To be or not to be Prosocial:

Judgments and Experiences of Prosocial Action and Refusal Across Development

Nasim Tavassoli

A Thesis

In the Department

Of

Education

Presented in Partial Fulfillment of the Requirements

For the Degree of

Doctor of Philosophy (Education) at

Concordia University

Montreal, Quebec, Canada

April 2022

CONCORDIA UNIVERSITY

SCHOOL OF GRADUATE STUDIES

This is to certify that the thesis prepared

By: Nasim Tavassoli

Entitled: To be or not to be prosocial: Judgments and experiences of prosocial action and refusal across development

and submitted in partial fulfillment of the requirements for the degree of

Doctor Of Philosophy (Education)

complies with the regulations of the University and meets the accepted standards with respect to originality and quality.

Signed by the final examining committee:

_____ Chair
Dr. Pavel Trofimovich

_____ External Examiner
Dr. Stuart Hammond

_____ Thesis Supervisor
Dr. Holly Recchia

_____ Examiner
Dr. Kristen Dunfield

_____ Examiner
Dr. Nina Howe

_____ Examiner
Dr. Hariclia Petrakos

Approved by _____
Dr. Steven Shaw, Graduate Program Director

5/11/2022 _____
Dr. Pascale Sicotte, Dean
Faculty of Arts and Science

Abstract

To be or not to be Prosocial: Judgments and Experiences of Prosocial Action and Refusal Across Development

Nasim Tavassoli, Ph.D.
Concordia University, 2022

As social beings, individuals regularly encounter multifaceted social situations wherein, for variety of reasons, they decide to help others or not. Although inevitable, prosocial refusal experiences are overlooked in the prosocial development literature. In two studies, the role of prosocial refusal experiences in the development of prosociality was investigated through analyses of reasoning, emotional and moral evaluations, and prosocial decision making. Study 1 examined how contextual factors influenced prosocial judgments in costly helping, sharing, and comforting situations. A total of 165 children and adolescents evaluated six hypothetical situations wherein one child needed to be helped, shared with, or comforted and another child decided whether to provide that assistance. Prosociality was evaluated as desirable-obligatory particularly in high need situations. Children more than adolescents evaluated prosociality as desirable. In high need situations, comforting more than helping and sharing was evaluated as desirable, whereas in low need situations, sharing was the most desirable form of prosociality. To complement analyses of hypothetical vignettes, Study 2 investigated children's, adolescents' and young adults' reflections on past prosocial experiences (N participants = 253; N experiences = 990); participants each recounted experiences of helping and not helping when they were glad or regretful. Developmental changes and contextual variations in prosocial (refusal) reasoning, emotional and moral evaluations, and prosocial decision making were assessed. Participants' reasons for prosocial actions and refusals varied across age groups and event types. To explain

why they were glad or regretful of their prosocial choices, participants used other-oriented reasons to evaluate prototypical experiences (e.g., helping/glad), and self-oriented reasons for non-prototypical experiences (e.g., helping/regret). Moral reasons were used to explain why prosocial engagements and refusals were both right or wrong. Non-prototypical prosocial experiences were reported to prevent future prosociality. The results of Study 2 broadened our understanding of prosocial refusal experiences, emphasized the importance of interpersonal and intrapersonal regret in evaluating prosocial choices, and revealed that not all prosocial decisions have moral roots. Overall, this dissertation contributed to the growing literature on prosocial refusal experiences by highlighting the context-specificity of prosocial judgments and shed light on how refusal experiences are relevant to prosocial development.

Acknowledgements

From the bottom of my heart, I would like to thank everyone who helped me throughout my PhD. I could not have done it without your support.

Holly, there are no words that can express the depth of my gratitude for all the things you did for me to be qualified and successful. Thank you for your brilliance, kindness, and most importantly patience. You helped me build my research career, but the impact you had on me is far greater than just an academic one. You taught me how to think, you lifted my confidence, and you helped me figure out who I am and who I would like to be. I immensely enjoyed our scholarly discussions, especially when we disagreed! :) Thank you for challenging me; it made me realize that my capabilities are boundless. You have changed me, and I am forever in your debt for that. Simply but sincerely, thank you!

Nina, I am absolutely honored to have you as one of my mentors. Thank you for believing in me and supporting me at all stages of my studies. You encouraged me to go beyond my comfort zone and to take on more challenges. You are a great role-model and, I only hope that one day I will become someone who is worthy of passing on your legacy.

Kristen, you believed in me and trusted me wholeheartedly over these years. Thank you for your endless emotional and professional support. You made me fall in love with prosociality, and I can't thank you enough! There is no better academic feeling than knowing someone who shares similar research interests with you! Your enthusiastic emails and your encouraging messages always brightened up my gloomy days. Thank you for adding sparkles to my PhD life.

Harriet, thank you for providing me with invaluable feedback throughout my studies. Your passion for children always reminded me of why I am pursuing this degree. Your

compassion and kindness, especially for your students made me want to be a better person, someone like you!

