personal/Contextual Factors, and Control Variables	52
Table 16. Mediation Effect of Social Perspective-Taking Competence (SPT-IM) on the Relationships between Moral Reasoning and Each Action Choice Rating.....	53

Figures

Figure 1. Hypothesis Diagrams for RQ1a, Relations Between Socio-moral Reasoning and Action Choices.....	19
Figure 2. Hypothesis Diagrams for RQ1b, Relations Between Personal/ Contextual Factors and Action Choices	20
Figure 3. Conceptual Diagrams of Potential Moderation.....	21
Figure 4. Additional Hypothesis Diagrams for RQ2c, Relations Between Personal/Prudential Reasoning and Action Choices	23
Figure 5. Conceptual Diagram of Potential Mediation	25
Figure 6. Moderation Effect of Perceived Bullying Prevalence on Relationship between Conventional Reasoning and Rating of Perpetration	40

Chapter 1: Introduction

1.1 Problem and Purpose

For everyone involved in the world of education--or, really, for anyone who cares about the future of human society--questions of socio-moral development loom large. We all have a stake in how people treat each other, but especially for educators, parents, or any other adults involved in the development of youth, it is critical to try to understand how young people think about what is right versus wrong and how these thoughts relate to how they choose to act.

One central question is why, even when people are able to make judgments about right and wrong, their judgments often fail to predict their actions. This phenomenon, often referred to as the judgment-action gap, is a perennial issue in the field of moral development (Blasi, 1980). One prevalent example in educational contexts is bullying: though the vast majority of young people judge bullying as “wrong” (Gini, Pozzoli, Borghi, & Franzoni, 2008; Thornberg, 2014), meta-analyses show that about 35% of adolescents report having perpetrated bullying behavior (Modecki, Minchin, Harbaugh, Guerra, & Runions, 2014), and even more have acted as bystanders, i.e., have witnessed bullying without intervening to stop it (Trach, Hymel, Waterhouse, & Neale, 2010).

Although judgments of right vs. wrong, taken simply at face value, may not always correspond well to social decisions, examining the reasoning behind a given judgment may shed some light on the issue. Social-cognitive domain theory (SDT) provides a framework for analyzing such reasoning, based on evidence that people distinguish between different domains of social knowledge—namely, morality (i.e., principles concerning welfare/harm, justice/fairness, and rights), social convention (i.e., rules and expectations that help society run smoothly), matters of personal choice (viewed as outside of the legitimate realm of moral or conventional regulation), and matters of personal safety/practicality (i.e., prudence)—when reasoning about real and hypothetical social situations (Nucci, 2001; Smetana, 1999; Turiel, 1983). For instance, research has shown that children and adults consistently treat moral principles as more universal and less mutable as compared with social-conventional rules, which are seen as relatively arbitrary and changeable, contingent on factors such as context, consensus, and/or the dictates of authority; similarly, moral transgressions (i.e., transgressions of moral principles) are reliably considered to be more serious than conventional transgressions (i.e., transgressions of social-conventional rules; Smetana et al. , 2012).

These findings do not imply, however, that morality is the only factor in deciding whether and how to act. SDT posits that, in social decision-making, considerations from all the domains are coordinated and weighed in different ways depending on personal and contextual factors (Turiel, 2015). Theoretically, this variance can lead to different action decisions even when moral judgments, per se, are similar. For instance, in a potentially risky situation, one person may choose to prioritize personal safety (prudential domain) over what they would judge as “the right thing to do” (moral domain), whereas another person—or the same person, in a different context—might prioritize the moral aspect of the same situation. Others might weigh the conventional implications of potential behavior

(conventional domain) more heavily or give a larger role to their own personal preferences (personal domain).

However, most studies in SDT are principally concerned not with individual differences, but with “universal” processes of socio-moral reasoning, i.e., the trends of how most people tend to think in certain social situations. More research is needed to investigate how different personal and contextual factors (i.e., factors beyond the details of the immediate situation) may influence domain-based socio-moral reasoning, as well as on the relationship between domain-based socio-moral reasoning and action choices in morally-relevant situations, especially among youth. Moreover, studies in SDT rarely include any information about participants’ social-emotional competencies, such as how able and inclined they are to perceive and understand their own and others’ feelings, manage their own emotions and behaviors in productive ways, and navigate social relationships. Because, according to SDT, knowledge in each of the domains develops through social experience and is informed by emotions (e.g., emotions can serve to highlight an event’s relevance to oneself and one’s important goals; Turiel & Killen, 2010), it seems likely that different levels of social-emotional competencies would influence how young people think about right and wrong in social situations and how they intend to behave when they encounter such situations. Therefore, further research is also needed on the connections between social-emotional competencies, socio-moral reasoning, and behavior (or at least behavioral intentions). These relationships may be especially important to investigate among adolescents, who are in the midst of significant developmental shifts in cognitive, social-emotional, and behavioral competencies that will set the stage for their adult identities and well-being (Blakemore & Choudhury, 2006; Steinberg, 2005; Yeager, 2017).

Thus, the main aim of this dissertation was to explore how adolescents reason about the social and moral aspects of a morally-relevant situation, how this reasoning may relate to what they might choose to do in response to the situation, and how personal/contextual factors and social-emotional competence may play a role in their reasoning and the actions they intend to take. Specifically, I set out to examine these questions with regards to bullying, which is both a common situation for adolescents to encounter and one that can result in significant psychosocial harm (Nansel et al., 2001).

In addition to this primary theoretical aim, there was also a secondary methodological aim, which was to investigate written survey-based measures as a potential alternative method to semi-structured interviews for assessing socio-moral reasoning and related variables. Though survey-based measures are more limited in terms of depth and clarification compared to the semi-structured interviews that are most often used in SDT research, they are more accessible and scalable; therefore, it may be useful to determine to what extent differences in domain-based socio-moral reasoning, as well as theorized relations between such reasoning and other variables and outcomes, can be detected through such measures.

In the following sections, I will first present a brief overview of moral and social-emotional development in education. Then, I will describe Nucci’s (2019) model of character as a relational developmental system, which integrates the individual’s socio-moral reasoning, social-emotional competencies, and context, and which serves as a theoretical framework for this dissertation study. Next, I will review research on bullying among youth, specifically as it results to components of interest from the character model

that will be addressed in this study. Finally, I will list the major research questions guiding the study.

1.2 Moral and Social-Emotional Development in Education

Historically, particularly in the United States, what is now often referred to as moral, ethical, or character development was one of the most important goals of education, if not the single most important goal (McClellan, 1999). These days, although it is a controversial topic, most people still agree that helping students develop into good people is a crucial part of what education should do (Nucci, 2001). The controversy arises, in part, with the question of what exactly it means to be a “good person.” Is a good person simply someone who follows externally-imposed rules, someone who is able to get along with others and function in society? Or is there more to it than that (Nucci, 2009)? And, most controversially, who gets to decide what counts as right or good? Some do not feel that it is the place of schools to address morality—though, of course, schools and those who work in them do promote social and moral values, whether this is explicitly recognized or not (e.g., Hunter & Olson, 2018).

Partially due to such controversies with regards to moral development and education, the trend in recent years has been for schools to focus instead on the development of social and emotional competence. The concept of social-emotional learning (SEL)—defined as the building of social and emotional knowledge, skills, and attitudes, such as those needed to recognize and manage one’s own emotions, understand and show concern for others, develop and maintain positive relationships, and make responsible decisions—has expanded beyond its roots in prevention science (i.e., efforts to prevent specific emotional and behavioral problems) to become a widely used type of school-based intervention intended to improve school and life outcomes for all young people (Schonert-Reichl & O’Brien, 2012). Meta-analyses of universal SEL programs have indeed shown benefits for youth overall in terms of psychological, social, behavioral, and academic outcomes (Durlak et al, 2011; Taylor et al., 2017).

Though SEL and moral development are often treated as completely separate fields of study and intervention, in actuality they have many conceptual and practical areas of overlap (Elias, Parker, Kash, Weissberg, & O’Brien, 2008). SEL programs, and studies of their effectiveness, rarely focus on moral reasoning explicitly, but often address morally-relevant outcomes such as aggression and prosocial behavior (e.g., Conduct Problems Prevention Research Group, 2010). On the other hand, as mentioned, socio-moral reasoning development in SDT is considered to be dependent on social and emotional experiences (Turiel, 2015), but studies of domain-based socio-moral reasoning rarely integrate explicit assessment of social-emotional competencies. It should be noted that studies based on other theories of moral development seem to be more likely to consider relationships between certain social-emotional competencies (e.g., empathy) and moral reasoning, as they define it (e.g., with moral development defined as reflecting a progression from egocentric to other-oriented motives; see Eisenberg, 2009).

1.3 Character as a Relational Developmental System

In contrast to the above-mentioned separation in most research of domain-based socio-moral reasoning from social-emotional competence, Nucci (2019) has proposed a model of character as a relational developmental system that combines multiple dimensions of social, emotional, and moral functioning. Building off of and transcending the definition of character as “the set of psychological characteristics that motivate and enable the individual to function as a competent moral agent, that is, to do ‘good’ in the world” (Berkowitz, 2011, p. 153), this model conceptualizes character not as a static set of characteristics, but as a dynamic system constantly interacting within itself, with other aspects of the larger self-system, and with context to produce moral functioning. As this model provides an overarching theoretical framework for this dissertation, in the following pages I will describe each component of the model, how they fit together, and what role each plays in the study.

Social-emotional competencies. In this model, social-emotional competencies are seen as part of “moral wellness,” basic social-cognitive and social-emotional skills—both self-directed and other-directed—that everyone needs to possess in order to live a successful and ethical life in society (Nucci, 2019). Examples of self-directed social-emotional competencies include awareness and regulation of one’s own emotions, while other-directed social-emotional competencies include recognition of others’ emotions, affective empathy (the propensity to feel for others), and cognitive empathy or perspective-taking (the ability to understand/predict how others may be thinking and feeling).

Though such social-emotional competencies are necessary for recognizing the moral features of situations and for translating moral convictions into appropriate, effective action, they are not sufficient for moral functioning on their own. Without a sense of morality to anchor and guide social-emotional skills, such skills could be used to manipulate people or otherwise cause harm. As stated by Elias, Nayman, and Duffell (2018), the idea is that “social and emotional proficiencies are an engine for accomplishment in many realms of life, and that a constructive guidance mechanism is necessary to steer them in positive directions” (p. 324). For example, if a young person perceived harm due to a certain social issue (e.g., homelessness or child hunger) and wanted to raise money to help address it, but did not possess the social-emotional competence necessary to create a structured campaign and appeal to potential donors, the fundraiser would not go far. On the other hand, if that young person were very competent at understanding what would move others and convince them to donate but did not give any thought to the moral consequences of their actions, they might run a successful fundraiser and pocket the money themselves. Thus, both socio-moral reasoning and social-emotional competencies are necessary component parts of a well-functioning character system. In this study, I focus on social perspective-taking competence—the ability and propensity to consider others’ perspectives along with one’s own—as an other-regarding social-emotional skill that may play an important role in how students think about bullying and how to respond to it.

Socio-moral reasoning: Social Domain Theory (SDT). Nucci’s (2019) model of character also incorporates the essential role of socio-moral reasoning, based on research in social domain theory (SDT). In the model, socio-moral reasoning, also referred to as moral cognition, is considered a basic component of the character system, possessed by all typically-developing people. Evidence from SDT-based studies indicates that people from cultures around the world, including adults and children as young as 2.5 years old, are able

to distinguish between different domains of social knowledge, particularly between the moral domain and others (Smetana, Jambon, Conry-Murray, & Sturge-Apple, 2012). Below, I will describe the main features of SDT and how each is applied in this dissertation.

Domain distinctions. In research using SDT, either three or four domains of social knowledge are commonly described. The moral domain involves considerations of harm/welfare, fairness/justice, and rights, which are perceived as obligatory and universal due to their inherent, non-arbitrary effects on people. The conventional domain, in contrast, concerns issues of rules, expectations, and traditions that serve to help groups/societies function smoothly, but that are fundamentally arbitrary and can be changed by consensus, commands of authority, etc. In addition to these, the personal domain refers to areas of identity and behavior that are considered to be in the realm of personal choice, autonomy, and privacy, outside the bounds of legitimate regulation by moral principles or conventional rules. Finally, the prudential domain covers issues of personal safety, welfare, and practicality; in this sense, it is less socially-oriented than the other three domains. Some scholars combine the personal and prudential domains into a superordinate domain called the psychological domain, referring to the focus of both the personal and prudential domains on the individual self (e.g., Smetana, Rote, et al., 2012), but, for the purposes of this research project, they are conceptualized as separate. In this study, I categorize and examine students' reasoning using a domain-based frame and look for associations between domain distinctions and action choices.

Domain coordination. Domain-based socio-moral reasoning—the ability to distinguish and balance considerations from different domains when making social judgments—is necessary for moral functioning, but SDT itself does not make predictions about individual differences in judgments or how judgments relate to subsequent actions. SDT simply asserts that action decisions are made by coordinating considerations from different domains, and that this coordination can be influenced by informational assumptions about the nature of the world or reality as well as personal and contextual factors, including sociocultural influences (Turiel, 2015). Among SDT researchers, the role of this type of coordination is recognized both as critical and as needing further research. Although this study does not explicitly investigate coordination between different SDT domains, it does incorporate certain potentially-relevant personal and contextual factors and how they may relate to reasoning and decision outcomes.

Development of domain-based socio-moral reasoning. SDT holds that moral reasoning is developed through everyday social interactions, as children experience the consequences of others' behavior and, with increasing sophistication as they age, observe the consequences of their own behavior on others. This contention has been supported by findings from studies with preschool children, in which more advanced understanding of morality has been related to higher levels of both extraversion (i.e., greater tendency to engage in interpersonal interactions, both positive and aggressive; Smetana, Rote, et al., 2012) and theory of mind (i.e., more advanced ability to understand that others' minds and perspectives are different than one's own; Smetana, Jambon, et al., 2012).

Of relevance to this study, research in the SDT framework has also found a distinctive pattern in how socio-moral reasoning develops through adolescence. Coordination propensity tends to form a J-curve, in that younger children often focus solely on one domain (often the moral domain) in morally-relevant situations, subordinating considerations relevant to other domains, and older adolescents, by around age 16, are

usually better able to coordinate considerations from multiple domains; early- and mid-adolescents (around ages 10-14), however, with advancing social-cognitive abilities such as perspective-taking, are starting to try to coordinate between domains, but in the process may subvert moral concerns to personal choice and/or other factors (Nucci, Turiel, & Roded, 2017). Because of the central role of development in SDT and potential developmental shifts in domain-based reasoning in adolescence, age, as a proxy for development, is included as a potentially influential factor in this study.

Other aspects of social judgments not separately addressed in SDT. Though the SDT domains are intended to cover most concerns that arise with regards to making judgments and decisions in social situations, they are not necessarily exhaustive. In other words, though SDT theorists contend that individuals arrive at most social decisions by coordinating moral, social-conventional, personal, and prudential considerations, people also may include other types of considerations beyond these four. Two examples of categories of social reasoning that are not explicitly addressed in the definitions of SDT domains (and thus are also not explicitly addressed in Nucci's model, which is based on SDT), but which frequently come up when people discuss their reasoning about social situations are relational considerations (i.e., how one's obligations, rights, preferences, etc. change when interacting with a close other, such as a family member or good friend, vs. a stranger) and emotional considerations (i.e., how one's own emotional state affects one's judgments and/or behavior). Both of these could, in some circumstances, be included in or subsumed by SDT domains; but in other cases, as I will argue below, it seems plausible that they could stand alone. Especially in a situation such as responding to bullying at school, which could involve complex calculations of personal and social risks and rewards (Pozzoli & Gini, 2010), the roles of social/relational and emotional considerations in decision-making seem worthy of attention.

Emotional considerations. In SDT, the role of emotions in social judgments is not denied; one's own emotions are typically viewed as sources of information that can be taken into consideration along with all other elements of reasoning. For instance, one's emotion about a situation could serve as a source of information about personal preference, and thus could be categorized in the personal domain; an emotion could also serve as an alert to possible risk or harm to oneself, thus falling under the prudential domain. However, it also seems possible that emotion, especially strong emotion, could be experienced and referenced as a justification in itself, without necessarily implicating any of the SDT domains or even any reasoning at all. If so, this could potentially align with Haidt's (2001) social intuitionist theory of moral judgment (which claims that most moral judgments are based on automatic intuitive/emotional reactions, with reasoning being post-hoc justification) or Greene's (2007) dual-process theory of moral judgment (which argues that, although certain impersonal moral judgments may be arrived at through a more deliberative, "cool" reasoning process, other more personal or immediate moral judgments are made through a quick or even automatic, emotionally-driven, "hot" process).

As an alternative to the aforementioned models, which tend to frame reasoning and emotions as nearly mutually exclusive (e.g., a decision can either be either rational or emotional, cool or hot, but not both), Arsenio and Lemerise (2004) have argued that, while reasoning-based theories like SDT may not give sufficient attention to the role of emotions, there is no need for conflict between SDT and greater consideration of emotional processes. These scholars have posited an integrated model in which domain-based socio-

moral reasoning serves to develop and describe underlying mental structures, while in-the-moment decisions and behavior (e.g., in peer interactions) are guided by a version of social information processing (SIP) that they revised to incorporate the role of emotions at every step that occurs when an individual makes a social decision (Lemerise & Arsenio, 2000; Arsenio & Lemerise, 2004). Specifically, Arsenio and Lemerise's model includes emotional processes in all the components of SIP: how people encode internal and external cues in a social environment, interpret and attribute the cues they perceive, clarify their own goals in the situation, access or construct response options, decide on a response, and enact the intended behavior (Arsenio & Lemerise, 2004). According to this model, many apparent discrepancies between moral judgments and behavior, as well as differences between individuals, could be explained with reference to these components of SIP, including the emotional processes inherent to each.

To clarify these possibilities, further research is needed to investigate to what extent emotions are mentioned in conjunction with SDT domains versus separate from or even opposed to them. For instance, do people tend to mention strong emotions (e.g., anger, sadness, fear) as a reaction to a perceived moral harm and/or as a source of motivation to rectify the harm? Or do they seem to experience emotions as a force acting outside their reasoning, possibly even working against what they have reasoned is the best course of action to take (e.g., they have perceived a harm and think they should address it, but strong emotions compel them to lash out or run away instead)? To this end, in this study, participants' references to their own emotion(s) as justifications for behavior are considered separately from the categorization of reasoning into SDT domains.

Relational considerations. With regards to relational concerns, what are the implications for the SDT framework of the very common impulse to treat people whom we are close to (family, friends, etc.) differently than we treat strangers? Several studies on the topic of bystanding among youth have found that young people say they are less likely to intervene if the perpetrators and/or targets are not their friends (e.g., Ferrans, Selman, & Feigenberg, 2012; Forsberg, Thornberg, & Samuelsson, 2013; Noonan & Charles, 2009). Some work in the SDT paradigm has recognized this phenomenon, treating relational partiality either as compatible with the moral domain, as it exemplifies the sense of care that is a necessary foundation for concerns about welfare and fairness among all people (Killen & Turiel, 2010), or as a prioritization of interpersonal goals above moral ones in certain contexts (Smetana, Killen, & Turiel, 1991). Still, how can we reconcile preferential treatment by relationship with the SDT conception of morality, which is supposed to be universal and obligatory, not contingent on context? When people judge transgressions differently depending on the relationship between the parties involved (e.g., Haidt & Baron, 1996), can it be completely explained by coordinations between morality, convention, personal choice, and prudence? Or could this imply a potential "relational domain" operating alongside, but differentiated from, the other domains? To provide insight into these questions, this study analyses mentions of relational justifications both independent from and in conjunction with SDT domain justifications.

Critical moral social engagement. Despite its universality and importance, socio-moral reasoning is of limited usefulness if we are not able, or not inclined, to deeply engage with others and do our best to understand their perspectives, such as their beliefs about how the world works or their views of the consequences that our actions may have for them; without such understanding, even well-intentioned decisions may do more harm

than good. Additionally, as valuable as social-emotional competencies are, they often focus only on immediate interpersonal situations and do not address broader moral principles or structural concerns, such as historical and societal-level power relations. How do we move beyond ourselves and our own limited points of view, beyond adapting to the world as it is, and towards transforming the world into a better, more moral one?

The concept of *moral critical social engagement* includes the inclination and skills to understand issues at the systems level, responsively engage with others, and work towards collaborative progress (Ilten-Gee & Nucci, 2018). In other words, this type of engagement promotes understanding social behaviors as part of a multi-level web of causes and effects (intrapersonal, interpersonal, societal, and global). It encourages us to recognize and question systems of power that undergird all social interactions, and empowers us to imagine a situation different than what currently exists. In Nucci's (2018) model, critical moral social engagement is the "extra" component, not included in most character frameworks, which combines and builds on the other components in order to transcend the limits of one's individual life, circumstances, and perspective and work towards a more fully-functioning morality. Though direct examination of this type of engagement is beyond the scope of this dissertation project, it should be kept in mind as a vital component of the character model and, ideally, an underlying goal of all educational efforts (including moral education, SEL, and anti-bullying).

Relationship with context. A central feature of Nucci's (2019) model of character is that it conceptualizes character not as a collection of static traits, but as a system that is continually interacting with context in a bidirectional way. "Context" is conceptualized here as a broad, multi-level construct, including personal aspects (e.g., personal experiences, beliefs, demographic factors, etc.), social aspects (e.g., family and peer relationships, group memberships, etc.), and societal aspects (e.g., social structures in which the individual is embedded, cultural factors, circumstances of history, etc.). The model's view of character takes into account the interpenetration of individual and context, both the role of personal-social-societal context in shaping individual expressions of character (judgments, intentions, and behaviors) and the role of the moral functioning of the individual in shaping their personal-social-societal context. In this sense, Nucci's model is well-suited to include potential contextual influences on socio-moral reasoning, social-emotional skills, moral functioning, and the relationships among them. Though it would be difficult, if not impossible, to include all potential contextual factors in any one study, a given study can provide a limited "snapshot" of how certain factors may be associated with differences in reasoning and behavioral decisions (Nucci, 2019). In that vein, as detailed below, this study includes gender (an often-salient element of personal-social context) and perceived prevalence of bullying (one specific aspect of the school social context) as potentially relevant contextual factors.

1.4 Response to Bullying as an Opportunity for Moral Functioning

As mentioned, peer bullying is one prevalent example of apparent asynchrony between moral judgments and actions. Bullying is defined as interpersonal behavior that is intended to cause harm to the target and involves an imbalance of power between the perpetrator(s) and victim(s) (such as through number, social status, physical strength, etc.); though a recurring pattern of behavior is also often included as a defining feature of

bullying, there is some disagreement on this point, and not all research on bullying explicitly includes repetition as a necessary factor (Menesini & Salmivalli, 2017). Bullying can take many different forms, both direct (e.g., physical or verbal aggression) and indirect (e.g., social exclusion, spreading rumors, etc.), and can aim to cause a variety of harms (such as physical/material harm, psychological/emotional harm, and/or social/reputational harm). Though the vast majority of young people judge such behavior as wrong when asked (Gini et al., 2008; Thornberg, 2014), meta-analyses show that about 35% of adolescents report having perpetrated some form of “traditional” (as opposed to cyber) bullying behavior towards peers (Modecki et al., 2014). Though findings vary, studies indicate that even larger percentages of children and, especially, adolescents have acted as bystanders, witnessing bullying passively and failing to intervene to stop it (see Trach et al., 2010). For theoretical and practical purposes, it would be useful to understand more about the socio-moral reasoning processes, social-emotional competencies, and personal and contextual factors that may play into adolescents’ decisions about how to respond to peer bullying. In the following sections, I will review research on how each of the factors of interest in this study (socio-moral reasoning, social-emotional competence, gender, age, and perceived prevalence of bullying) may relate to how young people choose to respond when they witness bullying.

Socio-moral reasoning and response to bullying. While several studies in the SDT framework have examined connections between domain-based socio-moral reasoning and intended actions in social situations, relatively few have investigated such relationships in the context of bullying among adolescents. In one study that focused on sexual and gender-based harassment (e.g., calling peers pejorative names based on gender or sexuality, teasing or excluding peers due to gender or sexual orientation, or sexually objectifying peers) Peter, Tasker, and Horn (2016) found that adolescents ranging in age from 12-18 who believed that such behaviors cause emotional harm (i.e., that they are transgressions in the moral domain) were significantly less likely to report having perpetrated thirteen of the fifteen listed behaviors. Mediation analyses showed that perceptions of harm fully or partially mediated the negative relationship between perceived wrongness (i.e., to what extent participants believed the behavior to be “wrong”) and reported perpetration for 10 of the 15 actions; in other words, the perception of moral harm was able to explain to a great extent why knowing that a behavior was “wrong” led to less perpetration. On the other hand, the adolescents’ knowledge of school policies against such behaviors (i.e., knowledge that they are transgressions in the conventional domain) was mostly unrelated to reported perpetration, showing significant associations (all negative) with only three behaviors. Moreover, when policy beliefs were examined as a potential mediator between perceived wrongness and reported perpetration, existence of policies against the behavior were associated with perceived wrongness for only one behavior, and in no cases were policy beliefs significantly related to reported perpetration. These results imply that, although adolescents are aware of social conventions, they do not play as significant a role in judgments and behavioral decisions as moral concerns do.

Further research is needed to understand if these patterns hold in contexts other than sexual or gender-based bullying, as well as how other factors may interact with moral vs. conventional reasoning to predict not only perpetration, but also bystander responses. In this study, I look for relations between domain-based socio-moral reasoning and intended bystander response in a situation of bullying based on another potentially

marginalized aspect of identity (i.e., perceived foreign origin).

Social-emotional competence and response to bullying. In contrast to research on socio-moral reasoning (i.e., SDT), which rarely directly addresses social-emotional competence, research on bullying often incorporates social-emotional competencies, both self-regarding and other-regarding. While a large amount of research—which is beyond the scope of this review—has examined disparities in social-emotional competencies between children and adolescents who perpetrate and/or are victimized by bullying vs. those who do neither, it is less clearly understood whether social-emotional distinctions exist between those who passively observe when bullying occurs (i.e., bystanders) and those who intervene to stop bullying or protect targets (i.e., defenders). For instance, some evidence indicates that bystanders and defenders tend to show similar levels of many social-cognitive and social-emotional abilities—such as social information processing, theory of mind, empathy, and even moral competence (defined as understanding of moral emotions and tendency to morally disengage; Gini, 2006)—but differences in other areas, such as self-efficacy and problem-solving strategies (Gini, Albiero, Benelli, & Altoe, 2008; Pozzoli & Gini, 2013). Such results imply that bystanders and defenders may not be very different in how they think or feel when they witness bullying, but may be more different in their abilities to convert their feelings and judgments into action. Other studies, though, have shown that higher levels of empathy are associated with a greater inclination to intervene in support or defense of targets of bullying (Abbott & Cameron, 2014). More research is needed to clarify how specific social-emotional competencies may relate to adolescents' propensity to intervene as opposed to bystand. To that end, this study looks at social perspective-taking competence—a construct similar to theory of mind and empathy, which, as described above, have shown varying associations with bystanding vs. defending in different studies—and how it may relate to intended response to witnessed bullying.

Gender and response to bullying. Previous literature indicates that bullying attitudes and behavior often differ on average by gender, in that girls tend to be less accepting of bullying in general and more likely to take positive action to help targets (e.g., Trach et al., 2010). However, not much is known about whether gender seems to exert influence on judgments or on the relationship between judgments and intended action. Because of these existing findings and unanswered questions, gender is included as a focal variable in this study.

Age and response to bullying. In general, children seem to become more accepting of bullying as they grow up, at least through middle school, though this trend may reverse in high school (Menesini & Salmivalli, 2017; Trach et al., 2010). More specifically for this study, some evidence indicates that motivation to intervene in bias-based bullying against out-group members may decrease with age (from age 8-10 to age 13-15), possibly due to increased identification with the norms of one's ingroup (Palmer, Rutland, & Cameron, 2015). Due to the potential effects of age differences among adolescents on both domain-based socio-moral reasoning (as previously described) and action choices in response to bullying, age is also included as a focal variable in this study.

Perceived prevalence of bullying and response to bullying. The social norms that students perceive can exert a powerful influence on behavior. If students perceive a high prevalence of bullying incidents at their school, they might be inclined to view bullying in a more conventional manner, in that it might seem to be a way of behaving that is to some degree endorsed or accepted by members of the school community; this could lead

such students to be less inclined to intervene. Indeed, studies have shown that students are likely to act in line with “descriptive norms,” or their perceptions of how common bystanding vs. defending are among their classmates (Pozzoli, Gini, & Vieno, 2012). But does higher perceived bullying prevalence lead students to infer that bullying is not actually harmful (an informational assumption), or might it make students feel that intervening is futile, even when they believe the situation to be causing harm? Or might repeatedly witnessing bullying lead to desensitization, i.e., not caring about it as much? Research on cyberbullying has shown that more frequent exposure to cyberbullying as a bystander seems to lead to desensitization (i.e., reduced empathic responsiveness; Pabian, Vandebosch, Poels, Van Cleemput, & Bastiaensens, 2016), but more research is needed, including with different types of bullying, to gain insight into this possible contextual effect and the reasoning behind it. Thus, this study includes perceived prevalence of bullying at one’s own school as a contextual variable with the potential to relate to reasoning and action choices.

1.5 Research Questions

Drawing on this background, the three main research questions and associated hypotheses for this dissertation are as follows (note that each question is addressed in more technical detail in Chapter 2):

Research Question 1: Relation of action choices to socio-moral reasoning and personal/contextual factors. How does adolescent students’ socio-moral reasoning about a hypothetical bullying situation relate to their choice of action (from a set of options) to take in response to the situation? In addition, how do factors outside the character system—both personal (age and gender) and social-contextual (perceived bullying prevalence at their school)—relate to adolescents’ intended action choices in response to witnessing bullying and/or to the relationship between their socio-moral reasoning and action choices?

Hypotheses for RQ1. Based on principles of SDT as well as previous research findings (e.g., Peter et al., 2016), I hypothesized that students who gave more weight to the moral aspect of bullying (specifically, the harm it can cause) would be more approving of, and likely to choose, direct intervention to stop it. On the other hand, I hypothesized that students who gave more weight to the conventional aspect of bullying (specifically, bullying as being against the rules) would be more approving of and likely to choose indirect intervention (telling a teacher) or bystanding (witnessing without intervening). Furthermore, again drawing from existing findings (e.g., Pabian et al., 2010; Trach et al. 2010). I expected that males and students who perceived a greater prevalence of bullying at their school would be more likely to approve of and choose bystanding and/or joining in bullying perpetration, as well as less likely to approve of or choose intervening. Due to the narrow age range of the participants and inconclusive previous research findings (e.g., Menesini & Salmivalli, 2017; Palmer et al., 2015), I did not hypothesize any relationship between age and action choice. The question of whether any of the personal/contextual factors (gender, age, or perceived bullying prevalence) might moderate the relationship between socio-moral reasoning and action was exploratory, and thus I did not formulate any specific hypotheses with regards to it.

Research Question 2: Analyses of free-response explanations of action choices using a social domain theory lens. When, after being asked to choose an intended action in response to a hypothetical witnessed bullying incident, adolescent students have the chance to briefly explain the reasoning behind their choices in their own written words, what domains of reasoning do they use, and how do their explanations relate to how they think about the potential actions they could choose?

Hypotheses for RQ2. I hypothesized that students overall would cite all of the focal types of considerations, both domain-based (moral, conventional, personal, prudential) and not (relational, emotional); however, because of the brevity of the responses, I predicted that most individual students would only cite one or two considerations per response. I predicted that students would tend to cite domains that theoretically related (based on SDT) to their evaluations of the intended action choices, e.g., that students who approved of direct intervention would be more likely to cite moral considerations, that students who approved of indirect intervention would be more likely to cite conventional and possibly prudential considerations, and that students who approved of bystanding or perpetrating would be more likely to cite prudential, personal, and possibly conventional considerations. Moreover, I expected the relationships between personal/contextual factors and considerations cited to mirror these patterns, e.g., that boys and students who perceived greater bullying prevalence—whom I expected to be more inclined to bystand—to correspondingly be more likely to cite prudential and personal considerations (and less likely to cite moral ones).

Research Question 3: Relation of social perspective-taking competence to socio-moral reasoning and action choices. How does adolescents' social perspective-taking competence relate to their socio-moral reasoning about the bullying situation, and how does social perspective-taking competence relate to intended action choices when considered together with socio-moral reasoning?

Hypotheses for RQ3. Building from the assumptions of SDT and Nucci's character model, I hypothesized that students who were more likely to prioritize moral reasoning would also be better at coordinating others' perspectives with their own. I also hypothesized that students who showed greater perspective-taking competence would be more likely to intend to intervene, especially directly, vs. bystand or perpetrate bullying (based on similar results, e.g., Abbott and Cameron, 2014). Finally, with regards to the exploratory question of whether social perspective-taking competence might mediate the relationship between endorsement of moral domain reasoning and response to bullying (such that students who were more likely to consider the moral implications of bullying would also be more able and inclined to take others' perspectives into account when deciding what to do, which in turn would make them more likely to intervene and less likely to bystand or perpetrate), I did not have any specific hypotheses.

Chapter 2: Methods

2.1 Data Source

This dissertation is a secondary analysis of data from the National Professional Development and Evaluation Project (NPDEP; Barr et al., 2015). The NPDEP project was designed and led by researchers from Facing History and Ourselves (“Facing History”), a nonprofit educational organization, along with university- and agency-based research collaborators.

Facing History was founded in 1976 and now has offices in nine locations in the US, Canada, and the UK (Facing History and Ourselves, 2019a), as well as partnerships with schools in 134 countries around the world (Facing History and Ourselves, 2019b). It creates, distributes, and provides professional development around high school humanities curriculum materials that now reach over 70,000 teachers and millions of students worldwide every year (Facing History and Ourselves, 2017). Through these efforts, Facing History endeavors to help secondary educators teach history through a lens of “educating for democracy,” and focuses on building students’ capacities to understand racism, bigotry, and genocide in the past and combat them in the future. The overall goal is to empower students to apply the lessons of history to the present and become more thoughtful and engaged citizens, or, in other words, to help students “make the essential connection between history and the moral choices they confront in their own lives” (Facing History and Ourselves, 2019a).

2.2 Recruitment and Data Collection

The project for which these data were collected, the National Professional Development and Evaluation Project (NPDEP), was designed as a randomized controlled experimental study to evaluate the effectiveness of a Facing History professional development intervention. The Facing History evaluation director and team designed the study project, including the selection and/or development of measures, in collaboration with independent academic researchers based at Harvard University and Eastern Michigan University.

Facing History regional staff members and staff of Abt Associates, Inc., an independent global research agency, worked together to recruit participants. To reduce self-selection biases, only schools and teachers who had never been exposed to or sought out Facing History trainings or resources were eligible to participate in the study. The research agency conducted all of the data collection and initial data processing in order to maintain independence and ensure objectivity to the greatest degree possible. Informed consent was obtained at all levels, i.e., from districts, principals, teachers, parents, and students (Barr & Facing History and Ourselves, 2010). All study procedures were approved by institutional review boards at both Harvard University and Abt Associates.

The overall NPDEP study, at baseline, included data from 1402 students and 97 of their teachers, drawn from 61 schools in eight regions across the United States (Chicago, Cleveland, Denver, Los Angeles, Memphis/Nashville, New England, New York/New Jersey, and the San Francisco Bay Area). The vast majority (89.20%) of the participating schools

were public; of these, 78.14% (69.70% of total) were regular public schools, while the rest were charter, magnet, or other/alternative schools (21.86% of public schools, 19.50% of total). Of the 10.80% of participating schools that were private, 92.09% (9.95% of total) were religious, with the remaining few being nonsectarian (7.91% of private schools, 0.85% of total).

In the interest of allowing for longitudinal follow-up, only students in the ninth and tenth grades and their teachers were eligible for participation in the study. Participants were randomly assigned by school within each region either to: (1) receive the Facing History professional development intervention in the first year of the study, or (2) serve as a control group in the first year and then receive the intervention in the second year. The overall study was conducted between 2007 and 2009, with baseline data collected from teachers in spring 2007 and follow-up data collected from teachers and students in spring 2008 (at the end of Year 1, the school year in which the first-year intervention group received the intervention) and spring 2009 (after Year 2, when the first-year control group received the intervention). Participants at each time point filled out packets of written surveys.

2.3 The Current Study: Sample/Participants

For the purposes of this dissertation, I did not seek to evaluate the effectiveness of the Facing History program, and thus did not directly compare responses between the intervention and control groups (see Barr et al., 2015, for such comparisons). Instead, I aimed to examine relationships between different variables assessed across all participants, with the goal of better understanding the psychological processes occurring in students' minds, regardless of condition.

For the analyses based on numerical rating data, I used data from all student participants in the NPDEP project at Year 1. As mentioned above, this total dataset included data from 1402 students at 61 schools across eight regions of the United States. Table 1, below, summarizes the sociodemographic characteristics of the student participants in the spring of Year 1.

Table 1

Student Sociodemographic Information

Variable	Count (%) or mean (SD)
Gender	
Male	593 (42.3%)
Female	809 (57.7%)
Grade level	
9	464 (33.1%)
10	938 (66.9%)
Mean age in years	15.85 (0.65)

Race/ethnicity	
Black	177 (12.9%)
Hispanic	450 (32.8%)
Asian	159 (11.6%)
White	428 (31.2%)
Other	38 (2.8%)
Mixed (2 or more selected)	108 (7.9%)
Home language	
English	966 (70.7%)
Other language	401 (29.3%)
Mean parental education level ^a	2.81 (1.23)
Intervention group	
Facing History	587 (45.6%)
Control	700 (54.4%)

Note. Total sample $N = 1402$. Counts (and percentages) of each category are listed for categorical variables, while means (and standard deviations) are listed for numerical variables. Due to missing values, some counts do not add up to the total sample size.

^a This variable represents the mean of the highest levels of education reached by each parent, which were each indicated ordinally as: 1 = didn't finish high school; 2 = finished high school; 3 = attended some college; 4 = finished college; 5 = more than college.

As shown in Table 1, slightly more than half of student participants indicated that they were female, with the rest indicating male. About one third of participants were in the ninth grade during Year 1 (the 2007-2008 school year), when the data were collected, while the remaining two thirds were in the tenth grade that year. The mean age of participants at the time of data collection was 15.85 years, with a standard deviation of 0.65 years; the minimum age was 13.42 years and the maximum was 18.67 years. With regards to race/ethnicity, participants were presented with various categories (Black, Hispanic, Asian, Native American, White, Other) and asked to check all that apply. Dummy variables were created to indicate the race/ethnicity of participants who selected only one category, while those who selected two or more categories were combined into a "Mixed" category. Only two participants selected Native American as their sole race/ethnicity, so, to avoid small cell size concerns, these two were recoded into the "Other" category. The majority (over 70%) of students reported speaking English as their first language, and the average highest level of educational attainment by participants' parents fell between "finished high school" and "attended some college." Each of these sociodemographic variables had a missing data rate of less than 5%. Finally, intervention group was also included as a control variable, with 1 = in Facing History intervention group in year 1, and 0 = in control group in year 1; slightly less than half of the total sample was in the intervention group.

For analyses involving free-response textual data, a subset of the NPDEP dataset was used that included all student participants at Year 1 who provided responses to the free-response item of interest (see Measures, below). This subsample contained data from 574 students, representing 34 schools in all eight regions. Because this subsample was not randomly determined, but rather consisted of those who chose to complete the free-response question, chi-square tests (for categorical variables) and independent samples *t*-tests (for numerical variables) were conducted to determine whether demographic variables differed significantly between the participants in the subsample and the rest of the participants. While the gender distribution and combined parental education level in the subsample were statistically the same as in the rest of the sample, students in the subsample were significantly younger and more likely to be in Grade 9 compared to students not in the subsample. They were also significantly more likely to be White or Black, less likely to be Hispanic or Asian, and more likely to speak English as their first language. These differences should be considered in the interpretation of results from the subsample as compared with those from the full sample.

2.4 The Current Study: Measures

In spring 2008, students participating in the NPDEP filled out two packets of written surveys, including demographic items as well as self-report measures of historical understanding, civic attitudes and behaviors, and ethical and social-emotional reasoning. This last category comprises the two main scales of interest for this dissertation study: the adapted Relationship Questionnaire and the Choices in Context Measure, both described below.

2.4.1 Adapted Relationship Questionnaire. The adapted Relationship Questionnaire, or RelQ-A (adapted by the NPDEP study designers from Schultz, Selman, & LaRusso, 2003, and Selman, 2003) is a measure designed to assess social-emotional competence through responses to hypothetical social scenarios. Specifically, the original RelQ is based on Selman's developmental theory of social perspective coordination. This theory, which grew out of Selman's early work with Kohlberg, posits that, as children mature, they become increasingly capable of understanding the perspectives of others and balancing these with their own perspectives. Development represents a shift in perspective-taking coordination through four levels: egocentric (lack of differentiation between one's own perspective and others'), one-way (recognition that others' perspectives may be different than one's own, but lack of consideration of both simultaneously in making decisions), reciprocal (understanding of how one's own perspective/needs may appear to others), and mutual (coordination of one's own perspective with those of others in resolving situations) (Selman, 2003). This progression has been empirically shown to generally correlate with age, while also being sensitive to certain contextual factors (e.g., maltreatment by parents; Burack et al., 2006). The original RelQ was developed for students in grades 4-12 and has been validated as reliable (i.e., acceptable test-retest reliability) and internally consistent (i.e., acceptable Cronbach's *alpha*), overall, by empirical studies with diverse samples of youth (Schultz et al., 2003; LaRusso & Selman, 2011).

For the NPDEP project, the RelQ was chosen as a measure of social-emotional competence, and the original version was adapted to focus mostly on school-based social

situations with peers rather than home/family-based situations; the scenarios in the RelQ-A were also intended to address areas of social-emotional competence relevant to the goals of Facing History, including social awareness (i.e., paying attention to and showing concern for others), perspective-taking, and conflict resolution skills (Barr et al., 2015). The NPDEP research was the first time that this specific adapted version of the measure (i.e., the RelQ-A) had been used (D. Barr, personal communication, April 2, 2019), and though it is based on a validated measure, the adapted version of the scale has not yet undergone any validity testing or other measurement work.

Like the original RelQ, the RelQ-A presents hypothetical scenarios centering on interpersonal issues requiring social perspective coordination, each of which is followed by items asking participants to rate the adequacy of four different possible responses (intended to correspond to the four levels of social perspective coordination described above) and then to choose the one response of the four they consider to be “best.” The RelQ-A that the participants completed had ten scenarios, but the NPDEP researchers excluded one of them from analysis because it was deemed to be too ambiguous. For each of the remaining nine scenarios, the NPDEP researchers assigned 1-4 points to the rating of each response choice and 1-4 points for the “best choice,” depending on alignment with the four levels of social perspective coordination (with higher scores indicating higher levels of perspective coordination). The nine scenarios correspond to three subscales—*Interpersonal Understanding*, *Interpersonal Management*, and *Personal Meaning*—which have also been reported in other studies using the RelQ (e.g., Schultz et al., 2003).

For the purposes of this study, I chose to only use the *Interpersonal Management* (IM) subscale, as the questions and response options within it most clearly differentiate between a tendency to focus on one’s own perspective and goals vs. a tendency to take others’ perspectives into account when making social decisions, and thus it provides the clearest measure of perspective-taking competence. (See Appendix A for the three scenarios and accompanying questions in the RelQ-A IM subscale.) For example, in one scenario, an athletic girl tries out for a boys’ sports team but is not selected; lower-level responses include ignoring the situation or focusing on her own view of how she performed in the tryouts, while higher-level responses include acknowledging the coach’s distinct perspective and trying to explain her perspective to him. Though such scenarios and the provided response options have limitations, they also tap into both perspective-taking ability and related problem-solving skills, which have been implicated in existing research as potentially relevant to bystander responses (e.g., Pozzoli & Gini, 2013). Furthermore, the items in the IM subscale seem more cohesive with each other as compared with items in other subscales, and indeed, the IM subscale of the original RelQ shows the highest internal consistency of all the subscales (Schultz et al., 2003). In this study, the Cronbach’s *alpha* for the IM subscale (including both the scores for the individual response ratings and the “best choice” scores, 15 items total) was .67. Though this value is slightly below the oft-cited threshold of adequate internal consistency (i.e., an *alpha* of .70 or greater, which Nunnally [1978, as cited in Lance, Butts, & Michels, 2006] suggested as adequate for early stages of research with an instrument), meaning that caution should be taken when interpreting results of analyses using this subscale, it is the highest *alpha* among the subscales in this study, and is very similar to IM subscale *alphas* reported in previous research (e.g., .68 in Schultz et al., 2003).

2.4.2 Choices in Context Measure. The Choices in Context Measure (CICM) is an

exploratory ethical reasoning scale designed for the NPDEP project (Selman, Barr, Feigenberg, & Facing History and Ourselves, 2007), modeled after the format of the RelQ. In this measure, participants were presented with four hypothetical ethically-relevant situations, intended to be similar to situations that students might actually face in their everyday school lives, and then asked to respond to questions about them, including multiple-choice, Likert-type ratings, and free-response questions.