Dr. Stuart Hammond, your work on prosocial development had a profound impact on the initiation and continuation of my program of research. It is a great honor to have you on my PhD committee. Thank you.

I would also like to extend my sincere thanks to all my research assistants and volunteers who worked alongside me through the past five years: Caroline Pawelczyk, Chiara Lier, Erika Infantino, Alessia Frattolillo, Elysia Conte, Daniela Loachim, Kristen Ferlisi, Elaine Psaradellis, Ariane Lalonde, Laura Amodeo, Jasmine Manan, Ramiya Edward, and Alison Roig.
Your efforts and dedication have not gone unnoticed! Thank you.

A special thanks to Gabrielle Leclerc for generously dedicating her time and knowledge to my research projects. Gabrielle, you are the best reliable coder anyone could have on their research team. You are a life saver! Thank you.

I would like to thank all children, adolescents, and young adults who participated in my study. During the data collection, I had the privilege to speak with 165 families from different regions of Canada and cultural backgrounds. I am blown away by how supportive, compassionate, and caring the parent community is. It is no surprise that the new generation is empathetic and thoughtful. Despite being overstressed by the pandemic and exhausted from juggling work and life, parents gave their invaluable time to help me with my studies and contributed to the research. Thank you for sharing your stories and experiences with me. I cannot thank you enough for your contribution, I couldn't have done this without you!

I would like to thank FRQSC Doctoral Research Fellowship and Concordia University Graduate Fellowship and Merit Scholarship for supporting my studies financially.

The best part of my PhD journey, without any doubt, was to meet kindhearted intelligent people and to build long-lasting friendships. Thank you to all my lab mates and PhD fellows who supported me immensely in this journey. A special thanks to Monyka, Alyssa, Clinton, Ryan, Christine, Anne, Laura, Daysi, Malene, Julie, Melissa (and many more I don't have enough space to name on paper, but you are in my heart). I literally could not have done this without you. You made this hard journey all worth it. I am forever grateful for our friendship, which I am sure will continue beyond the university walls.

Mom & Dad, I know that I haven't been an easy child. I have chosen bumpy roads and the occasional dead-end, nonetheless you've always had my back! Your unconditional love and self-sacrifice paved the way for who I am today. Thank you for being you!

Ali, you have been by my side for better and for worse. Thank you for loving me and supporting me unconditionally. No matter what I achieve or who I become, I am no one without you!

I hope that this journey has made me wiser and humbler. I acknowledge that holding this degree is a privilege that came with the sacrifice of many. I would like to dedicate my PhD to my grandmother, who despite longing for a proper formal education, never stopped learning. Mamani, you are my role model!

Contributions of Authors

The first author of each manuscript is Nasim Tavassoli, who recruited the participants, collected and coded the data, ran analyses, and wrote two manuscripts. The second author of each manuscript is Holly Recchia, who provided guidance at all stages of the research, from its inception to completion. This included honing of research ideas, interview protocols, analyses, and the preparation of manuscripts.

Table of Contents

List of Tables

Study 1

Study 2

List of Figures

Study 1

Study 2

General Introduction

As social beings, individuals regularly encounter multifaceted social situations wherein, for variety of reasons, they decide to help others or not. Prosocial behaviors – as other-oriented actions intended to benefit others – are crucial for promoting interpersonal skills and emotional competence (Eisenberg et al., 2015). Prosocial behaviors are often perceived as morally desirable (Eisenberg et al., 2015; Janoff-Bulman et al., 2009) and engaging in prosociality is linked with experiencing positive emotions such as pride and self-satisfaction (Etxebarria et al., 2015). But social interactions are complex, and prosocial actions may be sometimes evaluated negatively by the helper, on the basis of considerations such as the costs of helping, outcomes for the helper or the recipient, or the deservingness of the recipient. To illustrate, consider the following narrative recounted by a young adult, which clearly underlines how contextual factors such as the negative interaction between the helper and the recipient as well as the negative outcomes for the helper altered their views regarding the desirability of having helped:

> I used to volunteer for [Show Name] which it was a show on old port about a year ago, and there's different sections you can work in, the section I was in was with handicapped people. Like people with physical disabilities. Umm and so there was this one family who would come in and the mom had broken her foot. And so umm basically what had happened was she had come up to me and she had said "Can I have, you know a chair for this and that." And the rules of the show are to say "No" because those seats are reserved already, like you have to buy a specific ticket that entitles you to that chair. Umm and so I told her "I'm sorry, no but if I do have extra chairs, I will give you a chair." So, what ended up happening is I ended up giving her a chair because at the end we had some extra. And what happened was then umm... she had like a large family with her, and she

had like young kids and things like that. You know, they had seen that I had extra chairs and they're like, you know "Can I have one, this and that" and at that point I felt like in a moral dilemma of... like..."Yes, I can give you chairs but like... A) my boss will kill me if I do that. B) What about all these other kids who are there and you know, it's not fair to everyone else." And so, at that point I was like, I was trying to explain it to her "I'm being nice to you, and giving you the chair that you had asked for." So, she kinda got mad at me because I had a supply that I could give but I didn't give, and so at that point it's like... she got mad and then she went and talked to my supervisor and I was like... like you know, I kind of felt at that point like... (pause) like you know, I did a good deed but she wasn't appreciative of it and it just cause my supervisor to get mad and so. Like not that I regret helping her out, but it's just that I regret the consequences of helping.