This dissertation study used the responses from only one of the hypothetical situations in the CICM, Situation A (see Appendix B for the entire set of questions pertaining to CICM Situation A). This situation was chosen because it was the only one that both elicited responses regarding individual socio-moral reasoning and behavior in a situation with clear potential for moral relevance—witnessing bullying—and provided reasoning justification choices that align with SDT domains and thus allow for interpretation using an SDT framework. Situation A described the following episode of identity-based bullying:

A student sees a group of his friends teasing a boy whose family recently arrived in the U.S. from another country. They are making fun of the way he speaks and telling him he should move back to his own country. The student who sees this wonders what to do. He decides not to say anything. Instead, he walks away from the group.

Following the presentation of the situation, participants were first asked (question A1) to what extent they agree that walking away is the best thing for the protagonist to do (four choices from “strongly disagree” to “strongly agree”). Then, participants were asked (question A2) to rate, on a Likert-type scale from 1 = “very bad” to 4 = “very good,” several potential reasons for why the protagonist should have intervened instead of walking away; thus, A2 tapped into participants’ socio-moral reasoning. Two of the reasoning justifications given to be rated fell clearly within, respectively, the moral domain (“Teasing is hurting the new boy,” A2a) and the conventional domain (“There is a school rule against this behavior,” A2b), while the other two justifications focused on group processes and relationships that are not directly relevant to SDT. (Because only two of the reasoning justifications are of interest here, the next question, A3, which asked participants to choose which of the four justifications is best, was not included in this study.) As a context question, participants were also asked (question A4) how often this kind of bullying happens in their school, with four choices progressing from “very rarely” to “very often.”

Next, participants were asked (question A5) to rate, again from 1 = “very bad” to 4 = “very good,” different actions that they could take if they were to witness a situation like this in their school. The intended action choices included options to intervene indirectly (“Tell a teacher what was going on,” A5a), intervene directly (“Tell the students to stop being such jerks,” A5c), bystand (“Stay out of it,” A5b), or perpetrate (“Go over and join in making fun of the new boy,” A5d). Lastly, participants were asked to select (question A6) which action among these four choices they would be most likely to take if they were to witness the situation, and then were asked to explain (question A7) why they chose the action they did in A6. (Though the explanation question was not numbered on the survey, it is referred to here as A7, since it followed question A6.) A7 was a free response item, giving participants the chance to briefly explain their reasoning in their own words. Only three lines were provided to write on in response to question A7, limiting participants to concise answers.

2.5 Analytic Strategies and Hypotheses

This section contains a more detailed list of the sub-questions for analysis under each research question, along with the strategies used for analysis and the hypothesized results for each sub-question. In general, SPSS version 25 was used for all quantitative statistical analyses.

Research question 1: Relation of action choices to socio-moral reasoning and personal/contextual factors. This first main research question—of how adolescents’ socio-moral reasoning and selected personal/contextual factors (age, gender, and perceived bullying prevalence) might relate to their intended action choices in response to witnessed bullying—was investigated using the specific sub-questions below.

RQ1a: Prediction of action choice endorsement by socio-moral reasoning. How do endorsement ratings of moral vs. conventional reasoning justifications (A2) relate to endorsement of each action choice (A5)?

RQ1b: Prediction of action choice endorsement by personal/contextual factors. Are younger students vs. older students (age), male vs. female students (gender), or students who perceive more vs. less bullying as occurring at their own school (A4) more or less likely to endorse each action choice (A5)?

To address the two sub-questions above, I conducted multilevel linear regression modeling, with students nested in schools, to predict endorsement of each action choice (a numerical rating). First, I fit each regression model with only the socio-moral reasoning items (A2) as predictors, plus control variables. Next, I fit a model with age, gender, and perceived bullying prevalence (A4) as predictors, along with control variables. Finally, I included all of the above predictors in one model.

As shown in Figure 1, below, I hypothesized that endorsement of moral reasoning would positively relate to ratings of direct intervention and negatively relate to ratings of bystanding and perpetration. In contrast, I hypothesized that endorsement of conventional reasoning would positively relate to ratings of indirect intervention, and possibly bystanding, and negatively relate to ratings of perpetration.

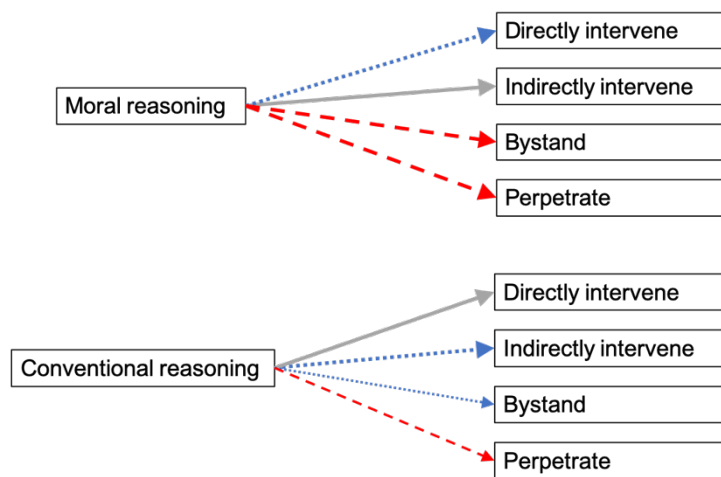


Figure 1. Hypothesis diagrams for RQ1a, relations between socio-moral reasoning and action choices. Blue dotted arrows indicate hypothesized positive relationships, red dashed arrows indicate hypothesized negative relationships, and gray solid arrows indicate either hypothesized nonsignificant relationships or no specific hypotheses.

As shown in Figure 2, below, based on existing findings, I did not make any specific hypotheses about the relationship of age with action choices; however, I did hypothesize that males would tend to rate bystanding and perpetrating more highly, and intervening less highly, than females would, and that students who perceived more bullying at their school would be less likely to endorse either type of intervention and more likely to endorse bystanding (and potentially perpetration).

Figure 2

Hypothesis Diagrams for RQ1b, Relations Between Personal/Contextual Factors and Action Choices

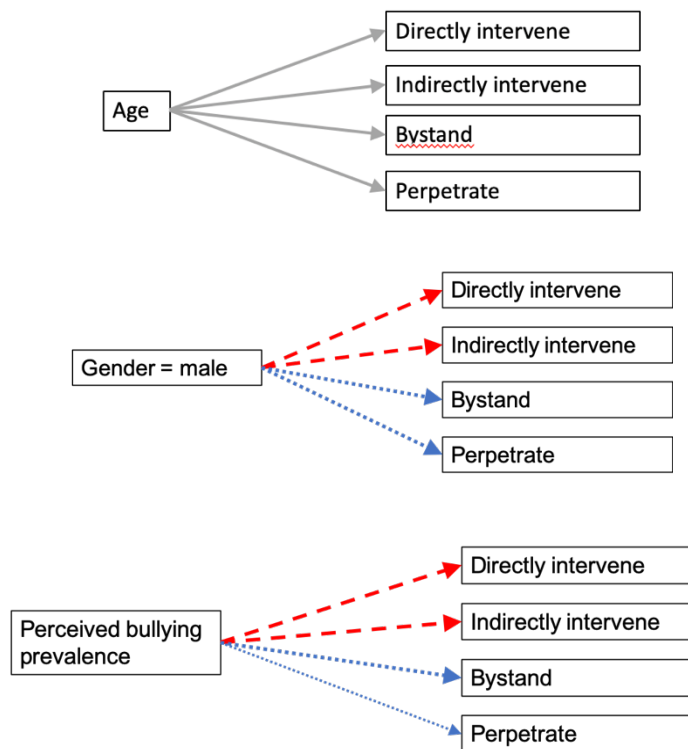


Figure 2. Hypothesis diagrams for RQ1b, relations between personal/contextual factors and action choices. Blue dotted arrows indicate hypothesized positive relationships, red dashed arrows indicate hypothesized negative relationships, and gray solid arrows indicate either hypothesized nonsignificant relationships or no specific hypotheses.

RQ1c: Moderation. Do any of the personal/contextual factors (gender, age, or perceived bullying prevalence) moderate the relationship between socio-moral reasoning (A2) and rating of each action choice (A5)?

To address this sub-question, I added interaction terms to the overall model described above (with action choice ratings predicted by reasoning and other factors and control variables). Specifically, I added terms for interactions between each type of reasoning endorsement (moral and conventional) and each factor, making for six total interaction terms. Figure 3 below is a simplified illustration of the tested relationships. Due to the exploratory nature of this question, I did not formulate any definite hypotheses.

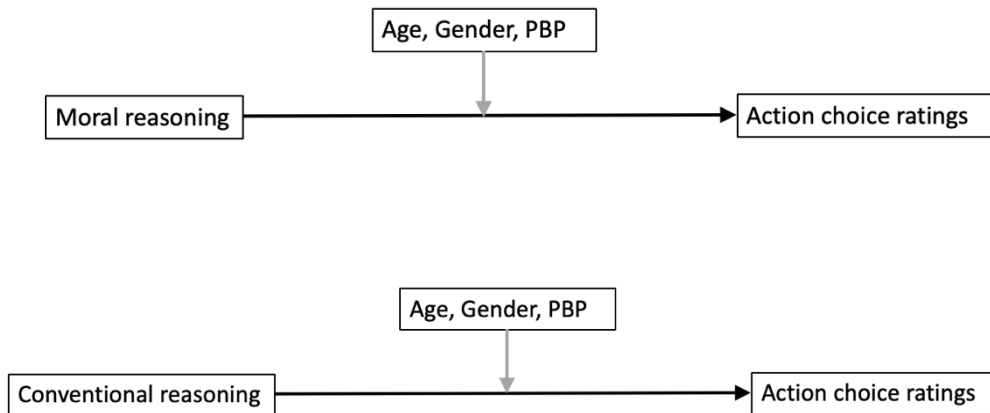


Figure 3. Conceptual diagrams of potential moderation.

RQ1d: Selection of “best” choice. How do endorsement ratings (A2) of moral vs. conventional reasoning, as well as the focal personal/contextual factors (age, gender, and perceived bullying prevalence), relate to likelihood of selecting each action choice as the “best” or most likely choice (A6)?

To address this sub-question, I used logistic regression modeling to predict selection of each action choice, operationalized as a series of binary outcomes (e.g., whether or not each choice is selected as the most likely action). The same predictors were used as in RQ1a (linear regression), and I did not expect significant differences in the pattern of results between the two types of outcome measurement (action choice endorsement, using linear regression, and action choice selection, using logistic regression). Therefore, the same hypothesis diagrams in Figures 1 and 2 applied to this sub-question as well.

Research question 2: Analyses of free-response explanations of action choices using a social domain theory lens. For this second major research question, which concerned students’ free-response answers to why they selected the intended action choice they did, I was guided by the sub-questions below.

RQ2a: Domain-based considerations. Which SDT domain(s) (moral, conventional, personal, and prudential) were cited in free responses explaining action choices (A7), and

how often? What proportion of responses could be coded with at least one SDT domain? Did references to different domains of reasoning tend to co-occur within responses?

RQ2b: Relational and emotional considerations. To what extent do free responses elicit codes for relational and emotion-based reasoning? Do these types of reasoning tend to co-occur with reasoning in certain SDT domain(s)?

Because the answers to question A7, which asked students to explain why they chose the action they did, were free responses, I approached the above sub-questions with a deductive coding strategy drawn from qualitative research methodology (Miles, Huberman, & Saldaña, 2014). Because the responses were brief, each participant had only one response (if they had a response at all), and deductive coding with pre-determined categories was employed, I used an Excel spreadsheet to record the codes, with each response (row) receiving a 0 or 1 for each code (column). This allowed for simplicity of coding and ease of analysis.

To code the data from the free-response question (A7), I went through three rounds of deductive coding. Details of the coding guidelines that I used can be found in Appendix C. In the first round, I marked each response as codable (1) or uncodable (0; indicating that the response was either missing or illegible, nonsensical, or otherwise seemingly irrelevant to the question asked).

In the second round, I coded all of the codable responses deductively by SDT domain (moral, conventional, personal, prudential), recording whether each domain was (1) or was not (0) cited in each response. (I also included a “vague/no domain” category, to be indicated if the response could not be clearly categorized as falling into any of the four SDT domains.) This strategy allowed me to capture how many domains, as well as which domains, were cited in each response, as opposed to trying to choose a single dominant domain. All cited domains were assumed to have the same weight, as there was no reliable way to assess from these brief responses any differential weighting of different considerations. At first, I had considered doing a second round of deductive coding to add sub-codes under each domain representing accepted considerations within SDT that define each domain, based on the coding manual developed by Killen (2014); for example, under the moral domain, deductive sub-codes could include physical harm, psychological harm, and fairness/equality/rights. However, since my research questions only used broad domain classifications, not sub-domain distinctions, I did not code beyond the top-level domain codes.

In the third round, I went through all of the codable responses again to determine whether each response cited relational considerations (references to the respondent’s own relationship, or lack thereof, with the bullies, target, or community as a factor in deciding how to respond) and/or emotional considerations (references to the role/influence of the respondent’s own emotions in influencing their action choice). The presence or absence of these considerations (0 or 1 for each) was coded independently of the SDT coding in round two, as the objective was to explore patterns in how these considerations might overlap, or not, with SDT domains. At this point, a second coder, blind to the study hypotheses, was enlisted to provide reliability coding for a portion of the sample of responses. Both I and the second coder were blind to the other (numerical) responses of the participants, with the exception of their selection of action choice in A6, to which the free-response question directly referred.

When all rounds of coding, including reliability coding, were complete, I tabulated the codes individually and in combination to both determine how often each code occurred in total and examine patterns in terms of which codes tended to occur together, if any. While I did expect each of the six focal categories of consideration to appear in students' responses, I did not have specific hypotheses about which ones would appear more often. I did hypothesize that most responses, due to their brief nature, would contain only one or two considerations.

RQ2c. Relations between considerations cited and other study variables. Do the domain(s) cited in free responses (coded from A7) correspond to endorsement of domains in reasoning justifications (measured quantitatively in A2)? How does the socio-moral reasoning in the free responses (i.e., which domains are cited in A7) relate to endorsement and prioritization of action choices (A5 & A6)?

To address the sub-question above, I used the codes to relate the content of the free responses to the other data from the CICM and certain demographic variables. I used *t*-tests to compare the means of study variables of interest—namely, endorsement of moral and conventional reasoning (A2) and endorsement of each action choice (A5), as well as age—between participants who cited a given category in the free response (A7) and those who did not. In parallel, I used chi-square tests of independence to determine whether categorical variables of interest—gender and selection of each action choice as “best” (A6)—were significantly associated with whether each category of consideration was cited.

I hypothesized that citing a given domain (moral and/or conventional) in A7 would relate positively with its endorsement in A2, but that students would also mention the other domains (personal and/or prudential) in A7, not necessarily related to their responses in A2. My hypotheses for the relations between moral/conventional reasoning (as cited in A7) and action choices (both endorsement and choice as “best”) were the same as my hypotheses for RQ1a; additionally, I hypothesized, as shown below, that citation of personal reasoning would relate positively with bystanding, and that citation of prudential reasoning would relate positively to bystanding and negatively to direct intervention. I also included relational and emotional considerations, though I did not formulate specific hypotheses for how citations of these considerations would relate to other variables.

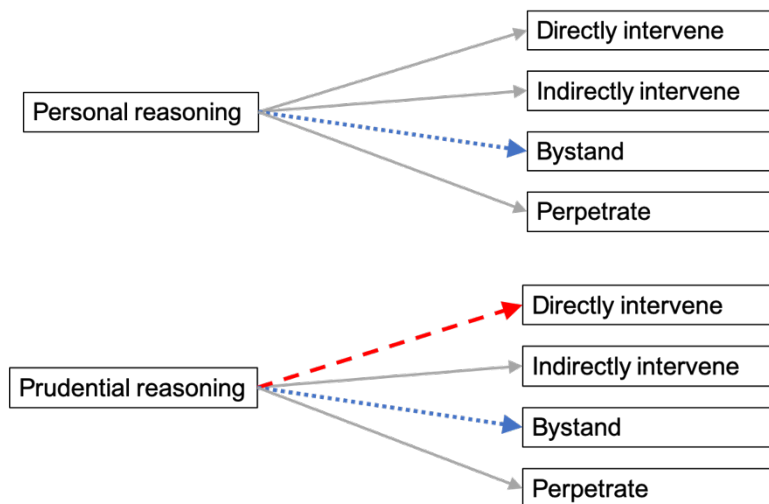


Figure 4. Additional hypothesis diagrams for RQ2c, relations between personal/prudential reasoning and action choices. Blue dotted arrows indicate hypothesized positive relationships, red dashed arrows indicate hypothesized negative relationships, and gray solid arrows indicate either hypothesized nonsignificant relationships or no specific hypotheses.

Research question 3: Relation of social perspective-taking competence to moral reasoning and action choices. I addressed the third and final research question, about social perspective-taking competence—operationalized here as the Interpersonal Management subscale (SPT-IM) of the RelQ-A—and its relations to both moral reasoning and intended action choice outcomes with the following sub-questions.

RQ3a: Prediction of social perspective-taking competence. How does endorsement of moral reasoning (A2a), along with other covariates, relate to perspective-taking score (SPT-IM)?

RQ3b: Mediation. Does social perspective-taking competence (SPT-IM) significantly mediate the hypothesized relationships between moral reasoning endorsement (A2a) and endorsement of each action choice?

For this third research question, I calculated the score for the IM subscale (SPT-IM) of the social perspective-taking measure (RelQ-A) following the scoring guidelines used by the designers of the RelQ-A. Under these guidelines, responses that showed greater ability and propensity to take others' perspectives into account along with one's own when making decisions were considered more mature and received higher scores.

To address sub-question RQ3a, I used multilevel linear regression, as in RQ1a/b, to examine the relationship between endorsement of moral reasoning (A2a) and social-perspective-taking competence (SPT-IM). Next, to address RQ3b, I used the PROCESS Macro for SPSS, v3 (Hayes, 2017), to conduct mediation analysis with moral reasoning endorsement (A2a) as the independent variable (along with other covariates), social perspective-taking competence (SPT-IM) as the mediator, and endorsement of each action choice as dependent variables. The PROCESS macro is a regression-based tool that uses bootstrapping to determine the significance of indirect effects, which many scholars consider superior to mediation models based on simple regression, particularly because bootstrapping has greater power and does not assume normality of the data (Hayes, 2009); however, the same cautions that apply to all non-experimental mediation analyses—particularly, the possibility of bias produced by unobserved variables that could be influencing both the independent and mediating variables and thus causing their error terms to covary—also apply to bootstrapping analyses (Bullock, Green, & Ha, 2010). Nevertheless, to aid in visualization of the tested relationships, Figure 5 (below) illustrates a simplified version of the proposed mediation model. (Note that this diagram represents all the action choice ratings as collapsed into one box, whereas, in actuality, separate analyses were conducted for each action choice rating.)

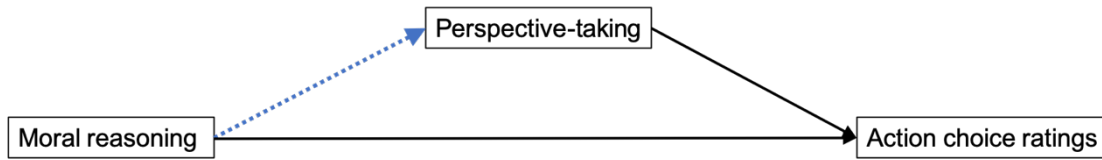


Figure 5. Conceptual diagram of potential mediation. Blue dotted arrow represents hypothesized positive relationship.

I hypothesized that moral reasoning endorsement would have a positive direct relationship with SPT-IM score. Furthermore, I hypothesized that that SPT-IM would at least partially mediate the relationship between moral reasoning and each action score (i.e., that each model would show significant indirect effects).

Chapter 3: Results

3.1 Preliminary and Descriptive Analyses

The total original sample size of 1402 participants was slightly reduced for each analysis due to missing data on the variables in question. The first packet of surveys that students filled out in the spring of Year 1 included the sociodemographic items and the Choices in Context Measure (CICM), while the adapted Relationship Questionnaire (RelQ-A) was included in the second packet. The rate of missing data did not exceed 5% on any of the sociodemographic or CICM items of interest for the study. The items from the RelQ-A showed slightly higher rates of missing data—likely because they were in the second packet, which some participants might not have completed—but the IM subscale (SPT-IM) still had a missing rate of less than 10%.

The distributions of response selections for each of the items of interest from the CICM—both frequency and valid percentage (i.e., percentage of non-missing responses)—are shown in Table 2, below. The most notable patterns relate to the idea of “joining in” (perpetrating) as a response to witnessing bullying. Student participants overwhelmingly tended to rate this as a “very bad” choice, and, correspondingly, very few selected it as the “best” action choice. For the other major study variable (not shown in the table), SPT-IM, scores on the composite subscale measure were approximately normally distributed, with a minimum of 1.67, maximum of 4.00, mean of 3.22, and standard deviation of .35.

Table 2

Distribution of Responses on CICM Items of Interest

Variables	1	2	3	4
Endorsement of moral reasoning (A2a) ^a	226 (16.7%)	222 (16.4%)	558 (41.2%)	349 (25.8%)
Endorsement of conventional reasoning (A2b) ^a	91 (6.8%)	369 (27.4%)	626 (46.5%)	260 (19.3%)
Perceived bullying prevalence (A4) ^b	210 (15.5%)	610 (45.1%)	419 (31.0%)	113 (8.4%)
Rating of indirect intervention (A5a) ^a	120 (8.9%)	305 (22.7%)	678 (50.4%)	242 (18.0%)
Rating of bystanding (A5b) ^a	255 (19.0%)	578 (43.0%)	374 (27.8%)	136 (10.1%)
Rating of direct intervention (A5c) ^a	54 (4.0%)	187 (13.9%)	671 (49.9%)	434 (32.2%)
Rating of perpetrating (A5d) ^a	1125 (83.4%)	178 (13.2%)	29 (2.1%)	17 (1.3%)
Action choice selection (A6) ^c	306 (22.8%)	327 (24.3%)	677 (48.3%)	34 (2.5%)

Note. Figures in parentheses indicate valid percentages, i.e., percentage of non-missing responses to each question.

^a For reasoning endorsements (A2a, A2b) and action choice ratings (A5a, A5b, A5c, A5d), 1 = very bad, 2 = bad, 3 = good, 4 = very good.

^b For perceived bullying prevalence (A4), i.e., how often this kind of bullying happens at your school, 1 = very rarely, 2 = rarely, 3 = often, 4 = very often.