This narrative highlights how the helper navigated through a prosocial moral dilemma in a real-life situation, made sense of the social interactions, laid out the consequences of helping, and finally evaluated her own prosociality. The context of prosociality plays an important role in how this young adult evaluated her actions. That is, she ultimately regretted her prosocial behavior in regards to how it played out; not only was she reprimanded by her boss, but the recipient did not show any signs of appreciation. Indeed, when she was later asked why she regretted helping, she responded: *"...you try to help and then you just get slapped in the face for helping."* The moral emotion of regret is not commonly coupled with prosociality, and thus, these experiences are neglected in the literature. More research is required to understand how individuals interpret, morally and emotionally evaluate, and make sense of regretful prosocial experiences.

Furthermore, it is impossible to act on behalf of others all the time. Choosing not to be prosocial (or prosocial refusal) is a frequent social experience (e.g., Darley & Batson, 1973; Tavassoli et al., 2020; Waugh & Brownell, 2017). While it is not typically evaluated as impermissible, prosocial refusal is judged to be less desirable than acting prosocially (Janoff-Bulman et al., 2009). Although important, prosocial refusal experiences are ignored in the literature and their long-term role in prosocial decision-making process is overlooked. This is especially important because social interactions do not occur in isolation, rather, they occur within a history of exchanges, and lessons learned from previous experiences are carried into new situations.

Related to these processes of learning, the developmental literature on prosociality has highlighted the contributions of both biological predispositions and social experiences to the development of prosociality (e.g., Eisenberg et al., 2015; Dahl, 2018; Köster & Kärtner, 2019; Warneken, 2015). As children grow older, their prosocial behaviors become more selective, strategic, and internally motivated (e.g., House & Tomasello, 2018; Olson & Spelke, 2008), and their prosocial reasoning becomes more oriented towards others' needs and feelings that their own (Eisenberg et al., 2005, 2014). Thus, as they experience different prosocial encounters, children's and adolescents' prosocial skills and capacity to weigh considerations for both the self and others become more refined. Based on constructivist-interactionist theory, individuals play an active role in incorporating social and contextual cues to initiate, interpret, evaluate, and construct new understanding of their social interactions (Carpendale & Lewis, 2015; Dahl, 2018). In this sense, inasmuch as prosocial refusals are part and parcel of people's lived experiences of prosocial decision-making investigating prosociality without also considering

instances in which they chose *not* to be prosocial creates an incomplete picture of the development of prosociality.

Prosocial Refusal Experiences

Individuals' pervasive prosocial behaviors do not preclude the reality that there are many situations in which people are presented with prosocial opportunities but ultimately do not assist others, either because they fail to fully recognize others' needs, do not know how to address others' needs, or are not motivated to do so (Dunfield, 2014). Despite the dearth of literature on prosocial refusals, these experiences are indeed inevitable parts of people's social interactions. Constructivist-interactionist theory posits that social experiences are a unique context within which prosocial skills develop (e.g., Carpendale & Lewis, 2015; Dahl, 2018; Dahl et al., 2017). During social interactions, individuals receive feedback, interpret, reflect on, and evaluate their existing social and moral skills and modify or construct new understandings of their social interactions (Carpendale & Lewis, 2015). Prosocial understandings and skills are constructed in the context of social interactions with others and prosocial refusal experiences are not exempted. Against this backdrop, prosocial refusal experiences and the underlying reasons why individuals refuse to engage in prosocial behaviors has received limited attention in the empirical literature.

Moreover, prosocial behaviors do not occur in isolation; in fact, the reasons why individuals choose to engage or refuse to engage in prosociality may be situated in the history of their personal prosocial experiences. While considerations such as the history of positive and negative interactions with the recipient may impact prosocial choices, prior studies have de-emphasized the role of past prosocial experiences (e.g., Eisenberg, 1986). Yet, interpreting and evaluating prosocial situations does not only depend on the context of *current* prosocial situations (e.g., costs of helping; Sierksma et al., 2014), it may also be influenced by *past*

personal experiences of prosociality. In fact, prosocial experiences are subjectively evaluated by individuals, and it is likely that individuals learn from past personal experiences, constructing meanings that prospectively shape their future behavior (McLean & Thorne, 2003; Thorne et al., 2004). In this sense, the importance of what has been learned from past personal prosocial experiences, especially prosocial refusals, ought to be more fully explored in the research literature.

Prosocial (Refusal) Reasoning and Judgment

Reasoning regarding prosocial behaviors can be traced back to Eisenberg and colleagues' (1979, 1983) seminal work on prosocial moral dilemmas. They presented children with four hypothetical vignettes wherein the needs of the actor/helper were pitted against the needs of the recipient. By studying how individuals' perceptions of reality were interpreted and reflected in their thinking about prosocial issues, Eisenberg and colleagues (1986) devised a coding system for justifications used to support decisions to help or not help. Their framework captured a variety of concerns that can be brought to bear on prosocial choices such as hedonistic considerations, needs, and moral values. However, in their analyses, the reasons why children chose *not* to be prosocial were collapsed with their reasons for endorsing prosociality. Surprisingly, there remains a gap in the literature with regard to the unique pattern of thoughts and reasoning that account for why individuals decide not to be prosocial. Furthermore, while previous studies on prosocial moral reasoning suggest clear age-related changes in the types of reasoning that predominate (Eisenberg et al., 2002, 2005, 2014), it is not clear if the same age pattern would be observed in relation to explanations for prosocial refusals.

Moreover, in the original design of moral dilemmas (Eisenberg, 1986), the participants encountered specific forced choices (e.g., choosing between helping a fallen child or going to a

birthday party), which reduces the generalizability of the findings to naturalistic interactions. In real life, the choices and reasons to be or not to be prosocial are more complex and nuanced. Hypothetical moral dilemmas are helpful in understanding how individuals reason about *others'* prosociality (i.e., third-person) in a context where situational factors such as costs of prosociality are singled out and carefully controlled. However, it is also of unique value to assess individuals' reasoning about *their own* prosocial choices (i.e., first-person experience), which further illustrates the complexity of prosocial experiences and increases the ecological validity of findings (Dahl, 2017). With this regard, in this dissertation, we used the complementary advantages of both methodologies (e.g., hypothetical vignettes and real-life experiences) to examine individuals' prosocial refusal reasoning.

Furthermore, prosocial reasoning is closely connected to how individuals *evaluate* actions in specific situations (i.e., prosocial judgment) as obligatory or not (e.g., Kahn, 1992). If acting prosocially is judged to be obligatory, it means that refusing to act prosocially will be evaluated negatively (e.g., Darwall, 2013). By contrast, if a prosocial refusal is not evaluated negatively, then this indicates that the prosocial act is judged to be non-obligatory. In this respect, even though prosociality is morally desirable, choosing not to act on behalf of others or prosocial refusals may not always be perceived as impermissible/prohibited (e.g., Janoff-Bulman et al., 2009). This can lead to mixed evaluations and context-specific behavioral decisions, especially for children, as it is more challenging for them to simultaneously consider multiple considerations (Nucci et al., 2017). Up until recently, prosocial reasoning and judgment were used interchangeably in studying prosocial moral reasoning (e.g., Eisenberg, 1986; Sierksma et al., 2014; Weller & Laguttata, 2014). However, recent studies have begun to consider prosocial judgment and reasoning as separate constructs and consider reasoning as a means to better

understand judgment (e.g., Dahl et al., 2020). In other words: reasoning is the pattern of thought that leads to a decision or judgment.

Prosocial judgments seem to be sensitive to the context of their application as they depend on contextual factors such as costs of helping, the intensity of recipient's need, and the relationship between the helper and the recipient (e.g., Dahl et al., 2020; Komolova & Wainryb, 2011; Sierksma et al., 2014; Weller & Laguttata, 2014). To date, however, the majority of studies have focused on prosocial judgments associated with instrumental helping, and less attention has been devoted to prosocial judgments of sharing and comforting. Helping, sharing, and comforting are three distinct types of prosociality that are, respectively, elicited by instrumental, material, and emotional needs (Dunfield & Kuhlemier, 2013). Social norms and expectations associated with each prosocial behavior type are varied, which provide unique affordances for prosocial (in)actions (e.g., Dunfield, 2014; Kahn, 1992; McAuliffe et al., 2017; Paulus et al., 2013). In this sense, it is plausible that desirability, obligatoriness, and permissibility judgments of helping, sharing, and comforting vary considerably (e.g., Jackson & Tisak, 2001).

Emotional Evaluation of Prosocial Experiences

Moral emotions refer to emotions that are evoked by an evaluation of the self (Tangney et al., 2007). While there is a debate regarding the precedency of moral emotions and judgments, there is no doubt that moral emotions and judgments are deeply intertwined (e.g., Malti & Ongley, 2014; Wainryb & Recchia, 2012). For example, individuals are more likely to judge a prosocial action as obligatory and to engage in prosociality if they expect to experience negative emotions for refusing to be prosocial. As such, in order to understand prosocial experiences, one cannot exclusively rely on judgment and reasoning. Emotions impact how we make sense of and