^c For action choice selection (A6), 1 indicates the selection of action choice a (indirect intervention) as the “best”/most likely to take, 2 indicates the selection of b (bystanding), 3 indicates the selection of c (direct intervention), and 4 indicates the selection of d (perpetrating).

Due to the clustered nature of the data, with individual students (level 1) nested into schools (level 2), intraclass correlations (ICCs) were calculated for each study variable from the CICM and RelQ. The choice to cluster students by school only, not by classroom/teacher in addition or instead, was made because the intervention was randomized by school, variables of interest evoked school-level factors (e.g., perceived bullying prevalence “at your school” in A4), and the majority of schools had only a single participating classroom/teacher, which led to redundancy errors when attempting three-level models for some variables. All of the items had low ICCs (<.08) except for the item asking about perceived prevalence of bullying at school (A4). This makes sense, as this particular item tapped into perceptions of a shared environment rather than individual judgments and thoughts. This one item, A4, had an ICC of .128, meaning that 12.8% of the variance in responses could be attributed to differences between school contexts (level 2) as opposed to individual differences (level 1). Because of this one higher ICC, multilevel modeling was conducted in the linear regression analyses that involved this variable.

Bivariate correlations were calculated between the sociodemographic control variables (parental education level, first language, race, and intervention group), the covariates of interest (gender, age, and perceived bullying prevalence), and the predictor and outcome variables from the CICM and RelQ-A. Spearman correlations were used due to the ordinal or categorical nature of many of the variables. Statistical significance was determined as a two-tailed *p* value of less than .05; only significant results are described here.

With regards to the relationships among the demographic variables and covariates, several significant correlations were evident. Reporting English as one’s first language was positively associated with parental education level and with selecting Black, White, or two or more races, while negatively associated with selecting Hispanic or Asian. Additionally, parental education level was correlated positively with selecting White or two or more races and negatively with selecting Hispanic. Students in the Facing History intervention group were more likely to be female and younger than the students in the control group. Age was not significantly related to any of the other control variables with the exception of a negative association with parental education. Male gender was negatively associated with selecting Black, while positively associated with selecting White and with speaking English as a first language. Perceived prevalence of bullying at school was also positively correlated with selecting White and with speaking English as a first language, and negatively correlated with selecting Hispanic.

Correlations between the major predictor and outcome variables are shown in Table 3. For the most part, relationships among these variables were in the hypothesized directions. Endorsement of moral reasoning in the CICM bullying scenario correlated negatively with ratings of bystanding and perpetrating as action choices in response to

witnessing bullying and positively with rating of direct intervention as an action choice. Endorsement of conventional reasoning, on the other hand, was only significantly correlated with rating of indirect intervention (positively). Ratings of the two positive action choices (i.e., direct and indirect intervention) were positively correlated with each other and negatively correlated with ratings of the two negative action choices (bystanding and perpetrating, which also correlated positively with each other). Social perspective-taking, as measured by the IM subscale of the RelQ-A, was positively correlated with endorsement of moral reasoning and with both of the positive action choice ratings, as well as negatively correlated with the negative action choice ratings. Perceived bullying prevalence showed an almost opposite pattern, correlating negatively with the positive action choices and positively with the negative action choices. Male participants showed the same pattern of correlations as perceived bullying prevalence (namely, being male was associated negatively with the positive action choices and positively with the negative action choices); furthermore, male gender correlated negatively with endorsement of moral reasoning and social perspective-taking. Age did not show significant correlations with any major variables.

Table 3

Correlations Among Major Variables

Variables	1	2	3	4	5	6	7	8	9	10
1. Endorsement of moral reasoning (CICM A2a)	--	.03	.03	-.13 ***	.15 ***	-.11 ***	.21 ***	-.12 ***	-.02	-.04
2. Endorsement of conventional reasoning (CICM A2b)	.03	--	.23 ***	.01	.05	-.05	.04	-.04	.01	-.01
3. Rating of indirect intervention (CICM A5a)	.03	.23 ***	--	-.25 ***	.13 ***	-.24 ***	.19 ***	-.23 ***	-.01	-.10 ***
4. Rating of bystanding (CICM A5b)	-.13 ***	.01	-.25 ***	--	-.27 ***	.22 ***	-.22 ***	.11 ***	.02	.13 ***
5. Rating of direct intervention (CICM A5c)	.15 ***	.05	.13 ***	-.26 ***	--	-.14 ***	.10 ***	-.11 ***	-.03	-.10 ***
6. Rating of perpetrating (CICM A5d)	-.11 ***	-.05	-.24 ***	.22 ***	-.14 ***	--	-.27 ***	.22 ***	-.02	.10 ***
7. Interpersonal Management subscale (RelQ-IM)	.21 ***	.04	.19 ***	-.22 ***	.10 ***	-.27 ***	--	-.23 ***	-.00	-.06 *
8. Gender (male)	-.12 ***	-.04	-.23 ***	.11 ***	-.11 ***	.22 ***	-.23 ***	--	.05	.02
9. Age in years	-.02	.01	-.01	.02	-.03	-.02	<.01	.05	--	-.01

10. Perceived bullying prevalence (CICM A4)	-0.04	-0.01	-0.10 ***	.13 ***	-0.10 ***	.10 ***	-0.06 *	.02	-0.01	--
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* $p < .05$, *** $p < .001$ (two-tailed Spearman correlations)

To determine whether there were systematic differences in the responses of the subsample of participants ($n = 574$) who chose to provide explanations for their action choices (A7) vs. the remainder of the participants (i.e., those who did not provide textual responses), independent samples t -tests were conducted on the mean values of the study variables for both groups. Though the subsample did significantly differ on several demographic variables from those not in the subsample, as described in the Sample/Participants section earlier, they did not differ significantly on any of the study variables from the CICM or the RelQ-A, with one exception. Participants in the subsample perceived that bullying of the type described in the CICM situation was going on significantly more often at their school (A4), as compared with participants not in the subsample. This difference, in addition to the demographic differences, should be taken into consideration in the interpretation of the results of analyses using the subsample.

3.2 RQ 1: Prediction of Action Choices by Socio-moral Reasoning and Personal/Contextual Factors

To further explore the relationships between participants' socio-moral reasoning, personal/contextual factors (gender, age, perceived bullying prevalence), and intended action choices in response to hypothetical witnessed bullying, linear and logistic regression analyses were conducted using the provided numerical rating data.

Linear regression analyses. Guided by the research hypotheses, multilevel linear regression analyses were conducted employing endorsement of moral reasoning (not intervening in the bullying situation is bad because the target is being hurt) and endorsement of conventional reasoning (not intervening is bad because bullying is against the rules) to predict participants' ratings of the adequacy of each action choice. Multilevel modeling with restricted maximum likelihood estimation was used to account for the hierarchical structure of the data, with students (level 1) nested in schools (level 2). All of the predictors and covariates were individual student-level variables and thus were included as level 1 fixed effects, with random intercepts by school.

Analyses were conducted separately for each outcome (i.e., rating of each action choice). For each of the four action choice ratings, Model 1 contained the focal SDT predictor variables (endorsement of moral and conventional reasoning) only and Model 2 added control variables (parental education, first language, race/ethnicity, intervention group). Next, in Model 3, the focal personal/contextual factors (gender, age, and perceived bullying prevalence) were used as sole predictors, and the same control variables as in Model 2 were added to these predictors in Model 4. Model 5 contained all of the predictors and covariates (SDT reasoning items, personal/contextual factors, and control variables). Lastly, to examine potential moderating effects of the personal/contextual factors on the relationship between socio-moral reasoning and action choices, six interaction terms

(between both moral and conventional reasoning and each of the three factors) were added in Model 6.

Models 1 and 2: Prediction by socio-moral reasoning endorsement. As shown in Table 4, when endorsement of moral reasoning and endorsement of conventional reasoning were the only predictors, moral reasoning was significantly positively related to ratings of the choice to intervene directly and significantly negatively related to ratings of bystanding and perpetrating as action choices. In other words, when students agreed more strongly with the idea that the bullying was wrong because it was hurting the target (i.e., moral reasoning), they were more approving of the choice to tell the bullies to stop, and less approving of the choices to stay out of it or join in the bullying. Endorsement of conventional reasoning, on the other hand, was significantly positively related to ratings of the choice to intervene indirectly, meaning that students who gave more weight to the idea that bullying was wrong because it was against the rules were more approving of the choice to tell a teacher about the situation.

Table 4

Multilevel Linear Regression Model 1: Prediction of Action Choice Ratings by Socio-moral Reasoning Endorsement

Outcome	Parameter	Coeff.	SE	df	<i>t</i>	Sig. (<i>p</i>)
Intervene indirectly (A5a)	Intercept	2.16***	.10	1000	20.99	<.001
	Endorsement of moral reasoning (A2a)	-.003	.02	1322.75	-.15	.88
	Endorsement of conventional reasoning (A2b)	.23***	.03	1322.47	8.51	<.001
Bystand (A5b)	Intercept	2.52***	.11	1051.50	23.18	<.001
	Endorsement of moral reasoning (A2a)	-.10***	.02	1284.19	-4.08	<.001
	Endorsement of conventional reasoning (A2b)	.01	.03	1311.57	.43	.67
Intervene directly (A5c)	Intercept	2.75***	.09	1103.09	29.04	<.001
	Endorsement of moral reasoning (A2a)	.09***	.02	1284.17	4.21	<.001
	Endorsement of conventional reasoning (A2b)	.04	.03	1309.56	1.52	.13
	Intercept	1.37***	.07	1105.21	20.69	<.001

Perpetrate (A5d)	Endorsement of moral reasoning (A2a)	-.03*	.01	1319.14	-2.33	.02
	Endorsement of conventional reasoning (A2b)	-.02	.02	1325.31	-1.32	.19

* $p < .05$, *** $p < .001$ (two-tailed)

Table 5

Multilevel Linear Regression Model 2: Prediction of Action Choice Ratings by Socio-moral Reasoning Endorsement with Control Variables

Outcome	Parameter	Coeff.	SE	df	t	Sig. (p)	
Intervene indirectly (A5a)	Intercept	2.10***	.19	1065.79	11.42	<.001	
	Endorsement of moral reasoning (A2a)	-.01	.02	1178.00	-.10	.92	
	Endorsement of conventional reasoning (A2b)	.21***	.03	1176.46	7.91	<.001	
	Parental education level	.03	.02	1050.37	1.32	.19	
	First language is English	-.15*	.07	1177.81	-2.27	.02	
	Race/ethnicity ^a						
	Black	.28	.15	1104.01	1.38	.17	
	Hispanic	.15	.14	1176.84	.75	.45	
	Asian	.15	.15	1173.90	.65	.52	
	White	.13	.14	1174.22	.61	.54	
	Mixed (2 or more)	-.03	.15	1168.52	-.42	.68	
In intervention group							
Bystand (A5b)	Intercept	2.49***	.21	929.77	12.00	<.001	
	Endorsement of moral reasoning (A2a)	-.09***	.03	1118.04	-3.59	<.001	
	Endorsement of conventional reasoning (A2b)	.01	.03	1166.81	.45	.65	
	Parental education level	-.03	.03	638.52	-1.11	.27	

	First language is English	.08	.07	1134.03	1.79	.24
	Race/ethnicity ^a					
	Black	.30 [†]	.16	833.26	1.79	.07
	Hispanic	.06	.16	1124.86	.40	.69
	Asian	.09	.16	1156.80	.53	.60
	White	.06	.15	995.14	.37	.71
	Mixed (2 or more)	-.06	.17	1172.18	-.38	.71
	In intervention group	-.10 [†]	.06	25.94	-1.74	.09
Intervene directly (A5c)	Intercept	2.54***	.18	1020.79	13.89	<.001
	Endorsement of moral reasoning (A2a)	.10***	.02	1154.93	4.32	<.001
	Endorsement of conventional reasoning (A2b)	.03	.03	1173.86	1.26	.21
	Parental education level	.04	.02	812.63	1.59	.11
	First language is English	.11 [†]	.06	1162.18	1.79	.07
	Race/ethnicity ^a					
	Black	-.03	.15	971.30	-.19	.85
	Hispanic	.15	.14	1161.03	1.07	.28
	Asian	.02	.14	1173.20	.15	.88
	White	-.08	.13	1095.47	-.61	.54
	Mixed (2 or more)	-.02	.15	1177.42	-.11	.91
	In intervention group	-.01	.05	39.40	-.21	.83
Perpetrate (A5d)	Intercept	1.49***	.13	1058.40	11.78	<.001
	Endorsement of moral reasoning (A2a)	-.03 [†]	.02	1173.95	-1.80	.07
	Endorsement of conventional reasoning (A2b)	-.02	.02	1180.43	-1.33	.18
	Parental education level	-.03	.02	933.69	-1.60	.11
	First language is English	.05	.04	1177.36	-1.25	.21
	Race/ethnicity ^a					

Black	-.06	.10	1046.15	-.62	.54
Hispanic	-.06	.09	1178.28	-.60	.55
Asian	-.12	.10	1180.94	-1.24	.21
White	-.15	.09	1147.79	-1.60	.11
Mixed (2 or more)	-.07	.10	1179.64	-.70	.49
In intervention group	.00	.04	45.51	.09	.93

^aRace/ethnicity coded as a series of dummy variables, with “Other” used as the reference group.
[†] $p < .10$, $*p < .05$, $***p < .001$ (two-tailed)

When control variables were added, as shown in Table 5, endorsement of conventional reasoning remained a positive predictor of ratings for indirect intervention, and endorsement of moral reasoning still positively predicted ratings of direct intervention and negatively predicted ratings of bystanding. The negative relationship between moral reasoning and perpetrating was reduced to marginal significance, however.

Models 3 and 4: Prediction by personal/contextual factors. For the next set of models, the same procedure was followed, except with gender, age in years, and perceived bullying prevalence as predictors in place of moral and conventional reasoning.

Results are shown in Table 6. As compared with female participants, male participants gave significantly lower ratings to the positive action choices (direct and indirect intervention) and significantly higher ratings to the negative action choices (bystanding and perpetrating). Student participants who perceived bullying as happening more often at their own schools showed this same pattern of inclination towards negative action choices and away from positive ones. Age did not significantly predict any of the action choice rating outcomes.

Table 6

Multilevel Linear Regression Model 3: Prediction of Action Choice Ratings by Personal/Contextual Factors

Outcome	Parameter	Coeff.	SE	df	<i>t</i>	Sig. (<i>p</i>)
Intervene indirectly (A5a)	Intercept	2.53***	.60	693.69	4.21	<.001
	Gender (1 = male, 0 = female)	-.38***	.05	1303.37	-8.29	<.001
	Age in years	.04	.04	672.74	1.03	.30
	Perceived bullying prevalence (A4)	-.08**	.03	1258.83	-2.96	.003
Bystand (A5b)	Intercept	1.28*	.63	509.38	2.02	.04
	Gender (1 = male, 0 = female)	.19***	.05	1272.72	3.86	<.001

	Age in years	.04	.04	485.47	.98	.33
	Perceived bullying prevalence (A4)	.13***	.03	1191.66	4.55	<.001
Intervene directly (A5c)	Intercept	3.58***	.54	393.63	6.69	<.001
	Gender (1 = male, 0 = female)	-.19***	.04	1208.22	-4.36	<.001
	Age in years	-.01	.03	368.37	-.37	.71
	Perceived bullying prevalence (A4)	-.09**	.03	1089.90	-3.4	.001
Perpetrate (A5d)	Intercept	1.08**	.38	728.36	2.87	.004
	Gender (1 = male, 0 = female)	.22***	.03	1304.36	7.56	<.001
	Age in years	-.01	.02	706.48	-.36	.72
	Perceived bullying prevalence (A4)	.07***	.02	1260.71	4.16	<.001

* $p < .05$, ** $p < .01$, *** $p < .001$ (two-tailed)

Table 7

Multilevel Linear Regression Model 4: Prediction of Action Choice Ratings by Personal/Contextual Factors with Control Variables

Outcome	Parameter	Coeff.	SE	df	t	Sig. (p)
Intervene indirectly (A5a)	Intercept	2.49***	.67	633.28	3.75	<.001
	Gender (1 = male, 0 = female)	-.35***	.05	1162.92	-7.31	<.001
	Age in years	.04	.04	598.30	1.00	.33
	Perceived bullying prevalence (A4)	-.08**	.03	1132.88	-2.86	.004
	Parental education level	.03	.02	997.76	1.31	.19
	First language is English	-.18**	.07	1165.32	-2.69	.007
	Race/ethnicity ^a					
	Black	.18	.16	1061.92	1.14	.26
	Hispanic	.06	.14	1165.93	.38	.70

	Asian	.07	.15	1165.04	.46	.65
	White	.07	.14	1150.23	.48	.63
	Mixed (2 or more)	-.11	.16	1161.91	-.66	.51
	In intervention group	.01	.07	49.91	.14	.89
Bystand (A5b)	Intercept	1.35*	.66	238.67	2.03	.04
	Gender (1 = male, 0 = female)	.21***	.05	1004.82	4.01	<.001
	Age in years	.03	.04	201.43	.73	.47
	Perceived bullying prevalence (A4)	.16***	.03	923.24	5.23	<.001
	Parental education level	-.03	.02	583.43	-1.15	.25
	First language is English	.05	.07	1092.07	.65	.51
	Race/ethnicity ^a					
	Black	.40*	.16	795.20	2.48	.01
	Hispanic	.13	.16	1095.36	.84	.40
	Asian	.17	.16	1129.14	1.03	.30
	White	.06	.15	929.11	.41	.69
	Mixed (2 or more)	-.02	.17	1150.62	-.13	.90
	In intervention group	-.11 [†]	.05	27.54	-2.05	.05
	Intervene directly (A5c)	Intercept	3.24***	.61	371.91	5.35
Gender (1 = male, 0 = female)		-.19***	.05	1101.28	-4.07	<.001
Age in years		-.001	.04	318.26	-.02	.98
Perceived bullying prevalence (A4)		-.08**	.03	1031.41	-2.85	.005
Parental education level		.04 [†]	.02	769.14	1.72	.09
First language is English		.11 [†]	.06	1135.77	1.74	.08
Race/ethnicity ^a						
Black		-.13	.15	937.98	-.86	.39
Hispanic		.06	.14	1141.96	.42	.68
Asian		-.06	.15	1155.05	-.43	.67

	White	-.12	.14	1050.26	-.88	.38
	Mixed (2 or more)	-.08	.15	1161.77	-.50	.62
	In intervention group	-.003	.05	41.41	-.05	.96
Perpetrate (A5d)	Intercept	1.42**	.41	470.25	3.47	.001
	Gender (1 = male, 0 = female)	.23***	.03	1136.77	7.43	<.001
	Age in years	-.02	.02	408.50	-.91	.36
	Perceived bullying prevalence (A4)	.08***	.02	1079.01	4.14	<.001
	Parental education level	-.03*	.01	879.86	-2.07	.04
	First language is English	.03	.04	1156.46	.65	.52
	Race/ethnicity ^a					
	Black	.01	.10	1006.77	.14	.89
	Hispanic	-.02	.09	1161.70	-.17	.86
	Asian	-.08	.10	1166.55	-.83	.41
	White	-.12	.09	1107/08	-1.32	.19
	Mixed (2 or more)	-.04	.10	1168.95	-.43	.67
	In intervention group	.004	.04	46.80	.10	.92

^aRace/ethnicity coded as a series of dummy variables, with “Other” used as the reference group.
[†] $p < .10$, * $p < .05$, ** $p < .01$, *** $p < .001$ (two-tailed)

When the same set of control variables was added as in Model 2, the results did not change, as shown in Table 7. Both being male and perceiving more frequent bullying at school continued to negatively predict positive action choice ratings and positively predict negative action choice ratings.

Model 5: Prediction by both socio-moral reasoning endorsement and personal/contextual factors. For this set of full models predicting each action choice rating, all major predictors were entered together—including moral and conventional reasoning endorsements, gender, and perceived bullying prevalence—but excluding age, since it did not prove to be significant in any of the preceding models. Of the control variables, only those which showed a significant effect in at least one the previous models (Models 2 and/or 4) were included in Model 5.

Table 8

Multilevel Linear Regression Model 5: Prediction of Action Choice Ratings by Socio-moral Reasoning Endorsement, Personal/Contextual Factors, and Significant Control Variables

Outcome	Parameter	Coeff.	SE	df	<i>t</i>	Sig. (<i>p</i>)
Intervene indirectly (A5a)	Intercept	2.65***	.13	1013.59	20.72	<.001
	Endorsement of moral reasoning (A2a)	-.02	.02	1304.46	-1.11	.27
	Endorsement of conventional reasoning (A2b)	.22***	.03	1305.90	8.35	<.001
	Gender (1 = male, 0 = female)	-.38***	.05	1302.93	-8.38	<.001
	Perceived bullying prevalence (A4)	-.08**	.03	1259.65	-2.98	.003
	First language is English	-.08	.05	795.32	-1.52	.13
Bystand (A5b)	Intercept	2.05***	.13	1000.33	15.69	<.001
	Endorsement of moral reasoning (A2a)	-.08**	.02	1216.51	-3.35	.001
	Endorsement of conventional reasoning (A2b)	.01	.03	1265.80	.36	.72
	Gender (1 = male, 0 = female)	.20***	.05	1138.17	4.04	<.001
	Perceived bullying prevalence (A4)	.13***	.03	977.13	4.55	<.001
	Race/ethnicity = Black	.28***	.07	247.06	3.81	<.001
Intervene directly (A5c)	Intercept	3.08***	.12	1095.52	26.74	<.001
	Endorsement of moral reasoning (A2a)	.07***	.02	1248.75	3.55	<.001
	Endorsement of conventional reasoning (A2b)	.04	.03	1280.34	1.46	.14
	Gender (1 = male, 0 = female)	-.18***	.04	1217.93	-4.16	<.001
	Perceived bullying prevalence (A4)	-.09***	.03	1077.94	-3.53	<.001
Perpetrate (A5d)	Intercept	1.16***	.09	909.21	13.51	<.001
	Endorsement of moral reasoning (A2a)	-.02	.01	1278.35	-1.49	.14

Endorsement of conventional reasoning (A2b)	-.02	.02	1275.96	-1.06	.29
Gender (1 = male, 0 = female)	.21***	.03	1260.92	7.32	<.001
Perceived bullying prevalence (A4)	.07***	.02	1195.75	3.80	<.001
Parental education level	-.03*	.01	404.35	-2.38	.02

* $p < .05$, ** $p < .01$, *** $p < .001$ (two-tailed)

As shown in Table 8, the patterns of significance in Model 5 did not change from those in Models 2 and 4, for the most part. Endorsement of moral reasoning still positively predicted direct intervention ratings and negatively predicted bystanding (though the negative relationship with perpetrating was reduced to nonsignificance); endorsement of conventional reasoning still only predicted indirect intervention (positively); and both male gender and greater perception of bullying at school positively predicted ratings of negative action choices and negatively predicted ratings of positive action choices. The control variable effects that remained significant in this model included that selecting Black (vs. all other race/ethnicity categories) related positively to ratings of bystanding and that parental education level related negatively to ratings of perpetrating.