evaluate our own prosocial actions. Although it is typically focused on antisocial rather than prosocial action, developmental research centered on the "Happy Victimizer" paradigm provides a valuable insight in children's constraints in understanding the complex relation between emotions and moral actions. This research reveals that preschool children typically attribute positive emotions to a victimizer who fulfills their own personal desire, because around age 4 and 5, children expect others to be satisfied by meeting their own needs even if it involves inflicting harm on others (Arsenio & Kramer, 1992; Krettenauer et al., 2008). Thus, although young children have some understanding of moral norms (i.e., *knowing* what is right or wrong), they do not necessarily associate moral emotions and actions in making sense of others' actions until the ages of 6 or 7 (Arsenio & Kramer, 1992; Krettenauer et al., 2008). A longitudinal study of the happy victimizer paradigm in a sample of 7- to 15-year-olds indicated that as children grew older, they made less selfish decisions and reported more happiness following their moral decisions (Malti & Keller, 2010). This indicates that with age, children become increasingly more aware of the consequences of their actions on others and this awareness has an impact on their evaluation of their own behavior (Lagattuta, 2005; McCormack et al., 2020).

Although this research provides an important backdrop for the current study, prioritizing the self in the happy victimizer paradigm involves actively inflicting harm to others, whereas prosocial refusals involve *omitting* an other-oriented action. Thus, patterns observed in relation to harmful behavior may not necessarily directly generalize to decisions to help or not (Janoff-Bulman et al., 2009). Besides antisocial behaviors, positive moral emotions (e.g., pride) are often felt following prosocial engagement and negative moral emotions (e.g., guilt, regret) following refusing to be prosocial (Malti & Keller, 2010). These prosocial situations where emotions and actions are coordinated might be considered to be prototypical prosocial experiences. However,

social situations are complex and multifaceted, and so it is possible that under certain non-prototypical circumstances, a helper regrets acting prosocially or is glad for refusing to be prosocial. Considering that negative moral emotions such as regret are not normally coupled with positive social behaviors (McCormack et al., 2020), little is known about how these non-prototypical experiences are interpreted and evaluated.

Lastly, evaluative emotions are linked to decision making; that is, emotions help individuals anticipate the consequences of their transgressive actions and adjust their behaviors accordingly (Arsenio & Gold, 2006; Malti & Ongley, 2014). The motivating role of moral emotions in relation to prosocial decision making is mainly studied with regards to empathy and sympathy (Malti et al., 2009; Miller et al., 1996) and less attention has paid to emotions such as regret or pride in the context of prosociality. A comparative study revealed that expecting negative evaluative emotions was a stronger predictor of moral decision making in antisocial than prosocial contexts, whereas anticipating positive evaluative emotions played a bigger role in prosocial than antisocial contexts (Krettenauer et al. 2011). However, the role of evaluative emotions in prosocial decision making is not clear in non-prototypical prosocial situations when actions and emotions are not aligned (i.e., when a person regrets acting prosocially or is glad for refusing to be prosocial).

General Research Aims

The overall goal of this dissertation was to highlight the important role of prosocial refusal experiences in the development of prosociality. To gain a holistic view of prosocial refusal experiences, we investigated prosocial reasoning, judgment, evaluative emotions, and prosocial decision-making processes. To better understand how prosocial refusal experiences contribute to the development of prosociality, we also investigated how reasoning, judgment, and

emotions developed from childhood through adolescence and young adulthood. The age groups in this dissertation were selected based on relevant age-related changes between these periods, and thus provide unique snapshots of key points in development. First, providing elaborated reasoning and constructing coherent narrative accounts of past experiences require sophisticated cognitive and linguistic abilities that are not fully developed prior to middle childhood (Eisenberg et al., 2006; Wainryb et al., 2005). Second, during adolescence, self-understanding and identity formation undergo dramatic changes, which influence adolescents' reasoning and judgment (Hardy & Carlo, 2011). Lastly, young adulthood is an important developmental point when individuals become increasingly exposed to a variety of social experiences and social expectations, providing them when ample opportunities to practice prosocial skills outside of their circle of familiar relationships. With this in mind, the research aims of this dissertation were threefold: (1) to assess the context-specificity of prosocial (refusal) reasoning and judgment across development, (2) to examine emotional evaluations (i.e., feeling glad, regretful) of different types of prosocial experiences across development, and (3) to understand the importance of different types of prosocial experiences in informing future prosocial decisions across development.

With regards to the first aim, we used both third-party evaluations of vignettes (Study 1) and first-person real-life experiences (Study 2) to understand the extent in which prosocial (refusal) reasoning and judgment are context dependent. For example, in Study 1, we examined whether children's and adolescents' judgments of the desirability, obligatoriness, or permissibility of prosocial acts depend on the intensity of recipient's needs and whether they vary across different types of prosociality (helping, sharing, and comforting). In terms of the second and third aims, we asked children, adolescents, and young adults to recount times when

they acted prosocially and then (1) they were glad or (2) regretful of their prosocial choices, as well as times when they refused to be prosocial and then (3) they were glad or (4) regretful of their prosocial choices. Participants' responses provided rich data to examine their perspectives on their reasons for engaging or refusing to engage in prosociality, reasons for why prosocial actions are evaluated positively or negatively, and lastly, how participants described these past prosocial experiences as influencing future prosocial decisions.

Summary of Method

A total of 254 participants were recruited for this dissertation. Participants included 84 children between ages 8 and 10 (*M* = 9.05 years, *SD* = .76), 81 adolescents between ages 13 to 15 (*M* = 13.68 years, SD = .83), and 89 young adults between ages 18 to 27 (*M* = 21.10 years, *SD* = 1.87). Study 1 included only children and adolescents (N = 165), and Study 2 included all three age groups (N = 253; one child was excluded). The same children and adolescents participated in both studies. Data were collected online in one session from children and adolescents, and in-person from young adults (See Appendix A for data collection procedure). Study 1 was part of a larger study that is pre-registered on the OSF website: https://osf.io/4ztf5/?view_only=2bc5b617f94546da8cba77662a0d1d52 .

Given that Study 1 was part of a larger project that included a test of mediation (See pre-registration link above), *a priori* power analysis was conducted for a mediation analysis with a target power of 0.8, and 5,000 replications, 20,000 Monte Carlo draws per replication, and average mediation parameters of .03. An estimated sample size of 160 (across the child and adolescent groups) was required for 80% power. Another *priori* power analysis was conducted for Study 2 in G*Power (albeit based on continuous outcome variables, as one initial goal of the study had been to code the frequency of various elements in participants' narrative accounts). A

total of 158 participants (across all three age groups) was needed to achieve a medium effect size f (0.25), with 80% power, and a total of 12 groups in the design (3 age groups x 2 prosocial/prosocial refusal events x 2 glad/regret). Therefore, given that both studies were based on one sample, the numbers of participants in each group were specified based on power analysis for Study 1, which required a larger sample size. The studies received IRB approval from the Concordia University Human Research Ethics Committee (Appendices J and K). Written consent was obtained from parents of children and adolescents (Appendix F), and from young adults (Appendix G), and verbal assent was obtained from each participant before the data collection (See Appendices H and I).

In Study 1, we developed six age-appropriate hypothetical vignettes with varying degrees of recipient's needs (high or low) wherein participants were asked to decide whether the actor should help, share, or comfort others (Appendix B). Using these vignettes, we were able to measure the desirability of prosociality (e.g., "*should* [the actor] help or not?"), as well as obligatory-permissibility judgments (e.g., "Is it okay to help [or not to help]?"). Although the vignettes depicted situations in which others exhibited instrumental, material, and emotional needs (which respectively corresponded to helping, sharing, and comforting situations; Dunfield 2014), we referred to prosocial acts as "helping" in a broad way to simplify the questions.

To complement hypothetical vignettes and to maximize ecological validity (Dahl, 2017), we elicited narrative accounts of participants' past prosocial experiences in Study 2. Past prosocial experiences are natural moral dilemmas, and they serve as unique contexts to study individuals' prosocial refusal reasoning, judgment, and decisions in real-life situations. It is noteworthy that narrative elicitation was the first task administered and participants were presented with hypothetical vignettes only after they had provided narrative accounts (or in a

separate session for adults). We decided to use this order of tasks to avoid guiding the content of participants' narratives. For the purpose of Study 2, we focused on participants' responses to specific prompts that followed the narratives to ensure that data were consistently available to answer all research questions. That is, while narratives provide a unique context to study the construction of prosocial (moral) experiences (e.g., McLean & Thorne, 2003), participants may inconsistently refer to reasons and other aspects of experiences in their narratives that were germane to the goals of Study 2. With this regard, after participants had provided open-ended narrative accounts, we explicitly asked them (1) why they helped or refused to help (i.e., prosocial [refusal] reasoning), (2) why they were glad for helping or not helping, or why they wished they helped or hadn't helped (i.e., emotional evaluation), (3) whether helping or not helping was the right thing to do, and why (i.e., moral judgment), and lastly (4) whether these experiences changed their future prosocial decisions (i.e., prosocial decision making; See Appendix C for full the narrative elicitation script). Similar to Study 1, "helping" was used in a common way to refer to any form of prosociality, although participants narrated different events involving instrumental helping, sharing, comforting, and protecting. Likewise, to simplify the wording for children, we indirectly referred to regretful experiences by saying "wish you helped or hadn't". Importantly, being glad or regretful of prosocial experiences do not necessarily reflect whether the prosocial choice was a right or wrong decision (i.e., moral evaluation; Malti & Ongley, 2014). Therefore, we also explicitly asked participants how they morally judged their prosocial engagement or refusal.