Model 6: Adding interaction terms. To test for any interaction effects between the reasoning variables and the personal/contextual factors in the prediction of action choice ratings—or, in other words, to determine if one or more of the factors functioned as moderators of the relationship between reasoning and action choices—interaction terms were added to Model 5. More specifically, the significant predictors from Model 5 for each outcome (action choice rating) were retained, and four interaction terms were added to each analysis: gender (Male) x moral reasoning endorsement (A2a), gender (Male) x conventional reasoning endorsement (A2b), perceived bullying prevalence (A4) x moral reasoning endorsement (A2a), and perceived bullying prevalence (A4) x conventional reasoning endorsement (A2b). Interaction terms were not created for age, as, again, it did not show any significant relationships in any of the preceding analyses.

None of the interaction terms for any of the outcomes turned out to be significant, except for one: in the prediction of ratings for perpetrating as an action choice (A5d), the interaction between endorsement of conventional reasoning (A2b) and perceived bullying prevalence (A4) was significant at the .05 level. The results for the analysis for ratings of perpetrating as an action choice are shown in Table 9 below.

Table 9

Multilevel Linear Regression Model 6: Addition of Interaction Terms (Perpetration Outcome Only)

Outcome	Parameter	Coeff.	SE	df	t	Sig. (p)
	Intercept	.89***	.19	1264.32	4.57	<.001

Perpetrate (A5d)	Endorsement of moral reasoning (A2a)	-.04	.04	1277.92	-.81	.42
	Endorsement of conventional reasoning (A2b)	.09 [†]	.05	1277.96	1.75	.08
	Gender (1 = male, 0 = female)	.19	.13	1275.09	1.44	.15
	Perceived bullying prevalence (A4)	.19*	.07	1274.19	2.59	.01
	Parental education level	-.03*	.01	397.03	-2.35	.02
	Male*A2a	.03	.03	1277.13	.89	.37
	Male*A2b	-.01	.03	1273.88	-.42	.67
	A4*A2a	.001	.02	1277.99	.07	.95
	A4*A2b	-.04*	.02	1273.67	-2.20	.03

[†] $p < .10$, * $p < .05$, *** $p < .001$ (two-tailed)

The negative value of the coefficient of the significant interaction term (A4*A2b) indicates that perceived frequency of bullying changed the relationship between endorsement of conventional reasoning and rating of perpetration as an action choice. Another way to say this is that the slope of the relationship between conventional reasoning endorsement and rating of perpetration changed at different levels of perceived bullying prevalence. Participants who perceived smaller amounts of bullying going on at their schools tended to be increasingly approving of perpetration the more they endorsed conventional reasoning, whereas participants who perceived a lot of bullying going on tended to select lower ratings of perpetration as an action choice the more they endorsed conventional reasoning. A different way to express this result would be that, when participants did not consider the conventional reason to be a good explanation for why bullying is bad, the amount of bullying they perceived made a difference in their approval of joining in the bullying (with more perceived bullying associated with greater approval), but when they did consider the conventional reason to be a good one, the amount of perceived bullying did not make as much difference to their approval of joining in. Figure 1 illustrates this change in slopes of the relationship between endorsement of conventional reasoning (SitA2b) and predicted values of the rating of perpetration (A5d) at different levels of perceived bullying prevalence (SitA4).

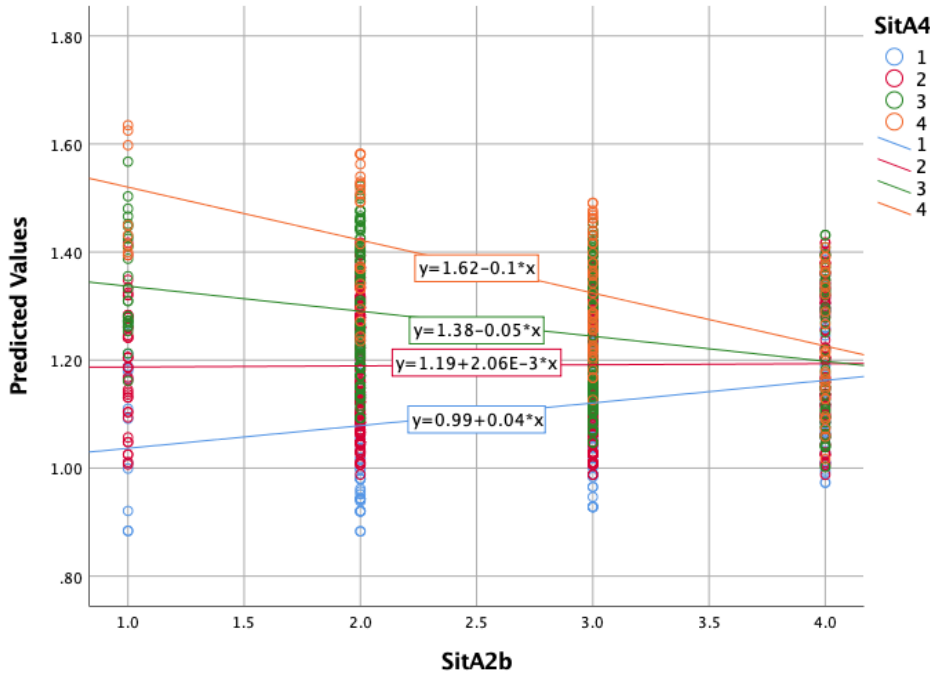


Figure 6. Moderation effect of perceived bullying prevalence on relationship between conventional reasoning and rating of perpetration.

Logistic regression analyses. To gain a slightly different perspective into students' decision-making around the hypothetical bullying situation, logistic regression analyses were conducted to examine the effects of the major study variables (moral and conventional reasoning, gender, age, and perceived bullying prevalence) on the likelihood of a participant selecting each action choice as the "best" choice, i.e., the one they would be most likely to take if they were in the situation themselves.

Table 10

Logistic Regression: Prediction of Selection of Each Action Choice as "Best" Choice

Outcome	Parameter	Coeff. (B)	SE	Wald	Sig. (p)	Exp(B)
Intervene indirectly chosen as best (A6a)	Endorsement of moral reasoning (A2a)	-.24***	.07	13.60	<.001	.79
	Endorsement of conventional reasoning (A2b)	.35***	.08	17.18	<.001	1.41
	Gender (1 = male, 0 = female)	-.63***	.14	19.40	<.001	.53
	Age in years	.12	.10	1.39	.24	1.13

	Perceived bullying prevalence (A4)	-.28**	.08	11.74	.001	.75
	Constant	-2.57	1.69	2.32	.13	.08
Bystand chosen as best (A6b)	Endorsement of moral reasoning (A2a)	-.12†	.07	3.18	.07	.89
	Endorsement of conventional reasoning (A2b)	-.04	.08	.22	.64	.96
	Gender (1 = male, 0 = female)	.58***	.13	18.89	<.001	1.78
	Age in years	.02	.10	.03	.88	1.02
	Perceived bullying prevalence (A4)	.27**	.08	11.49	.001	1.31
	Constant	-1.88	1.63	1.33	.25	.15
Intervene directly chosen as best (A6c)	Endorsement of moral reasoning (A2a)	.25***	.06	19.46	<.001	1.29
	Endorsement of conventional reasoning (A2b)	-.21**	.07	9.16	.002	.81
	Gender (1 = male, 0 = female)	-.14	.12	1.38	.24	.87
	Age in years	-.14	.09	2.48	.12	.87
	Perceived bullying prevalence (A4)	-.07	.07	.95	.33	.94
	Constant	2.28	1.42	2.57	.11	9.73
Perpetrate chosen as best (A6d)	Endorsement of moral reasoning (A2a)	.08	.19	.17	.68	1.08
	Endorsement of conventional reasoning (A2b)	-.13	.22	.36	.55	.88
	Gender (1 = male, 0 = female)	1.37***	.42	10.79	.001	3.93
	Age in years	.31	.27	1.30	.26	1.37
	Perceived bullying prevalence (A4)	.64**	.22	8.71	.003	1.89
	Constant	-10.92*	4.47	5.97	.02	<.001

† $p < .10$, * $p < .05$, ** $p < .01$, *** $p < .001$ (two-tailed)

The results of the logistic regressions, as shown in Table 10 above, are similar to the analogous results from the linear regression analyses with the action choice ratings, but with a few differences. For indirect intervention as the outcome choice (A5a), the overall model was significant, $\chi^2(5) = 61.15, p < .001$. The model explained 7.0% (Nagelkerke R^2) of the variance in choosing indirect intervention and correctly classified 76.6% of cases. The likelihood of choosing indirect intervention as the best choice was significantly positively associated with greater endorsement of conventional reasoning and negatively associated with endorsement of moral reasoning, as well as with male gender and perceived bullying prevalence. Choosing direct intervention (A5c) as best showed an opposite pattern in terms of socio-moral reasoning, with endorsement of moral reasoning predicting higher odds and endorsement of conventional reasoning predicting lower odds of this choice, but gender and perceived bullying prevalence were not significant predictors. The overall model with direct intervention as the outcome was significant, $\chi^2(5) = 33.92, p < .001$. The model explained 3.7% (Nagelkerke R^2) of the variance in choosing the option to directly intervene and correctly classified 58.1% of cases.

Interestingly, in the logistic regression analyses, neither of the reasoning variables were significantly related to the likelihood of choosing either negative action (bystanding or joining in) as the best choice, but both male participants and those who perceived more bullying at school had significantly higher odds of selecting both of the negative action choices as what they would most likely do. The model for choosing bystanding (A5b) was significant, $\chi^2(5) = 37.30, p < .001$. The model explained 4.3% (Nagelkerke R^2) of the variance in choosing bystanding and correctly classified 75.9% of cases. For the outcome of perpetration, the model was also significant, $\chi^2(5) = 24.55, p < .001$. The model explained 9.1% (Nagelkerke R^2) of the variance in choosing to join in and correctly classified 97.5% of cases.

3.3 RQ 2: Analyses of Free-Response Explanations of Action Choices Using a Social Domain Theory Lens

The aim of the second research question of this study was to explore the free-response textual explanations that a subset of participants ($n = 574$, or 40.94% of the total sample size) provided when given the opportunity to describe why they chose whichever action choice they selected as the one they would most likely take if they were to witness the bullying situation themselves. This open-ended question (“Please explain why”) was asked at the end of the CICM-Situation A survey, with a few lines provided for participants to write a brief response if they chose.

Of the 574 textual responses, the minimum response length was 7 characters (“Because”), the maximum length was 275 characters (“I know what it is like to be teased. I’m afraid to be teased again or for people dislike me. It all depends on the situation though. If the kid was my friend I would help him. It is hard to stand up for someone that isn’t your friend, even if it is the right thing to do.”), and the mean length was 87 characters (e.g., “I would go and tell the other student to stop because that is not right for the new kid,” along with several others) with a standard deviation of 40 characters.

Coding for considerations. Following the analysis plan, the textual data from the free-response question was subjected to three rounds of coding. In the first round, none of the responses were marked as uncodable, confirming that the subset contained only

participants who did provide responses to the question (A7). In the second round, responses were coded for the presence or absence of considerations relating to each of the four SDT domains: moral, conventional, personal, and prudential. In the third round, responses were coded for the presence or absence of relational and emotional considerations. (See Appendix C for the details of the coding guidelines that were employed.)

Interrater reliability. After finalizing the coding guidelines, I trained a second coder, who then coded approximately 21% of the responses ($n = 115$) in order to determine the interrater reliability of the coding system. I compared the second coder's codes to my own codes for those 115 responses using Cohen's *kappa* statistic, obtaining a value of $\kappa = .87$. A Cohen's *kappa* value of at least .80 is considered a standard indicating good interrater reliability (Hallgren, 2012). To resolve coding disagreements where our codes differed from each other, the second coder and I discussed and decided together on the final code(s) to be recorded for the responses in question.

Frequencies of considerations cited. In total, moral considerations were cited 228 times (meaning that moral reasons were cited in 39.6% of responses), conventional considerations were cited 91 times (in 15.8% of responses), personal considerations were cited 103 times (in 17.9% of responses), and prudential considerations were cited 121 times (in 21.0% of responses). Besides the SDT domains, relational considerations were cited 37 times (in 6.4% of responses) and emotional considerations were cited 20 times (in 3.5% of responses).

These frequencies add up to more than 574 due to the fact that some participants cited considerations from more than a single category in their responses. Specifically, 487 responses (84.8%) contained considerations from only one SDT domain and 28 (4.9%) contained considerations from two SDT domains, plus 59 responses (10.3%) that cited no SDT domains. With the relational and emotional considerations included, 474 responses (82.6%) referred to one category of consideration total, 60 responses (10.5%) referred to two categories, 2 responses (0.3%) referred to three categories, and 38 responses (6.6%) did not contain any of the focal categories of consideration. Spearman correlations revealed that both the number of domains cited ($\rho = .18, p < .001$) and the number of total categories cited ($\rho = .28, p < .001$) were significantly correlated with response length. Additionally, though speaking English as a first language was not significantly associated with response length or number of total categories cited, it was actually negatively correlated with number of SDT domains cited ($\rho = -.09, p = .03$). Table 11 displays how many responses cited each consideration alone as well as in combination with each other consideration.

Table 11

Counts and Percentages of Responses Citing Each Consideration Alone and in Each Combination

Consideration	Moral	Conventional	Personal	Prudential	Relational	Emotional
Moral	193 (84.65%)	10 (10.99%)	6 (5.83%)	7 (5.79%)	6 (16.22%)	6 (30%)

Conventional	10 (4.39%)	73 (80.22%)	0 (0%)	4 (3.31%)	4 (10.81%)	0 (0%)
Personal	6 (2.63%)	0 (0%)	83 (80.58%)	1 (0.83%)	8 (21.62%)	5 (25%)
Prudential	7 (3.07%)	4 (4.40%)	1 (0.97%)	102 (84.30%)	5 (13.51%)	2 (10%)
Relational	6 (2.63%)	4 (4.40%)	8 (7.77%)	5 (4.13%)	12 (32.43%)	2 (10%)
Emotional	6 (2.63%)	0 (0%)	5 (4.85%)	2 (1.65%)	2 (5.41%)	5 (25%)
Total	228	91	103	121	37	20

Note: The percentages in parentheses represent the percentage of the total number of citations for the consideration (by column) that were cited in each combination. The numbers on the diagonal represent how many responses, out of all the responses that cited a consideration, cited only that one consideration.

The moral domain was the domain invoked most frequently, followed by prudential, personal, and then conventional, with relational and emotional considerations mentioned much less frequently. It is also apparent from Table 11 that the vast majority of the citations for each domain-related consideration were solitary citations (all > 80%). In other words, most of the time, participants only cited one SDT domain in their brief free-response explanations. Relational and emotional considerations, on the other hand, were less often cited as the sole consideration; they appeared more often alongside other considerations.

Examples of each code and combination. This section provides examples of student responses that were coded with each different consideration, alone and in each combination. Responses that were coded as only containing considerations from only one SDT domain will be discussed first, followed by examples of responses that cited various combinations of domain-based considerations. Lastly, examples of the two non-SDT categories of consideration, relational and emotional, will be presented.

Responses that referred to concerns about harm and welfare—physical and/or psychological—of the target or others (not the participant themselves), or to fairness/justice, rights, etc. were coded as containing a *moral* consideration. Examples of responses containing moral considerations included, “It’s not fair that the new kid is being made fun of,” “Teasing turns school into a horrible place for them, and no one deserves that,” and “I would tell the kids that it is not nice to make fun of it and it really is hurting the kid’s feelings.” Several participants used language that was somewhat vague, but that clearly referred to a sense of universal, inherent rightness vs. wrongness—and thus to the moral domain—such as, “Because I think that it’s wrong to make fun of someone just because of the way they look or because of where they are from,” or “I would do this because it is not cool to make fun of someone and where they are from.” (Though the word “cool” could refer to social approval, which would potentially be in the conventional

domain, some responses that used “not cool” clearly seemed to mean it in the sense of “not OK” in a moral way.) Another subtype of consideration coded as moral could be referred to as empathy-based reasoning, in that participants extended their own feelings to those of others as equal human beings. These Golden Rule-following participants stated that they, or the bullies, would not like to be treated the way the target was treated, and therefore it was wrong to treat someone like that, such as, “Because it isn't right to judge anyone you don't know and if it was you, you wouldn't like to be treated that way,” or “I don't like being teased and so I imagine the boy doesn't either so I'd try and stop it.” A final example that contains at least two different types of moral consideration was, “Why, because they are making the boy feel bad. And with me having family that came to the US recently they shouldn't deserve to be treated like that” (referring to both psychological harm and empathy-based reasoning).

Responses were coded as containing a *conventional* consideration if they referred to the structure and/or function of social groups, the social role or authority of certain figures, external rules or punishments intended to maintain order, and other such concerns. Representative examples included the following: “The teacher has more authority, and he or she would know how to solve this problem,” “Because hopefully they [teachers] tell the kids who are doing the bullying to stop and punish them somehow,” and “I would tell them [the perpetrators] to stop and warn them if they don't I would go to a teacher. Usually if they will get in trouble, they will stop.” Like these examples, most responses coded as conventional talked about teachers as knowing what to do and being more able to handle the situation due to their social role and power. A few other responses contained a different type of conventional consideration, in which students seemed concerned with a social convention that it is not desirable to be a tattletale or snitch, i.e., someone who tells an authority figure about a peer's wrongdoing. Two examples of this were, “because someone should tell them that and not ‘tattle’ on them” (explaining why it would be best to confront the bullies) and “So the teacher can solve it and let the student get away from it so the other students wouldn't think he or she snitch” (explaining why it would be best to tell a teacher).

Responses that referenced issues of individuality, personal preference, and privacy—issues that participants seemed to feel, should not be governed by either moral or social-conventional rules—were coded as containing considerations from the *personal* domain. Many examples in this category involved participants stating that the situation was none of their business and/or implying that becoming involved should be a matter of personal choice (i.e., not a moral or social obligation), such as, “Because I don't like getting in people's business,” “I'm not generally one to meddle in what someone else is doing. I like to mind my own business,” and “Because I don't like getting into drama.” Others referred to their own personal qualities as justifications for their choice of action, such as, “I'm a shy person and I don't like to get into situations that don't involve me. I usually just move on,” “Because I'm outspoken like that,” or “I'm a very confrontational person. If someone has a problem, say it to my face.”

The *prudential* domain category included references to the participant's own safety/welfare or other practical concerns (for the participant themselves). Most of the participants whose responses contained prudential considerations appeared to be worried about getting teased, hurt, or in trouble if they were to intervene, e.g., “Because sometimes when you get involved you could get hurt yourself,” “I would stay out of it because the

students doing the teasing would most likely start to tease me instead,” “By staying out of the situation, I avoid making enemies with the students and keep them from focusing their negativity towards me in retaliation,” or, simply, “I don’t want to get in trouble.” A few other responses seemed to focus less on personal safety and more on practicality, in terms of the probable effects of potential efforts they could make, such as, “It [confronting them] is the easiest way and it will probably work better than telling the teacher on them,” or, on the more cynical side, “I chose b [to stay out of it], because most of the time and in reality you can’t save everyone.”

Even with such short responses, a number of participants cited considerations from more than one SDT domain. For instance, the following response cited considerations relating to both punishment (conventional) and the psychological welfare of the target (moral): “If I tell a teacher about what’s going on, the boys will be disciplined, and hopefully the new boy would feel comfortable enough and not keep to himself anymore.” An example response that cited both moral (referring to harm) and personal (referring to personal preference) considerations was, “I do not like getting in other people’s problems. I would only help if it was hurting someone physically.” A sample response combining moral and prudential concerns was, “I would not want to get myself in the situation and get hurt, but I wouldn’t want him to get hurt either, so I’d tell a teacher.” No responses were coded as containing both conventional and personal considerations, but one that was coded as both conventional and prudential was, “It should be taken into adult hands and others may not want to put themselves in risk,” as it referred to both the conventional role of adults and the safety concerns of witnesses like the participant. Finally, only one response seemed to clearly cite both personal and prudential concerns, namely, “I normally don’t like bullying people and I prefer to stay out so that they won’t try to bully me.” In addition to voicing concern for their own safety, this participant argued against bullying not because it is harmful or against social rules, but because they “normally don’t like” to do it.

One of the two non-SDT categories that was coded for was *relational* considerations, when participants referred to their relationships (or lack thereof) with the target and/or bullies as an action choice justification in itself, separate from any moral, conventional, personal, or prudential concerns. Though the majority of relational considerations were cited together with SDT considerations, sometimes they were cited alone without explicit reference to any of the domains, as in, “If I know the kids bullying the boy I would say something but otherwise I wouldn’t,” or “I would just leave it alone cause it aint me or my friend or family.” These and several other responses coded as containing relational considerations appeared to indicate that the participant would act differently depending on whether they had an interpersonal relationship with the involved parties or not, implying that different standards would apply. There were also a few responses that cited both relational and other considerations. “Why would I take precautions if I didn’t know him? Why should I get involved and create enemies” and “Because I don’t want the people teasing the boy to start tease me. If they were my friends, though, I would stick up for the other kid” both combined relational and prudential, though the first example referenced relation to the target, while the second example referenced relation to the perpetrators. An example of the combination of relational and personal (referring to personal choice/discretion) was, “Because I don’t want to get involved with it. I probably don’t even know the student who’s being teased. If it was one of my friends, then I would stand up for them.” One response that was coded as both relational and conventional was the following:

“Sometimes depending on who the person is I will help out but most of the time not worry because some students need it”; though the referent of “it” was not clear, this response was coded as containing a conventional consideration because the idea seemed to be that some students “need” either help (possibly due to power differentials) or teasing (possibly in order to fit in), both of which have to do with the functioning of the social system of the school. Lastly, an example of the combination of relational and moral was, “I picked [direct intervention] because if they are your real friends they should respect that you are standing up for another person.” In addition to the relational consideration, this response was coded as citing a moral consideration because it referred to a sense of being owed respect, particularly for trying to protect another person.