Lastly, the measures and tasks that formed the focus of this dissertation were drawn from a larger study of children's and adolescents' prosocial judgment development and parental socialization practices in encouraging children's self- and other-oriented concern. Parents

completed a series of questionnaires and were interviewed after the data were collected from their children (Appendix A). Except the demographic questionnaire, the data collected from parents were not included in this dissertation. Similarly, not all measures completed by children, adolescents, and young adults were included in the analyses of these studies. A summary of all measures and tasks that were administered is reported in Appendix A. A detailed description of the relevant tasks and procedures is reported in the method section of each study as well as in Appendices.

Children's and Adolescents' Judgments of the Desirability and Obligatoriness of Prosocial Action: Variations across Helping, Sharing, and Comforting

Nasim Tavassoli, & Holly Recchia

Department of Education, Concordia University, Canada

Abstract

This study examined whether intensity of need in high-cost prosocial situations differentially influenced children's and adolescents' prosocial judgments of helping, sharing, and comforting. A total of 165 8-10-year-old children and 13-15-year-old adolescents evaluated six hypothetical situations wherein one child needed to be helped, shared with, or comforted and another child decided whether or not to provide that assistance. Participants evaluated whether acting prosocially was desirable-obligatory, desirable-nonobligatory, undesirable-permissible, or undesirable-impermissible, and their reasoning was coded. Prosociality was evaluated as desirable-obligatory more in high need situations. Overall, children more than adolescents evaluated prosocial situations as desirable. When the need was high, comforting more than helping and sharing was evaluated as desirable, whereas when the need was low, sharing was evaluated as particularly desirable. The reasoning underlying judgments different across types of prosociality. Results are discussed in relation to the context-specificity of children's and adolescents' prosocial judgments.

Keywords: Prosocial judgment; Obligatoriness; Permissibility; Prosocial reasoning; Prosocial development

Children's and Adolescents' Judgments of the Desirability and Obligatoriness of Prosocial Action: Variations across Helping, Sharing, and Comforting

Acting on behalf of others is commonly considered as a positive, praiseworthy behavior (Eisenberg et al., 2015); yet not all prosocial actions are evaluated positively (e.g., helping a friend to bully a peer; Bloom, 2018; Janoff-Bulman et al., 2009; Oakley et al., 2011) and not all prosocial opportunities are met with prosocial action. Decisions not to respond prosocially (i.e., prosocial refusals) are common among children (e.g., Tavassoli et al., 2020; Waugh & Brownell, 2017) and adults (e.g., Darley & Batson, 1973). These non-actions are evaluated negatively, but not as harshly as immoral behaviors such as harming others (Janoff-Bulman et al., 2009). Given that there is a relationship between moral judgments and actions (Turiel, 2018), illuminating children's prosocial reasoning across contexts can help to uncover why some situations evoke prosocial actions and others prosocial refusals. In fact, it is likely that children's prosocial reasoning goes beyond conventional and polarized judgments of "helping is good/right" and "not helping is bad/wrong"; that is, in different contexts, prosocial actions may be judged as obligatory (I should help, and it is not okay not to help), desirable but not obligatory (I should help, but it is okay not to help), undesirable but permissible (I should not help, but it is okay to help), or impermissible (I should not help and it is not okay to help). Thus far, only a handful of studies have investigated the reasoning underlying these differentiated prosocial judgments (Dahl et al., 2020; Sierksma et al., 2014). The current study aims to contribute to this emerging line of research. Our overarching goal was to gain a better understanding of children's and adolescents' prosocial judgments regarding helping, sharing, and comforting.

More specifically, our first aim was to examine how prosocial judgments vary depending on recipients' levels of need and the type of prosociality required to meet their needs. Depending

on whether a prosocial opportunity encompasses high versus low needs and costs, prosocial situations may be evaluated differently (Kahn, 1992; Sierksma et al., 2014). Furthermore, given that helping, sharing, and comforting are characterized by distinct features and affordances (Dunfield, 2014; Paulus et al., 2013; Sohail et al., 2021), it is plausible that prosocial judgments of desirability, obligatoriness, and permissibility may vary across types of prosociality (e.g., Jackson & Tisak, 2001). Our second aim was to examine how these patterns shift from middle childhood to adolescence, as children become increasingly adept at simultaneously coordinating self-interest with others' needs (Helwig & Turiel, 2002).

Obligatoriness of Prosocial Enactments and Permissibility of Prosocial Refusals

The literature on moral judgments has predominantly focused on evaluating proscriptive morality, or refraining from harmful conduct (i.e., what we should NOT do; Turiel, 2018); judgments related to prescriptive morality which promotes positive, prosocial (moral) behaviors (i.e., what we should do) have been understudied (Janoff-Bulman et al., 2009). Proscriptive morality implies behavioral inhibition (e.g., "I should not harm others") whereas prescriptive morality implies behavioral activation (e.g., "I should help others"; Sheikh & Janoff-Bulman, 2010). Often, prosocial and antisocial actions are contrasted with one another as two sides of the same coin. However, a more suitable comparison is between prescriptive morality (i.e., engaging in prosociality) and prescriptive immorality (i.e., refusing to be prosocial or non-actions; Carnes & Janoff-Bulman, 2012). In other words, where the goal is to chart specific patterns of *prosocial* judgment, it is more illuminating to directly contrast individuals' helpful and not helpful behaviors rather than helpful and harmful behaviors. Although they are rarely the focus of scholarship, prosocial refusals are meaningful on their own right and arise commonly in

children's everyday exchanges (Tavassoli et al., 2020). Nevertheless, the ways in which prosocial refusals are evaluated is understudied.