The final category of interest was *emotional* considerations, conceptualized as occurring when participants mentioned their own emotional reactions, or those of generic others, as reasons in themselves to explain their intended action choice. The emotional category was the least-cited overall of the six categories of interest, and three quarters of all coded emotional considerations were cited alongside other categories of consideration, making this the category least often cited alone. The handful of responses that cited emotional considerations alone included, “The teasing of the boy would make me mad and I’d go over and tell them that,” “Even though its not the best choice, I would be scared to do anything about it,” and “I would want to say something but I wouldn’t be brave enough to say anything.” Responses citing both emotional and other considerations included: “Unfortunately, I probably would be too scared to interfere, unless I knew the people who were picking on” (emotional and relational); “Well I would say that I believe in human rights, but I might not have the courage to help. Fear can often be a big factor” (emotional and moral); “I can’t stand jerks so I would tell them to stop. It really frustrates me when people are rude” (emotional and personal); and “Because it would make me feel bad probably for a long time if I never said anything” (emotional and prudential, referring to the participant’s own emotional well-being).

Considerations cited by action choice selected. To get an idea of how the considerations cited by participants in their free-response explanations (A7) related to their answers to the previous question that set up the explanation—namely, the question asking them to choose which one of the four provided action choices they would be most likely to take (A6)—whether participants cited each consideration was cross-tabulated by which action choice was selected. Table 12 below shows how many participants cited each consideration by which action choice they selected.

Table 12

Number and Percentage of Participants Who Cited Each Consideration, by Action Choice Selected

Action choice selected	Moral cited	Convention-al cited	Personal cited	Prudential cited	Relational cited	Emotional cited	Total
Indirect intervention (A6a)	38 (29.23%)	65 (50.00%)	4 (3.08%)	33 (25.38%)	2 (1.54%)	1 (0.77%)	130

Bystanding (A6b)	8 (5.26%)	2 (1.22%)	66 (43.42%)	71 (46.71%)	13 (8.55%)	5 (3.29%)	152
Direct intervention (A6c)	180 (63.83%)	21 (7.45%)	29 (10.28%)	16 (5.67%)	21 (7.45%)	14 (4.96%)	282
Perpetrating (A6d)	2 (20%)	3 (30%)	4 (40%)	1 (10%)	1 (10%)	0 (0%)	10

Note: Some participants cited more than one consideration; here, each consideration cited is counted separately. Percentages in parentheses represent the percentage who cited each consideration out of the total number of participants who selected that action choice.

Looking at Table 12, it can be seen that participants who selected indirect intervention as their most likely action cited conventional considerations most often, about half the time, followed by moral and prudential considerations. Participants who chose bystanding mostly cited personal and/or prudential considerations, while the majority of those who chose direct intervention cited moral considerations. Few participants, especially out of the subsample who provided free response explanations, selected perpetrating, but of those who did ($n = 10$), the largest number of considerations cited were personal, followed by conventional.

Relations of considerations cited to means/categories of major study variables. A series of independent samples *t*-tests were conducted to compare mean numerical ratings on certain variables of interest between participants who cited each category in their free-response explanation (A7) and those who did not cite the category. For each category of consideration (moral, conventional, personal, prudential, relational, emotional), the variables compared using *t*-tests included endorsement of moral reasoning (A2a), endorsement of conventional reasoning (A2b), age, perceived bullying prevalence (A4), rating of indirect intervention (A5a), rating of bystanding (A5b), rating of direct intervention (A5c), and rating of perpetration (A5d). Table 13 presents only the statistically significant (or marginal) results for each consideration, each of which indicates that there was a significant difference in the mean of the variable between those who cited a given consideration in their response and those who did not.

In addition, chi-square tests of independence were conducted to determine whether there was a significant relationship between whether a category of consideration was cited and categorical variables of interest, including gender, whether indirect intervention was chosen (as the “best,” i.e., most likely, choice they would take; A6a), whether bystanding was chosen (A6b), whether direct intervention was chosen (A6c), and whether perpetrating was chosen (A6d). In Table 14, statistically significant (or marginal) results for each consideration are presented, each of which provides evidence of an association between the categorical variable and whether a given consideration was cited or not.

Table 13

t-tests for Differences in Means of Study Variables by Whether Each Consideration Was Cited in Free-Response Explanation

Consideration	Variable	<i>t</i>	df	Sig. (<i>p</i>)	Mean diff.	SE diff.	<i>g</i> ^a
Moral	Age in years	-2.44*	566	.02	-.14	.06	.21
	Perceived bullying prevalence (A4)	-2.02*	566	.04	-.14	.07	.18
	Rating of bystanding (A5b)	-5.95***	486.21	<.001	-.45	.08	.51
	Rating of direct intervention (A5c)	7.19***	566	<.001	.48	.07	.61
Conventional	Conven. reasoning endorsement (A2b)	2.20*	136.12	.03	.20	.09	.24
	Rating of indirect intervention (A5a)	5.63***	149.91	<.001	.46	.08	.55
	Rating of bystanding (A5b)	-2.49*	137.69	.01	-.24	.10	.26
	Rating of direct intervention (A5c)	-1.85 [†]	566	.06	-.17	.09	.21
Personal	Rating of indirect intervention (A5a)	-3.91***	141.90	<.001	-.37	.10	.45
	Rating of bystanding (A5b)	5.39***	569	<.001	.52	.10	.58
	Rating of direct intervention (A5c)	-4.05***	566	<.001	-.35	.09	.44
	Rating of perpetrating (A5d)	3.23**	118.06	.002	.24	.07	.20
Prudential	Perceived bullying prevalence (A4)	2.72**	566	.007	.22	.08	.28
	Rating of bystanding (A5b)	4.25***	569	<.001	.39	.09	.43
	Rating of direct intervention (A5c)	-5.16***	566	<.001	-.42	.08	.53
Relational	Endorsement of moral reasoning (A2a)	2.00 [†]	42.78	.05	.31	.15	.30

Emotional	Endorsement of moral reasoning (A2a)	2.06 [†]	21.40	.05	.38	.18	.36
	Age in years	1.82 [†]	566	.07	.28	.15	.42

Note: Levene's test for equality of variances was used to determine whether equal variances could be assumed between the two means for each variable. If equal variances could not be assumed (as indicated by a low *p* value of Levene's test), Welch *t* Test statistics are reported.

^a Hedges' *g* is a measure of effect size similar to Cohen's *d*, but corrected for when sample sizes differ between groups; a general rule of thumb is that .2 is considered small in magnitude, .5 is medium, and .8 is large (Cohen, 1988).

[†]*p* < .10, **p* < .05, ***p* < .01, ****p* < .001 (two-tailed)

Table 14

Chi-Square Tests of Independence Between Categorical Study Variables and Whether Each Consideration Was Cited in Free-Response Explanation

Consideration	Variable	<i>df</i>	<i>N</i>	χ^2	Sig. (<i>p</i>)	Greater ^a	φ^b
Moral	Gender (1 = male, 0 = female)	1	574	6.10*	.01	0	.10
	Indirect intervention chosen (A6a; 1 = yes, 0 = no)	1	574	7.73**	.005	0	.12
	Bystanding chosen (A6b; 1 = yes, 0 = no)	1	574	102.53***	<.001	0	.42
	Direct intervention chosen (A6c; 1 = yes, 0 = no)	1	574	134.57***	<.001	1	.48
Conventional	Indirect intervention chosen (A6a; 1 = yes, 0 = no)	1	574	146.89***	<.001	1	.51
	Bystanding chosen (A6b)	1	574	32.76***	<.001	0	.24
	Direct intervention chosen (A6c; 1 = yes, 0 = no)	1	574	29.39***	<.001	0	.23
Personal	Gender (1 = male, 0 = female)	1	574	3.12 [†]	.08	1	.07
	Indirect intervention chosen (A6a; 1 = yes, 0 = no)	1	574	25.23***	<.001	0	.21
	Bystanding chosen (A6b)	1	574	91.14***	<.001	1	.40
	Direct intervention chosen (A6c; 1 = yes, 0 = no)	1	574	22.09***	<.001	0	.20
Prudential	Bystanding chosen (A6b; 1 = yes, 0 = no)	1	574	81.64***	<.001	1	.38

	Direct intervention chosen (A6c; 1 = yes, 0 = no)	1	574	79.09***	<.001	0	.37
Relational	Indirect intervention chosen (A6a; 1 = yes, 0 = no)	1	574	6.71*	.01	0	.11
Emotional	Indirect intervention chosen (A6a; 1 = yes, 0 = no)	1	574	3.68†	.06	0	.08
	Direct intervention chosen (A6c; 1 = yes, 0 = no)	1	574	3.61†	.06	1	.08

^aThis column indicates at which value of the categorical variable (1 or 0) the proportion who cited the consideration was significantly greater, as determined from crosstabulation tables.

^b ϕ (phi) is a measure of effect size for chi-square tests, for which, generally, .1 is considered a small effect size, .3 is medium, and .5 is large (Cohen, 1988).

† $p < .10$, * $p < .05$, ** $p < .01$, *** $p < .001$ (two-tailed)

Participants who cited moral considerations in their explanations, as compared to those who did not, were younger, more likely to be female, and perceived less bullying at their school. They did not differ in reasoning endorsement, but rated direct intervention more highly and rated indirect intervention and bystanding less highly; correspondingly, they were more likely to choose direct intervention as their most likely action choice, and less likely to choose indirect intervention or bystanding.

Participants who cited conventional considerations scored higher on conventional reasoning endorsement compared to those who did not. They also rated indirect intervention as better and both direct intervention (marginally) and bystanding as worse. In parallel to this, they were more likely to choose indirect intervention and less likely to choose either bystanding or direct intervention.

Participants who cited personal considerations were (marginally) more often male, and tended to rate both positive action choices less highly and both negative action choices more highly; likewise, they more often chose bystanding and less often chose direct or indirect intervention.

Compared to others, participants who cited prudential considerations perceived greater prevalence of bullying at their schools. They were more approving of bystanding and were more likely to choose it; on the other hand, they were less approving of direct intervention and less likely to select it as their “best” action choice.

If participants cited relational considerations, they tended to score marginally higher on endorsement of moral reasoning and were significantly less likely to select the action choice of indirect intervention.

Finally, participants who mentioned emotional considerations, compared to those who did not, were marginally older, marginally more endorsing of moral reasoning, and marginally more likely to choose direct intervention, as well as marginally less likely to choose indirect intervention.

3.4 RQ 3: Relation of Social Perspective-Taking Competence to Socio-moral Reasoning and Action Choices

The third research question involved the relationships between participants' social perspective-taking (SPT) competence—as measured by the Interpersonal Management subscale of the RelQ-A (SPT-IM)—and their moral reasoning and action choices expressed in response to the hypothetical bullying situation. First, multilevel linear regression was conducted to determine which variables were significant predictors of SPT-IM score. Then, to test for mediation, regression-based mediation analyses were conducted with the PROCESS macro for SPSS, v. 3.3 (Hayes, 2017), which uses bootstrapping to determine the significance of indirect effects.

Prediction of SPT-IM score. Before testing the direct and indirect effects of the predictor and covariates on the ultimate outcome variable (action choice ratings, in this case), mediation analyses must first test the effects of the predictor and covariates on the mediator variable (SPT-IM score, in this case) as the intermediate outcome. The PROCESS macro does include this step in each analysis, but in order to use multilevel modeling (to account for the clustering of students in schools) and to see which covariates show significant relationships with SPT-IM score and should be included the mediation model, a separate multilevel linear regression model was run first. This model included all the major variables as predictors (moral reasoning endorsement, conventional reasoning endorsement, gender, age, and perceived bullying prevalence), plus all the sociodemographic control variables (parental education level, first language, race/ethnicity dummy variables, and intervention condition). Results are shown below in Table 15.

Table 15

Multilevel Linear Regression: Prediction of SPT-IM Score by Socio-moral Reasoning, Personal/Contextual Factors, and Control Variables

Outcome	Parameter	Coeff.	SE	df	<i>t</i>	Sig. (<i>p</i>)
Social perspective-taking competence (SPT-IM)	Intercept	2.83***	.28	709.93	10.04	<.001
	Endorsement of moral reasoning (A2a)	.05***	.01	1157.75	5.37	<.001
	Endorsement of conventional reasoning (A2b)	.01	.01	1157.35	1.26	.21
	Gender (1 = male, 0 = female)	-.17***	.02	1157.88	-8.25	<.001
	Age in years	.01	.02	630.14	.81	.42
	Perceived bullying prevalence (A4)	-.01	.01	1136.88	-.78	.44
	Parental education level	.02*	.01	1033.55	2.09	.04

First language is English	.02	.03	1158.00	.82	.41
Race/ethnicity ^a					
Black	-.03	.07	1085.59	-.39	.69
Hispanic	.04	.06	1157.21	.74	.46
Asian	.06	.06	1153.99	.98	.33
White	.01	.06	1150.72	.12	.91
Mixed (2 or more)	-.05	.07	1149.42	-.74	.46
In intervention group	-.02	.03	46.88	-.81	.42

^aRace/ethnicity coded as a series of dummy variables, with “Other” used as the reference group.
* $p < .05$, *** $p < .001$ (two-tailed)

Prediction of each action choice rating, mediated by SPT-IM score. Using the PROCESS macro, the mediation analyses tested for direct effects of moral reasoning (and covariates) on ratings of each action choice as well as indirect effects of moral reasoning on ratings of each action choice, mediated through social perspective-taking competence. In addition to the focal independent variable (endorsement of moral reasoning), mediator (SPT-IM score), and dependent variables (action choice ratings), endorsement of conventional reasoning and the factors that proved to be significant in previous analyses—gender, perceived bullying prevalence, and parental education level—were included as covariates. It should be noted that the results of the intermediate regression step included in PROCESS, with SPT-IM score as the dependent variable, closely echoed the results from the multilevel regression above; in fact, though the coefficients were slightly different—and varied slightly between analyses, due to the bootstrapping procedure that PROCESS employs—all of the signs (positive vs. negative) and significance levels of the coefficients were the same between the multilevel linear regression and the regression within PROCESS. Results for each of the four full mediation analyses conducted using the PROCESS macro, one with each action choice rating as a dependent variable in turn, are displayed in Table 16.

Table 16

Mediation Effect of Social Perspective-Taking Competence (SPT-IM) on the Relationships between Moral Reasoning and Each Action Choice Rating

Dependent Variable: Rating of Indirect Intervention (A5a)					
Direct effects	Parameter	Coeff.	SE	<i>t</i>	Sig. (<i>p</i>)
	Constant	1.52***	.25	6.08	<.001
	Endorsement of moral reasoning (A2a)	-.06**	.02	-2.54	.01

	Endorsement of conventional reasoning (A2b)	.20***	.03	7.24	<.001
	Gender (1 = male, 0 = female)	-.33***	.05	-6.91	<.001
	Perceived bullying prevalence (A4)	-.09***	.03	-3.28	<.001
	Parental education level	.003	.02	.15	.88
	Social perspective-taking competence (SPT-IM)	.37***	.07	5.43	<.001

Indirect effects	Parameter	Effect	SE	LLCI ^a	ULCI ^b
	Social perspective-taking competence (SPT-IM)	.02	.006	.010	.032

Dependent Variable: Rating of Bystanding (A5b)

Direct effects	Parameter	Coeff.	SE	<i>t</i>	Sig. (<i>p</i>)
	Constant	3.13***	.28	11.33	<.001
	Endorsement of moral reasoning (A2a)	-.06*	.03	-2.37	.02
	Endorsement of conventional reasoning (A2b)	.03	.03	1.00	.32
	Gender (1 = male, 0 = female)	.13*	.05	2.46	.01
	Perceived bullying prevalence (A4)	.15*	.03	4.94	<.001
	Parental education level	-.01	.02	-.39	.70
	Social perspective-taking competence (SPT-IM)	-.35***	.08	-4.65	<.001

Indirect effects	Parameter	Effect	SE	LLCI ^a	ULCI ^b
	Social perspective-taking competence (SPT-IM)	-.02	.006	-.031	-.009

Dependent Variable: Rating of Direct Intervention (A5c)

Direct effects	Parameter	Coeff.	SE	<i>t</i>	Sig. (<i>p</i>)
	Constant	2.64***	.25	10.76	<.001

	Endorsement of moral reasoning (A2a)	.08***	.02	3.42	<.001
	Endorsement of conventional reasoning (A2b)	.02	.03	.84	.40
	Gender (1 = male, 0 = female)	-.15**	.05	-3.19	.002
	Perceived bullying prevalence (A4)	-.08**	.03	-3.06	.002
	Parental education level	.01	.02	.53	.59
	Social perspective-taking competence (SPT-IM)	.13*	.07	2.04	.04
Indirect effects	Parameter	Effect	SE	LLCI ^a	ULCI ^b
	Social perspective-taking competence (SPT-IM)	.01	.004	-.0002	.016
Dependent Variable: Rating of Perpetration (A5d)					
Direct effects	Parameter	Coeff.	SE	<i>t</i>	Sig. (<i>p</i>)
	Constant	2.20***	.16	13.75	<.001
	Endorsement of moral reasoning (A2a)	.001	.01	.05	.96
	Endorsement of conventional reasoning (A2b)	-.008	.02	-.46	.65
	Gender (1 = male, 0 = female)	.16***	.03	5.35	<.001
	Perceived bullying prevalence (A4)	.06***	.02	3.57	<.001
	Parental education level	-.04**	.01	-3.05	.002
	Social perspective-taking competence (SPT-IM)	-.33***	.04	-7.60	<.001
Indirect effects	Parameter	Effect	SE	LLCI ^a	ULCI ^b
	Social perspective-taking competence (SPT-IM)	-.02	.005	-.028	-.010

^aLLCI = lower limit of 95% confidence interval; ^bULCI = upper limit of 95% confidence interval
p* < .05, ** *p* < .01, **p* < .001 (two-tailed)

For the first mediation analysis, with ratings of indirect intervention (A5a) as the dependent variable, the overall model was significant, $F(6, 1170) = 29.16, p < .001$, and explained about 13% of the variance in the rating of indirect intervention as an action choice. In this model, endorsement of moral reasoning, along with being male and perceiving more bullying happening at school, were related to significantly lower ratings of indirect intervention as an action choice. Endorsement of conventional reasoning was related to significantly higher ratings, and parental education level did not have a significant direct effect. SPT-IM score showed a positive direct effect on ratings of indirect intervention as well as a significant positive indirect effect (between moral reasoning and action choice), as indicated by the 95% confidence interval that did not include zero; this indicates that the effect of moral reasoning on indirect intervention rating was significantly mediated by social perspective-taking competence.

The second mediation analysis used ratings of bystanding (A5b) as the action choice dependent variable. The total model was significant, $F(6, 1171) = 12.94, p < .001$, and explained about 6% of variance in ratings of bystanding. Male participants and those who perceived greater bullying prevalence tended to rate bystanding significantly higher, while endorsement of moral reasoning and SPT-IM score were associated with lower ratings of bystanding. Neither conventional reasoning endorsement nor parental education level had a significant direct effect. The indirect effect of moral reasoning on bystanding through SPT-IM score was significant (negative), meaning that social perspective-taking competence significantly mediated the negative relationship of moral reasoning to ratings of bystanding.

The dependent variable for the third model was ratings of direct intervention as an action choice (A5c). The model was significant, $F(6, 1171) = 8.18$, and explained about 4% of variance. In terms of direct effects on ratings of direct intervention, endorsement of moral reasoning and SPT-IM score had significant positive effects, endorsement of conventional reasoning and parental education level had no effects, and gender (male) and perceived bullying prevalence had significant negative effects. The 95% confidence interval for the indirect effect of moral reasoning through SPT-IM did include zero, indicating that significant mediation by SPT-IM did not occur in relation to direct intervention ratings.

The fourth model, with ratings of perpetrating bullying as the action choice dependent variable (A5d), was significant overall, $F(6, 1173) = 24.27, p < .001$. This model explained about 11% of the variance in ratings of perpetrating. Neither moral nor conventional reasoning showed a significant direct effect on this outcome, but males and those who perceived more bullying at school tended to rate perpetrating more highly, while those with higher SPT-IM scores and more highly-educated parents gave it lower ratings. There was also a significant negative indirect effect of moral reasoning endorsement through SPT-IM. This significant indirect effect, in combination with the nonsignificant direct effect of moral reasoning, implies that any effects of moral reasoning on ratings of perpetrating were at least partially mediated by social perspective-taking competence.

Chapter 4: Conclusion

4.1 Discussion of Results

The main conceptual aim of this dissertation was to explore the relationships among adolescents' socio-moral reasoning, social perspective-taking competence, and intended action choices. In other words, the goal was to understand more about how young people think about right and wrong, to what extent they take others' perspectives into account, and how such thought processes relate to what they say they would do in a morally-relevant situation. These relationships were investigated in the context of a particular type of situation, witnessing the bullying of a classmate, that is commonly encountered by adolescents at school. Other potentially influential factors in this type of situation, such as age, gender, and perceived bullying prevalence, were included in analyses as well. The overall theoretical framework was a model of character as a relational developmental system, in which socio-moral reasoning (as conceptualized by social domain theory, or SDT) works in concert with social-emotional competencies to form the character system, which then interacts bidirectionally with context to produce an individual's moral functioning (Nucci, 2019).

The secondary aim of this dissertation was a methodological one. Socio-moral cognitive processes like the focal concepts in this study—particularly domain-based socio-moral reasoning—are most often researched using semi-structured interviews, in which investigators can probe participants with follow-up questions. This method can be prohibitively difficult and time-consuming, however. Written survey-based measures, though necessarily more limited in several ways, are often more feasible and scalable. Thus, this study attempted to increase understanding of the extent to which socio-moral constructs can be meaningfully studied through survey-based research, particularly among youth.

Towards these aims, three major research questions were posed. The main results pertaining to each of these questions are summarized and discussed below.

RQ 1: Prediction of action choices by socio-moral reasoning and personal/contextual factors. To investigate this question, I conducted a series of multilevel linear regression models with numerical ratings of each intended action choice as outcomes, as well as logistic regression models with binary outcome variables representing whether each action choice was chosen as the “best” (or, more accurately, most likely) action to take.

In line with the research hypotheses, endorsement of moral reasoning—specifically, the thought that the bullying was causing harm to the target—was consistently positively related to the choice to directly intervene to stop the bullying, while negatively related to the choice to bystand. This finding persisted even when control variables and covariates were added and was the same whether the outcomes were ratings of the adequacy of each action choice (linear regression) or a forced choice of one “best” action (logistic regression). Such results accord with previous research on similar topics, such as the finding by Peter et al (2016) that students who viewed certain types of harassment as harmful—i.e., as morally wrong—were less likely to report having committed them. In this case, when students agreed that the bullying was hurting the target (i.e., that it was a moral

issue), they seemed to take the situation more seriously—as would be expected in SDT—and feel more of an obligation to help.

Endorsement of conventional reasoning, on the other hand, was only consistently related to the choice to intervene indirectly. Participants who agreed that bullying should be stopped because it is against the rules were more approving of the choice to tell a teacher about the situation. One explanation for this finding might be that if students viewed the transgression (bullying) as falling predominantly in the conventional realm, they were more inclined to respond to it by involving an authority figure because such authorities are often the source and/or enforcers of conventional rules. Contrary to expectations, endorsement of conventional reasoning was not significantly related to either of the negative action choices.

With regards to the non-SDT factors that were considered, age did not show any significant relationship with action choices (likely because the age range was not large enough), but gender and perceived bullying prevalence showed distinct, and parallel, patterns of association with participants' evaluations and selections regarding the possible actions. In nearly every analysis, both male students and students who perceived a greater prevalence of bullying at their school were significantly less likely to endorse or select the positive action choices (to intervene directly or indirectly) and significantly more likely to endorse or select the negative ones (to bystand or perpetrate). Though the analyses in this section of the research cannot explain why this might be the case, the analyses for the second research question (discussed below), dealing with the free-response explanations, provide some insight.

There was also one other intriguing result involving perceived bullying prevalence, namely, its significant interaction with endorsement of conventional reasoning in the prediction of ratings of perpetrating (joining in the bullying). When students did not value the idea that bullying should be stopped because of rules against it (i.e., when they gave lower ratings to conventional reasoning), the amount of bullying they perceived at their school made a difference in their ratings of perpetration as an action choice. The more bullying they perceived around them, the more likely they were to approve of joining in. This could indicate that some students, because they were more used to witnessing it, viewed bullying less as a serious problem and more as a norm of social behavior in their school. These participants might have been in situations where rules against bullying either did not exist or did not matter (e.g., were not enforced). On the other hand, when students rated conventional reasoning highly—as in, when they agreed with the idea that bullying should be stopped because it is against the rules—it did not matter as much how prevalent they perceived bullying to be at their school; most of them simply viewed perpetration as a bad choice. Perhaps their respect for conventional rules, or fear of getting in trouble with authorities, made them more wary of joining the rule-flouting bullies.

As a final note, though the focus of this study was not to evaluate results of the Facing History intervention that was the premise for the larger research project, the study did include data from both an intervention group and a control group, and so intervention condition was included as a control variable. This variable did not show significant effects in any analyses, indicating that intervention condition did not seem to change patterns of association between the responses of interest.

RQ 2: Analyses of free-response explanations of action choices using a social domain theory lens. To explore the second research question, involving students' brief

free-response explanations for their intended action choices, I began by coding all of the responses (from the subset of participants who provided them) using a domain-based framework. I then tabulated the categories cited by which action choice had been selected and compared means of study variables between those who had cited a given consideration and those who had not.

The first finding was that all the categories, particularly considerations related to the four SDT domains, were well-represented in terms of citations. Considerations related to the moral domain were the most commonly cited by a large margin, supporting the contention that students do tend to view issues of bullying and bystander intervention as morally-relevant issues. Only about 10% of responses did not refer to any domain-based considerations, which strongly suggests that SDT was a viable interpretive framework even when responses were limited to three lines and questions were not specifically designed to elicit domain-based reasoning. Though most domain considerations were cited alone, i.e., as the only consideration in the response, the fact that responses were so constrained in terms of length limits the conclusions that can be drawn. Most students may not have spontaneously demonstrated multi-domain coordination simply because the survey form suggested such brief responses. The non-SDT categories, relational and emotional considerations, were cited less often overall than domain considerations and were less likely to be cited alone, though each was cited as the sole consideration several times.

When the number of responses citing each category of consideration was cross-tabulated with which intended action choice participants selected (as the one they would be most likely to take), similar patterns emerged as those found in research question 1. For instance, moral was the most-cited category by those who selected direct intervention (64% of responses in this group mentioned moral considerations), while half of those who selected indirect intervention cited conventional reasoning. The content of these responses showed that the cited considerations did tend to correspond with the chosen mechanism of action. For instance, most of the moral citations reflected concerns with harm to the target, fairness, and empathy (similar in principle to the Golden Rule), while the majority of conventional citations had to do with the social role and authority of teachers. The novel contribution of this analysis, as compared with RQ1, was that personal and prudential reasoning could be examined as well due to the open-ended nature of the question. In line with study hypotheses, most of the students who selected bystanding cited personal (43%) and prudential (47%) considerations. Similar to what has been found in other studies of adolescent bystanding behavior (i.e., non-action in response to witnessing the harassment of others; see Edwards, Rodenhizer-Stämpfli, & Eckstein, 2015), students who selected bystanding tended to cite personal safety concerns (prudential) and the belief that others' conflicts were "not their business" (personal).

Though few students in this subsample chose perpetrating as the "best" choice in the situation, those who did cited personal and conventional citations most often. One particularly striking explanation by a student who selected perpetration stated, "I would make fun of him we students don't 'bully' him - making fun of [him] is the new kind of respect we accept him." This response seems to indicate that this student viewed teasing not as harmful bullying, but as a social convention that signifies respect and acceptance. Other explanations for choosing to join in on perpetration included, "I think if I don't start teasing the person they will start with me" (coded as prudential), as well as "Because I like to join in because it is a fun thing to do," "I'm not a nice person," and "That just who I am"

(all coded as personal). These types of responses were rare, however. In fact, though it is impossible to know for sure, a few of the free-response explanations by students who selected perpetrating seemed mismatched with that action choice (e.g., responses that explicitly referenced telling a teacher or telling the perpetrators to stop), implying that these students might have chosen perpetrating by accident or misunderstood the question.

The largest number of relational citations were found when direct intervention was selected, followed by bystanding; an examination of these responses indicates that students who used relational considerations to explain the choice to bystand were often referring to relational concerns in the negative (e.g., if none of the involved parties were my friends, I would stay out of it). Emotional considerations were most often cited to explain the choice to directly intervene, usually with the sense that strong emotions would propel the participant towards action. Though not conclusive, this pattern suggests support for the model proposed by Arsenio and Lemerise (2004), in which emotions play an integral part in the type of social information processing that translates reasoned socio-moral standards into action.

Finally, the comparison of means of study variables by whether each consideration was cited in the free response yielded several notable patterns of results. Concordant with the analyses under RQ1, those who cited moral considerations were less likely male and perceived less bullying at their schools; they were also significantly younger (in one of the few significant associations found with age). They were more apt to approve of or choose direct intervention and less likely to do the same for bystanding. Interestingly, however, they did not endorse the moral reasoning justification significantly more than participants who did not cite moral considerations in their free-response explanations. One speculation about this could be that the variety of moral considerations that students could come up with might be much broader than the particular consideration in the earlier question (that of bullying being hurtful to the target). When participants cited conventional considerations, however, they did tend to have endorsed the conventional justification (about bullying being against the rules) more than others did. As in previous analyses, these participants (i.e., those who cited conventional considerations) were inclined towards indirect intervention and away from both bystanding and direct intervention as action choices. Also similar to previous analyses and the study hypotheses, those who cited personal considerations gave relatively higher ratings to the negative actions (bystanding and perpetrating) and lower ratings to both types of intervention. Students who cited prudential concerns perceived significantly higher levels of bullying at their schools, which perhaps desensitized them to the effects of bullying on targets and/or sensitized them to the futility and potential dangers of intervening; for these or other reasons, they were more likely to say they would bystand and less likely to say they would directly intervene. They did not, however, significantly differ from others in terms of socio-moral reasoning endorsements. This implies that contextual factors, not necessarily differences in socio-moral reasoning, were behind their propensity to bystand.

The last two categories of consideration, relational and emotional, were both only significantly related to a lower likelihood of choosing indirect intervention. It is not clear from these data why this was the case, but it seems plausible that students for whom relational and emotional concerns were seemingly more salient (and therefore mentioned in their free responses) would find the prospect of going and telling a teacher less appealing than the other action options, which were all more focused on relating to peers

in the moment. More detailed research, perhaps drawing on Arsenio and Lemerise's (2004) model, is needed to clarify these kinds of thought processes.

RQ 3: Relation of social perspective-taking competence to socio-moral reasoning and action choices. To address the third research question, I first conducted a multilevel linear regression with social perspective-taking competence (Interpersonal Management subscale, or SPT-IM) as the outcome, to find out how it related to socio-moral reasoning and other variables. Then, I conducted a mediation analysis to test for significant indirect effects of moral reasoning on action choices through SPT-IM.

Despite the low internal reliability of the subscale used to represent the construct, SPT-IM was, as predicted, significantly positively related to endorsement of moral reasoning. Students who appeared to care more about the moral consequences of actions were also more able and inclined to integrate others' perspectives with their own. Additionally—and unsurprisingly, considering the findings from the first research question—boys tended to score lower on SPT-IM, as did students with less highly-educated parents.

In the mediation models, SPT-IM was shown to be positively related to both of the positive action choices (direct and indirect intervention) and negatively to the negative choices (bystanding and perpetration). As this pattern differed somewhat from how moral reasoning alone related to action choices, it appears likely that SPT-IM made unique contributions to action choice ratings. However, it may also have served as an intermediate step, conceptually, between moral reasoning and intended action, as shown by the significant indirect effects found for three of the four outcomes. Though the configuration tested here is certainly not the only way to arrange these variables, particularly since the data were not time-ordered or experimental, these results did demonstrate a strong set of associations among them which merits further investigation. The finding that moral reasoning and social perspective-taking combine to some extent in their association with intended action lends support to the model of character as a relational developmental system (Nucci, 2019), in which moral cognition and social-emotional skills are both necessary for mature and effective moral functioning.

4.2 Limitations and Future Research Directions

The most significant limitation of this dissertation study, due to the fact that it was a secondary analysis, was the inability to ask certain questions that would have been of great interest with regards to the research questions. More specifically, since this study was a secondary analysis of data from a project that was not designed with a social domain theory (SDT) framework in mind, the questions included in the surveys did not align perfectly with what would have been ideal for an SDT-based analysis. Future work should, for example, ask participants to rate reasoning options that relate to all of the domains, instead of only to the moral and conventional domains. Furthermore, measurement work—e.g., assessments of test-retest reliability, dimensionality (i.e., factor structure), internal consistency of dimensions, etc.—should be undertaken in order to more confidently use written survey measures in SDT research.

Similarly, because of the need to use items that could be linked to an SDT framework, only one scenario from the CICM, Situation A, was able to be incorporated into this study. There are likely many factors specific to the particular type of situation used in

this one scenario—namely, witnessing verbal harassment of a new classmate who is from another country—that would not generalize even to other hypothetical situations of witnessing bullying, and even less so to other situations (hypothetical or real) involving moral reasoning, social perspective-taking, and action. Moreover, the target in the scenario was described as male for all participants, and it is unknown how gender dynamics might have affected participants' responses. To improve generalizability, future studies in this vein should utilize scenarios based on different types of situations in which bullying, bystanding, and other behaviors of interest tend to occur—and with different types of targets—and compare results with those found here.

On the subject of using hypothetical scenarios, another limitation of this study was that it only collected data on intended or anticipated action, not actual action. Of course, it is possible that certain adolescents' actual behavior would align well with their self-reported anticipated/intended action choices—in fact, some studies have found that intended and actual actions with regards to bullying do significantly correspond (e.g., Heirman & Walrave, 2012)—but the reverse possibility is also likely. In other words, what adolescents say they would do in response to morally relevant situations like witnessing bullying might turn out to be quite different from what they actually have done or would do. Future studies should compare survey answers about hypothetical actions to actual actions, whether self-reported (e.g., retrospectively) or triangulated from other sources such as disciplinary records, peer nominations, teacher reports, direct observations, etc. Because each of these methods has weaknesses, multi-method assessment is recommended, as it is in most cases of social-emotional/moral functioning (Humphrey et al., 2011; McKown, 2015). Another potential option would be to use a simulated/virtual environment for assessment, such as the Virtual Environment for Social Information Processing (VESIP; Russo-Ponsaran et al., 2018; Shapiro, Accomazzo, Claassen, & Robitaille, 2015). Such an environment might feel more “real” than a written hypothetical scenario, but would still enable access to the participant's inner thoughts, reasoning, feelings, etc., which cannot be assessed by non-self-report means.

Additionally, to strengthen the probability that studies focused on intended action will correspond with future real-life action, future research should consider including a measure of self-efficacy, particularly self-efficacy related to the action in question. Previous research on bystander behavior among young people has provided evidence that self-efficacy (i.e., confidence with regards to intervening) is a key component that functions alongside behavioral intentions to produce intervention behavior (McMahon et al., 2015; Pozzoli & Gini, 2013). In other words, one of the reasons why behavioral intentions and behavioral outcomes are not always aligned is that young people may not have the self-efficacy, i.e., confidence in themselves, needed to motivate themselves to take the actions that they intend to take.

With regards to the design of the focal surveys themselves, the free-response question on the CICM (A7) provided student participants with very little space, which limited their answers in length. Although this probably helped make the survey packet more time-efficient, it would be useful to see what participants would write if they were given more space to explain their decisions (and encouraged to use it). Also, when they were asked to explain why they chose the action choice they did, participants may have been inspired or biased by the options already presented to them in the same survey (namely, the four reasoning justifications given in question A2), and thus the free

responses may be different than what they would have been if this type of question had been the only mode of response (i.e., if participants had not already been offered reasoning options to rate). Additionally, perhaps because of time constraints or higher task demand, more than half of participants did not fill out the free-response question, which does again limit the generalizability of these results. Future research using free-response questions of this nature might consider placing the free-response question first, before asking the participants to rate different (provided) options of responses, as well as giving more space and time in which to answer.

A further methodological issue arose with the coding procedure. When coding the free responses (A7), both coders were blind to all of the participants' other responses except for their answers to A6, their selection of a "best" action choice; this information was included in the coding process because the free response question (A7) was phrased as a request for explanation of the choice selected in A6, so it seemed to make sense to include the two responses together. While this may have increased the interpretability of some of the free responses, it may have also introduced bias into the coding by priming coders to interpret responses a certain way. The fact that the second coder was blind to the study hypotheses reduces but does not completely mitigate this concern. Future work should assess reliability of this coding system with none of the participants' other responses included for context.

Another concern with the measures used here was that the RelQ-A was created for this research project as an adapted version of an existing scale, meaning that this exact scale had not been validated before, and the results cannot be directly compared to those of other studies. Furthermore, the Interpersonal Management subscale did not meet the conventional threshold for scale internal reliability (although it had the highest reliability of all the subscales). Thus, the results involving scores on this subscale must be taken with caution, as the extent to which the items actually tap into a single, internally consistent psychological construct may be questionable (i.e., one item may not be sufficiently related to others, or the subscale may actually be capturing a multidimensional construct). Though the small number of items in the subscale likely lowered the *alpha* value (Cortina, 2003), it should be noted that Nunnally (1978) originally suggested .70 as an adequate *alpha* only for the early stages of research with an instrument, with *alphas* of at least .80 suggested for applied research (as cited in Lance et al., 2006). It would be interesting if this scale (RelQ-A) and subscale (IM) could be refined in the future such that they would be able to demonstrate more adequate internal reliability. In the meantime, it would be useful for future studies to explore relations between socio-moral reasoning and perspective-taking (and/or other social-emotional skills) using other measures that have been validated and show more robust reliability. One option would be to use a measure of social perspective-taking that allows for separation of potentially different dimensions, such as the ability to perspective-take accurately vs. the propensity to engage in it (e.g., Gehlbach, 2004). Similar results using such measures would corroborate both these findings and the refinement and use of the IM subscale in further research. Furthermore, since this study was cross-sectional, with data from students collected at only one time point, no claims about causality or time-ordering of psychological processes (e.g., socio-moral reasoning vs. social perspective taking) can be made. In terms of the relationship between socio-moral reasoning and social perspective-taking competence, it would be interesting to conduct a longitudinal study that would allow for cross-lagged relationships between the two. This

would provide insight into whether changes in one appear to precede or follow changes in the other.

Another consideration that must be mentioned is that the overall proportion of variance in intended action explained by the variables included in this study was relatively low in all analyses. This indicates that there were important factors influencing adolescents' choice of intended action that were not captured by the variables in this study. Thus, future research should attempt to account for a greater share of potential predictors. In addition to self-efficacy, as mentioned above, potential predictors could include teacher- or classroom-level variables, which have been found to be influential in students' attitudes towards bullying and intervention (Pozzoli et al, 2012). In fact, the larger NPDEP project also included student-report scales measuring their perceptions of classroom-level factors such as classroom climate and teacher practices, as well as several teacher-reported measures, including an assessment of their own self-efficacy in guiding students' social and ethical development. Further work with the larger dataset should explore other variables such as these in conjunction with the variables used in this study. Such work could provide a fuller picture of how students' socio-moral reasoning, social perspective-taking competence, and intended action in challenging situations at school might relate to their classroom contexts. A related limitation is that this study did not analyze data clustered at the classroom level, only at the school level; although these levels were the same for the majority of schools (which had only one participating classroom/teacher per school), for schools that did have more than one participating classroom, this may have underestimated the contribution of classroom-level factors to the observed variance, and future work should incorporate both levels if possible.

With regards to the sample used in this study and the information available about the participants, several limitations and avenues for future research arise. For one, the age range in this study, of only two school grades, was likely too narrow to detect developmental differences in the target variables. Future studies should include a broader age range in order to clarify any developmental changes that may occur in young people's perceptions of bullying, bystanding, and related socio-moral cognitions. Another issue is that it was not within the scope of this study to more deeply investigate differences that were found by race/ethnicity, especially due to the limited nature of the data and inability to ask follow-up questions. Future work should both attempt to see if the findings reported here can be replicated and, if so, explore potential reasons for the findings, such as discrepant experiences with and/or perceptions of school discipline systems.

Additionally, information about the immigration status of the students and/or their families (e.g., whether they were born in the United States) was not collected. Such data might have been particularly relevant and conceptually interesting in this study, as the subject matter of the hypothetical situation was bullying based on the "foreignness" of the target. Future research using this type of situation should consider attempting to obtain such data, while taking into account that this information can be sensitive. Following on that, and as a final point, the data used in this study were collected about a decade ago, and different results might be obtained if new data were to be collected now. This is especially possible due to the current political climate of the United States, which unfortunately seems to have led to increased levels of harassment and bullying among school-aged students, particularly based on immigration status, foreign origin, and other aspects of perceived difference (Huang & Cornell, 2019; Southern Poverty Law Center, 2016). Though

it is beyond the scope of this dissertation to delve into any of the specific social-historical circumstances that may have affected these data at the unique time they were collected, it should be noted that, as highlighted in Nucci's (2019) model, social/emotional/moral functioning always exists in dynamic relationship with context, which can limit the generalizability of any given study.

4.3 Implications for Research and Practice

Several implications can be drawn from the results of this study with regards to both research, e.g., theoretical implications for SDT and methodological implications for future studies of these topics, and practice, e.g., potential practical applications for educators and others engaging in efforts to combat bullying and promote bystander intervention among adolescents.

Theoretical and methodological implications. In terms of moral development theory (i.e., SDT), the results of this study imply that, at least among adolescents, relational concerns are often salient and deserve further attention, especially when anticipated (or actual) action—not only reasoning—is involved. This study could not provide the necessary evidence to claim that there is or is not a “relational domain” that is separate from the other SDT domains, but the question of how relational partiality might integrate into the SDT framework remains ambiguous. This point has been noted by other recent research in domain theory, such as Midgette's (2019) study of how parents and children reason about division of household tasks, and it should continue to be addressed in future qualitative and quantitative research in various contexts.

As for methodology, this study suggests that self-report survey-based measures can indeed be used to obtain meaningful results in an SDT-based theoretical frame, at least with adolescent participants, even when the survey was not specifically designed with SDT in mind—though, of course, it would be helpful for future studies and measures to be designed by social domain theorists as well. Another implication is that different types of questions (ratings, multiple choice, free response, etc.) may produce comparable results, but using more than one type is likely to be most informative due to the subtle differences in reasoning processes that may be uncovered. However, potentially biasing factors, such as the order of items, should be taken into account. Specifically, if free-response items are to be included, it might make sense to place them before questions that ask students to rate or choose from a provided set of options, in order to avoid influencing students' “free” answers.

Implications for educational settings and anti-bullying efforts. First of all, it must be acknowledged again that causality cannot be determined from the results of this study, so the following implications are speculative with regards to directionality. With that caveat, based on the results of this study, it may be the case that emphasizing the harm that bullying can do would encourage students to intervene. Other research has shown that oftentimes students who have been in bystander positions did not consider the situations “serious enough” to get involved (Ferrans et al., 2012; Palmer et al., 2015). This may indeed be accurate sometimes—as in, it may be true that a situation simply involves teasing between friends and the “victim” does not feel harmed—but it seems likely that many times there is harm occurring that observers/bystanders may not perceive or appreciate.

In contrast, focusing on rules against bullying, the potential to get in trouble for bullying, etc. may be better than nothing, but it also may promote an inclination by students to get teachers involved in bullying incidents rather than stepping in to try to disrupt the incidents directly. Informing teachers is not necessarily a negative course of action; in fact, it may be one of the more desirable and effective ones, especially if the school social-emotional climate/context is such that it might be dangerous for students to get directly involved (if there are issues with gangs, as one example). However, in other cases, it may be preferable to encourage students to be “upstanders” and intervene themselves. For instance, in some situations, direct intervention by students could halt the escalation of the situation more quickly and prevent reliance on over-burdened teachers or other staff to intervene. Also, as several participants in this study stated in their free-response explanations, intervening directly might sometimes be more efficacious because some adolescents would be more likely to take the judgments of peers into account as compared to the judgments of teachers and other adults. Direct intervention by other students could also convey to the target that they are supported—and to perpetrating students, as well as other bystanders, that certain kinds of behavior are socially unacceptable. In this way, even students who consider bullying and/or bystanding a social convention or norm could become more responsive to anti-bullying messages.

Finally, educators or others who hold the goal of promoting bystander intervention among youth should be cognizant of the various factors that may play into students’ decisions to intervene or not, particularly concerns about their own safety, physical or psychological (e.g., becoming targets of bullying themselves). There may be other influential factors as well, such as students’ feeling like their personal characteristics are not well-suited to intervene (e.g., that they are shy and quiet) or that bullying of classmates—especially those they don’t know well—is not their business (which could be interpreted as, or related to, a lack of empathy). Social and emotional learning (SEL), which aims to strengthen self- and other-oriented social and emotional skills in every student, could be one way to address some of these factors (Divecha & Brackett, 2019). Thus, the combination of SEL with a domain-based moral education approach could be an organic and holistic way to both prevent bullying and promote upstanding.

References

- Abbott, N., & Cameron, L. (2014). What makes a young assertive bystander? The effect of intergroup contact, empathy, cultural openness, and in-group bias on assertive bystander intervention intentions. *Journal of Social Issues, 70*(1), 167-182.
- Arsenio, W. F., & Lemerise, E. A. (2004). Aggression and moral development: Integrating social information processing and moral domain models. *Child Development, 75*(4), 987-1002.
- Barr, D. J., Boulay, B., Selman, R. L., McCormick, R., Lowenstein, E., Gamse, B., ... & Leonard, M. B. (2015). A randomized controlled trial of professional development for interdisciplinary civic education: Impacts on humanities teachers and their students. *Teachers College Record, 117*(2), 1-52.
- Barr, D. J., & Facing History and Ourselves (2010). *Continuing a tradition of research on the foundations of democratic education: The National Professional Development and Evaluation Project* [PDF file]. Retrieved from https://www.facinghistory.org/sites/default/files/Continuing_a_Tradition_v93010_0-February2016.pdf
- Berkowitz, M. W. (2011). What works in values education. *International Journal of Educational Research, 50*(3), 153-158.
- Blakemore, S. J., & Choudhury, S. (2006). Development of the adolescent brain: Implications for executive function and social cognition. *Journal of Child Psychology and Psychiatry, 47*(3-4), 296-312.
- Blasi, A. (1980). Bridging moral cognition and moral action: A critical review of the literature. *Psychological Bulletin, 88*(1), 1-45.
- Bullock, J. G., Green, D. P., & Ha, S. E. (2010). Yes, but what's the mechanism? (Don't expect an easy answer). *Journal of Personality and Social Psychology, 98*(4), 550-558.
- Burack, J. A., Flanagan, T., Peled, T., Sutton, H. M., Zygmuntowicz, C., & Manly, J. T. (2006). Social perspective-taking skills in maltreated children and adolescents. *Developmental Psychology, 42*(2), 207-217.
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Conduct Problems Prevention Research Group (2010). The effects of a multiyear universal social-emotional learning program: The role of student and school characteristics. *Journal of Consulting and Clinical Psychology, 78*(2), 156-168. doi:10.1037/a0018607
- Cortina, J. M. (1993). What is coefficient alpha? An examination of theory and applications. *Journal of Applied Psychology, 78*(1), 98-104.
- Divecha, D., & Brackett, M. (2019). Rethinking school-based bullying prevention through the lens of social and emotional learning: A bioecological perspective. *International Journal of Bullying Prevention, 1*-21.
- Durlak, J. A., Weissberg, R. P., Dymnicki, A. B., Taylor, R. D., & Schellinger, K. B. (2011). The impact of enhancing students' social and emotional learning: A meta-analysis of school-based universal interventions. *Child Development, 82*(1), 405-432.
- Edwards, K.M., Rodenhizer-Stämpfli, K.A. & Eckstein, R.P. (2015). Bystander action in situations of dating a sexual aggression: A mixed methodological study of high school youth. *Journal of Youth and Adolescence, 44*(12), 2321-2336.

- Eisenberg, N. (2009). Empathy-related responding: Links with self-regulation, moral judgment, and moral behavior. In M. Mikulincer & P. R. Shaver (Eds.), *Prosocial motives, emotions, and behavior: The better angels of our nature* (pp. 129–148). Washington, DC: American Psychological Association.
- Elias M.J., Nayman S.J., Duffell J.C. (2018) Scaling up high-quality social-emotional and character development in all schools: A set of policy recommendations to the US Secretary of Education. In K. V. Keefer, J. D. A. Parker, & D. F. Saklofske (Eds.), *Emotional intelligence in education: Integrating research with practice* (pp. 321-350). New York, NY: Springer.
- Elias, M.J., Parker, S.J., Kash, V.M., Weissberg, R.P., & O'Brien, M.U. (2008). Social and emotional learning, moral education, and character education: A comparative analysis and a view toward convergence. In L.P. Nucci & D. Narvaez (Eds.), *Handbook of moral and character education* (pp. 248–266). New York, NY: Routledge.
- Facing History and Ourselves (2017). *Reaching new heights for greater impact: FY 2017 annual report* [PDF file]. Retrieved from [https://www.facinghistory.org/sites/default/files/FHAO Annual Report 2017 v3.pdf](https://www.facinghistory.org/sites/default/files/FHAO%20Annual%20Report%202017%20v3.pdf)
- Facing History and Ourselves (2019a). "About us." *Facing History and Ourselves*. Retrieved from <https://www.facinghistory.org/about-us>
- Facing History and Ourselves (2019b). "Our impact." *Facing History and Ourselves*. Retrieved from <https://www.facinghistory.org/our-impact>
- Ferrans, S. D., Selman, R. L., & Feigenberg, L. F. (2012). Rules of the culture and personal needs: Witnesses' decision-making processes to deal with situations of bullying in middle school. *Harvard Educational Review*, 82, 445–470.
- Forsberg, C., Thornberg, R., & Samuelsson, M. (2014). Bystanders to bullying: Fourth-to seventh-grade students' perspectives on their reactions. *Research Papers in Education*, 29(5), 557-576.
- Gehlbach, H. (2004). Social perspective taking: A facilitating aptitude for conflict resolution, historical empathy, and social studies achievement. *Theory & Research in Social Education*, 32(1), 39-55.
- Gini, G. (2006). Social cognition and moral cognition in bullying: What's wrong? *Aggressive Behavior*, 32(6), 528-539.
- Gini, G., Albiero, P., Benelli, B., & Altoe, G. (2008). Determinants of adolescents' active defending and passive bystanding behavior in bullying. *Journal of Adolescence*, 31(1), 93-105.
- Gini, G., Pozzoli, T., Borghi, F., & Franzoni, L. (2008). The role of bystanders in students' perception of bullying and sense of safety. *Journal of School Psychology*, 46(6), 617-638.
- Greene, J. D. (2007). Why are VMPFC patients more utilitarian? A dual-process theory of moral judgment explains. *Trends in Cognitive Sciences*, 11(8), 322-323.
- Haidt, J. (2001). The emotional dog and its rational tail: a social intuitionist approach to moral judgment. *Psychological Review*, 108(4), 814-834.
- Haidt, J., & Baron, J. (1996). Social roles and the moral judgement of acts and omissions. *European Journal of Social Psychology*, 26(2), 201-218.
- Hallgren, K. A. (2012). Computing inter-rater reliability for observational data: An overview and tutorial. *Tutorials in Quantitative Methods for Psychology*, 8(1), 23-34.

- Hayes, A. F. (2009). Beyond Baron and Kenny: Statistical mediation analysis in the new millennium. *Communication Monographs*, 76(4), 408-420.
- Hayes, A. F. (2017). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach* (2nd ed.). New York, NY: Guilford Publications.
- Heirman, W., & Walrave, M. (2012). Predicting adolescent perpetration in cyberbullying: An application of the theory of planned behavior. *Psicothema*, 24(4), 614-620.
- Huang, F. L., & Cornell, D. G. (2019). School teasing and bullying after the presidential election. *Educational Researcher*, 48(2), 69-83.
- Humphrey, N., Kalambouka, A., Wigelsworth, M., Lendrum, A., Deighton, J., & Wolpert, M. (2011). Measures of social and emotional skills for children and young people: A systematic review. *Educational and Psychological Measurement*, 71(4), 617-637.
- Hunter, J. D., & Olson, R. S. (Eds.) (2018). *The content of their character: Inquiries into the varieties of moral formation*. New York, NY: Finstock & Tew.
- Ilten-Gee, R., & Nucci, L. (2018). From peer discourse to critical moral perspectives: Teaching for engaged reasoning. *Precollege Philosophy and Public Practice*. Advance online publication. doi: 10.5840/p4201810242
- Killen, M. (2014). Social Domain Theory coding system. Unpublished manuscript.
- Killen, M., & Turiel, E. (1998). Adolescents' and young adults' evaluations of helping and sacrificing for others. *Journal of Research on Adolescence*, 8(3), 355-375.
- Lance, C. E., Butts, M. M., & Michels, L. C. (2006). The sources of four commonly reported cutoff criteria: What did they really say? *Organizational Research Methods*, 9(2), 202-220.
- LaRusso, M., & Selman, R. (2011). Early adolescent health risk behaviors, conflict resolution strategies, and school climate. *Journal of Applied Developmental Psychology*, 32(6), 354-362.
- Lemerise, E. A., & Arsenio, W. F. (2000). An integrated model of emotion processes and cognition in social information processing. *Child Development*, 71(1), 107-118.
- McClellan, B. E. (1999). *Moral education in America: Schools and the shaping of character from colonial times to the present*. New York, NY: Teachers College Press.
- McKown, C. (2015). Challenges and opportunities in the direct assessment of children's social and emotional comprehension. In J.A. Durlak, C.E. Domitrovich, R.P. Weissberg, & T.P. Gullotta (Eds.), *Handbook of social and emotional learning: Research and practice*. New York, NY: Guilford.
- McMahon, S., Peterson, N. A., Winter, S. C., Palmer, J. E., Postmus, J. L., & Koenick, R. A. (2015). Predicting bystander behavior to prevent sexual assault on college campuses: The role of self-efficacy and intent. *American Journal of Community Psychology*, 56(1-2), 46-56.
- Menesini, E., & Salmivalli, C. (2017). Bullying in schools: The state of knowledge and effective interventions. *Psychology, Health & Medicine*, 22(sup1), 240-253.
- Midgette, A. J. (2019). *Gendered household labor distribution & morality: Social & moral reasoning about household chores in Chinese & South Korean families* (Doctoral dissertation, University of California, Berkeley). Retrieved from <https://escholarship.org/uc/item/5v39g4d5>
- Miles, M. B., Huberman, A. M., & Saldaña, J. (2014). *Qualitative data analysis: A methods sourcebook. Third edition*. Thousand Oaks, CA: Sage Publications.
- Modecki, K. L., Minchin, J., Harbaugh, A. G., Guerra, N. G., & Runions, K. C. (2014). Bullying

- prevalence across contexts: A meta-analysis measuring cyber and traditional bullying. *Journal of Adolescent Health, 55*(5), 602-611.
- Nansel, T. R., Overpeck, M., Pilla, R. S., Ruan, W. J., Simons-Morton, B., & Scheidt, P. (2001). Bullying behaviors among US youth: Prevalence and association with psychosocial adjustment. *JAMA, 285*(16), 2094-2100.
- Narvaez, D., & Lapsley, D. K. (2009). Triune ethics theory and moral personality. *Personality, identity and character: Explorations in moral psychology, 136-158.*
- Noonan, R. K., & Charles, D. (2009). Developing teen dating violence prevention strategies: Formative research with middle school youth. *Violence Against Women, 15*(9), 1087-1105.
- Nucci, L. P. (2001). *Education in the moral domain.* Cambridge, UK: Cambridge University Press.
- Nucci, L. (2004). Reflections on the moral self construct. In *Moral development, self, and identity* (pp. 123-144). Psychology Press.
- Nucci, L. (2009). Nice is not enough: Facilitating moral development. Upper Saddle River, NJ: Pearson Education.
- Nucci, L. (2019). Character: A developmental system. *Child Development Perspectives, 13*(2), 73-78.
- Nucci, L., Turiel, E., & Roded, A. D. (2017). Continuities and discontinuities in the development of moral judgments. *Human Development, 60*(6), 279-341.
- Pabian, S., Vandebosch, H., Poels, K., Van Cleemput, K., & Bastiaensens, S. (2016). Exposure to cyberbullying as a bystander: An investigation of desensitization effects among early adolescents. *Computers in Human Behavior, 62,* 480-487.
- Palmer, S. B., Rutland, A., & Cameron, L. (2015). The development of bystander intentions and social-moral reasoning about intergroup verbal aggression. *British Journal of Developmental Psychology, 33*(4), 419-433.
- Peter, C. R., Tasker, T. B., & Horn, S. S. (2016). Adolescents' beliefs about harm, wrongness, and school policies as predictors of sexual and gender-based harassment. *Psychology of Sexual Orientation and Gender Diversity, 3*(4), 426-431.
- Pozzoli, T., & Gini, G. (2010). Active defending and passive bystanding behavior in bullying: The role of personal characteristics and perceived peer pressure. *Journal of Abnormal Child Psychology, 38*(6), 815-827.
- Pozzoli, T., & Gini, G. (2013). Why do bystanders of bullying help or not? A multidimensional model. *The Journal of Early Adolescence, 33*(3), 315-340.
- Pozzoli, T., Gini, G., & Vieno, A. (2012). The role of individual correlates and class norms in defending and passive bystanding behavior in bullying: A multilevel analysis. *Child Development, 83*(6), 1917-1931.
- Russo-Ponsaran, N., McKown, C., Johnson, J., Russo, J., Crossman, J., & Reife, I. (2018). Virtual environment for social information processing: Assessment of children with and without autism spectrum disorders. *Autism Research, 11*(2), 305-317.
- Schonert-Reichl, K. A., & O'Brien, M. U. (2012). Social and emotional learning and prosocial education. In P. M. Brown, M. W. Corrigan, & A. Higgins-D'Alessandro (Eds.), *Handbook of prosocial education* (pp. 311-345). Lanham, MD: Rowman & Littlefield.
- Schultz, L. H., Selman, R. L., & LaRusso, M. D. (2003). The assessment of psychosocial maturity in children and adolescents: Implications for the evaluation of school-based character education programs. *Journal of Research in Character Education,*

- 1(2), 67-87.
- Selman, R. (2003). *The promotion of social awareness: Powerful lessons from the partnership of developmental theory and classroom practice*. New York, NY: The Russell Sage Foundation.
- Selman, R. L., Barr, D. J., Feigenberg, L. F., & Facing History and Ourselves. (2007). *Choices in Context Measure*. Brookline, MA: Robert L. Selman & Facing History and Ourselves National Foundation, Inc.
- Shapiro, V. B., Accomazzo, S., Claassen, J., & Robitaille, J. L. F. (2015). The choices, challenges, and lessons learned from a multi-method social-emotional/character assessment in and out of school time setting. *Journal of Youth Development, 10*(3), 31-45.
- Smetana, J. G. (1999). The role of parents in moral development: A social domain analysis. *Journal of Moral Education, 28*(3), 311-321.
- Smetana, J. G., Killen, M., & Turiel, E. (1991). Children's reasoning about interpersonal and moral conflicts. *Child Development, 62*(3), 629-644.
- Smetana, J. G., Jambon, M., Conry-Murray, C., & Sturge-Apple, M. L. (2012). Reciprocal associations between young children's developing moral judgments and theory of mind. *Developmental Psychology, 48*(4), 1144-1155.
- Smetana, J. G., Rote, W. M., Jambon, M., Tasopoulos-Chan, M., Villalobos, M., & Comer, J. (2012). Developmental changes and individual differences in young children's moral judgments. *Child Development, 83*(2), 683-696.
- Southern Poverty Law Center (2016). *The Trump effect: The impact of the 2016 presidential election on our nation's schools* [PDF file]. Retrieved from https://www.splcenter.org/sites/default/files/the_trump_effect.pdf
- Steinberg, L. (2005). Cognitive and affective development in adolescence. *Trends in Cognitive Sciences, 9*(2), 69-74.
- Taylor, R. D., Oberle, E., Durlak, J. A., & Weissberg, R. P. (2017). Promoting positive youth development through school-based social and emotional learning interventions: A meta-analysis of follow-up effects. *Child Development, 88*(4), 1156-1171.
- Thornberg, R. (2014). A study of children's conceptions of school rules by investigating their judgments of transgressions in the absence of rules. *Educational Psychology, 30*, 583-603.
- Trach, J., Hymel, S., Waterhouse, T., & Neale, K. (2010). Bystander responses to school bullying: A cross-sectional investigation of grade and sex differences. *Canadian Journal of School Psychology, 25*(1), 114-130.
- Turiel, E. (1983). *The development of social knowledge: Morality and convention*. Cambridge, UK: Cambridge University Press.
- Turiel, E. (2015). Moral development. In R. M. Lerner, W. F. Overton, & P. C. M. Molenaar, (Eds.), *Handbook of child psychology and developmental science* (7th ed., Vol. 1, pp. 484-582). Hoboken, NJ: John Wiley & Sons.
- Turiel, E., & Killen, M. (2010). Taking emotions seriously: The role of emotions in moral development. In W.F. Arsenio & E.A. Lemerise (Eds.), *Emotions, aggression, and morality in children: Bridging development and psychopathology* (pp. 33-52). Washington, DC: American Psychological Association.
- Yeager, D. S. (2017). Social and emotional learning programs for adolescents. *The Future of Children, 27*(1), 73-94.

Appendix A: Choices in Context Measure (CICM), Situation A

Situation A

A student sees a group of his friends teasing a boy whose family recently arrived in the U.S. from another country. They are making fun of the way he speaks and telling him he should move back to his own country. The student who sees this wonders what to do. He decides not to say anything. Instead, he walks away from the group.

1. How much do you agree that walking away is the best thing for him to do? (Check only one)

Strongly disagree Disagree Agree Strongly agree

2. Here are some of the reasons other people gave for why they think the boy should not have walked away but instead should have told his friends not to disrespect the boy. How would you rate each of the following reasons?

Reasons (Check for each row)

(You may check the same rating more than once)

Very bad

Bad

Good

Very good

a. Teasing is hurting the new boy.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
a. There is a school rule against this behavior.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
a. Saying something now might help other students feel that they can speak out in these situations.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
a. The new boy should know he is not alone.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

3. Which one of these reasons do you think is best? (Check only one):

a b c d

4. How often does this kind of bullying happen in *your* school? (Check only one)

Very rarely Rarely Often Very often

5. If you saw this situation in your school, how would you rate each of the following actions you might take?

Actions (Check one for each row)

(You may check the same rating more than once)

Very bad

Bad

Good

Very good

- | | | | | |
|--|--------------------------|--------------------------|--------------------------|--------------------------|
| a. Tell a teacher what was going on. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| a. Just stay out of it. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| a. Tell the students to stop being such jerks. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| a. Go over and join in making fun of the new boy. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

6. Which one of these four actions (a, b, c, or d) would you be most likely to take?

a

b

c

d

Please explain why: _____

Appendix B:
Adapted Relationship Questionnaire (RelQ-A),
Interpersonal Management (IM) Subscale

Note. Only three questions—questions 3, 4, and 7—are shown here because they are the three that make up the Interpersonal Management (IM) subscale.

The first seven questions below are about situations that happen in schools like yours:

3. The principal of the school has told the students that this year there are no funds for after-school activities such as sports and art. Leticia and a lot of other students in the school are upset about losing these activities. They get together to decide what to do. They think of the following ideas:

Please rate each of these ideas:

(You may check the same rating more than once)

	Very Bad	Bad	Good	Very Good
a. begin an awareness campaign to get the community to understand how important sports and art are for the students	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. offer to paint the school building in return for money for after-school programs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. tell them they don't care about kids	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d. write the school board and tell them they better restore the funds or there will be some very angry students	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Now check the one you think is the best choice.

a b c d

4. Amy is very athletic and likes sports. She particularly likes baseball and decides to try out for the school team one spring, even though there are no other girls on the team. During the tryouts, some of the boys start insulting her, saying that baseball is for boys and that they don't want her on the team. Amy tries out anyway, but the next day when the coach at school announces who made the team, Amy is not chosen. Amy could:

Please rate each of these ideas:

(You may check the same rating more than once)

	Very Bad	Bad	Good	Very Good
a. tell the coach "I know I played better than some of the boys who made the team."	0	0	0	0
b. tell the coach she thinks he should realize she deserves to be on it	0	0	0	0
c. just don't think about it	0	0	0	0
d. go to the coach to hear his reasons for not putting her on the team and explain her point of view to him	0	0	0	0

Now check the one you think is the best choice.

ao bo co do

7. Voula, a ninth grade student, wants to go to the high school school dance, but her father won't let her because he thinks she is too young. She could:

Please rate each of these ideas:

(You may check the same rating more than once)

	Very Bad	Bad	Good	Very Good
a. refuse to talk to him because he's stopping her from having fun	0	0	0	0

b. tell him he can't just keep telling her what to do now that she is in ninth grade **0** **0** **0** **0**

c. ask him to work with her on an agreement to deal with their concerns **0** **0** **0** **0**

d. explain to him why she feels she's responsible enough to go to the dance **0** **0** **0** **0**

Now check the one you think is the best choice.

ao **bo** **co** **do**

Appendix C:

Social Domain Theory Coding Guidelines

1. First round: Codability

- a. Codable: response seems to address the question asked
- b. Uncodable: response is missing, illegible, nonsensical, obviously off-topic, etc.

2. Second round: SDT domains

(Note: Each category includes all positive and/or negative references to the considerations within that category; e.g., both “They’re hurting him” and “They’re not really hurting him” would be coded as SDT-Moral due to the focus on harm or lack thereof.)

- a. Moral domain: Reason addresses the inherent rightness vs. wrongness of actions; has to do with rules that are more universal. References any of the following, positively or negatively:
 - i. The welfare/well-being of the victim or others, including physical harm and/or psychological harm (hurt feelings, etc.); this also includes empathy/perspective-taking [e.g., how would they feel if it were them; I wouldn’t want that to happen to me]
 - ii. Notions of justice, fairness/equality, or rights of those involved in the situation (other than the respondent)
- b. Conventional domain: Reason addresses the structure and/or function of groups/society and how to maintain them; has to do with rules but that could potentially be changed, based on social consensus, decisions of authority, etc. References any of the following, positively or negatively:
 - i. External rules, dictates of authority, etc. (as opposed to internal notions of right vs. wrong)
 - ii. Group functioning and/or group identity [e.g., we’re not like that at this school; this is how we do it]
 - iii. The experience, jurisdiction, or social role(s) of authority figures (teachers, etc.)
 - iv. Punishment/retribution, especially as a way to maintain order
- c. Personal domain: Reason focuses on respondent’s individual concerns and choices; has to do with things that should not be regulated by moral or conventional rules, but should instead be under individual control. References any of the following, positively or negatively:
 - i. Personal autonomy/individuality [e.g., I am like this]

- ii. Personal preference/choice [e.g., I don't like that; I don't want to get involved]
- iii. Privacy [e.g., it's not my business]
- d. Prudential domain: Reason references respondent's own safety, welfare, and/or practical concerns [e.g., I might get hurt; I might get in trouble; they might turn on me; it wouldn't do any good].
- e. Vague/no domain: Response cannot be clearly categorized using any of the above SDT domain(s).

3. Third round: Non-SDT considerations

- a. Emotion: refers to the role/influence of respondent's emotions, or lack thereof, in motivating behavior, either in addition to or without explicit reference to SDT domain(s) [e.g., I would be too scared; it makes me mad]
- b. Relation: Reason refers to relationships with others as justifications in themselves, either in addition to or without explicit reference to SDT domain(s); includes references to respondent's positive/present or negative/absent relationship(s) with the victim, with the bullies, and/or with the larger community [e.g., I would intervene if they were my friends]
- c. Other: Reason concerns other consideration(s) that seem important in the response, but do not fit into the SDT domains or the relational or emotional categories above; such reasons, if any, will be noted for possible future work but not analyzed in this study.