One way of categorizing judgments is to gauge whether the actions are viewed as obligatory or discretionary (Kahn, 1992). Following from Darwall's (2013) notion of "bipolar moral attitudes", if acting prosocially is judged obligatory, it means that refusing to act prosocially is evaluated negatively. In fact, even when prosociality is viewed as morally desirable, prosocial refusals may not be perceived as wrong if the action is deemed to be discretionary (e.g., Janoff-Bulman et al., 2009). Even further, engaging in some prosocial actions may be judged to be impermissible. For example, a prosocial act might be judged impermissible if the dangers involved in helping are perceived as extremely pronounced as compared to the benefits (or need of the recipient). This can lead to mixed evaluations and context-specific behavioral decisions.

The literature on children's moral reasoning underlines that, in making judgments of actions, children develop an increasingly sophisticated capacity to coordinate moral concerns with welfare or justice with other considerations such as social conventional, prudential, or personal concerns (Smetana et al., 2014). Coordinating self-interest such as the personal costs of helping with the moral concerns underlying prosociality (i.e., promoting fairness or others' welfare) can thus be challenging for children (Nucci et al., 2017). As children grow older, they become increasingly proficient in simultaneously considering more than one element of complex social situations (Helwig & Turiel, 2002).

For these reasons, it is crucial to document the reasoning underlying children's prosocial judgments to uncover their differentiated moral understandings of prosocial situations (Helwig & Turiel, 2002). Investigating reasoning regarding prosocial behaviors can be traced back to

Eisenberg and colleagues' work (1986) on prosocial moral dilemmas, wherein the needs/wants of one individual were described as coming into conflict with those of another individual. Yet, Eisenberg and colleagues (1987, 1991) focused on capturing the forms of reasoning used to support children's prosocial decisions (e.g., hedonistic reasons, need-oriented reasons, etc.), rather than specific patterns of reasoning underlying prosocial judgments of desirability (or lack thereof), obligatoriness or permissibility of prosocial actions. References to others' welfare and general evaluations of prosocial behavior are often used to justify why helping is desirable in hypothetical prosocial situations, however, the reasons why helping is sometimes deemed undesirable or even impermissible have not been as well-documented (Dahl et al., 2020). Thus, the goal of this study is not only to examine children's and adolescents' differential prosocial judgments, but also the reasoning underlying them.

Contextual Sensitivity of Prosocial (Moral) Judgments

Existing scholarship underlines that prosocial judgments are sensitive to the context of their application, in that they vary depending on situational factors such as the cost of prosociality, intensity of need, and relationship between helper and recipient (e.g., Dahl et al., 2020; Komolova & Wainryb, 2011; Sierksma et al., 2014; Weller & Laguttata, 2014). Previous studies have indicated that both preschoolers (3- to 5-year-olds; Dahl et al., 2020) and older children (7- to 13-year-olds; Weller & Laguttata, 2014) evaluate high need-low cost helping as obligatory. Similarly, 8- to 13-year-old children perceived greater obligation to help a peer when the cost of helping was low, whereas the obligation to help in high cost situations was overshadowed when the other's need was low (Sierksma et al., 2014). Additionally, as children grow older, their judgments of prosociality in high need situations appear to shift. Nucci et al. (2017) documented a curvilinear age-related pattern, wherein 8- and 16-year-olds made more

negative judgments of *not* helping in high need situations, whereas 11- and 14-year-olds' judgments of prosocial refusals were less equivocally negative. Overall, it is evident that the situational factors are a crucial predictor of individual's prosocial judgments.

Furthermore, the majority of previous studies on prosocial judgments have focused on helping situations (Sierksma et al., 2014; Weller & Laguttata, 2014). However, prosocial behaviors include a variety of other-oriented acts including sharing and comforting that are also within the realm of children's daily experiences (Dunfield & Kuhlmeier, 2013). Although there is growing evidence that distinct psychological mechanism underlies these types of prosociality (e.g., Dunfield, 2014; Paulus et al., 2012), the prosocial judgment literature has overlooked these distinctions. Each type of prosociality is elicited by different type of needs: Helping is elicited by instrumental needs is intended to assist others reach their instrumental goals (e.g., Hepach et al., 2016; Warneken & Tomasello, 2006); sharing is elicited by material needs and aims to compensate for unequal distribution of resources (e.g., Brownell et al., 2013); and comforting is elicited by emotional needs and involve efforts to alleviate negative emotions (e.g., Svetlova et al., 2010). Although helping, sharing, and comforting share a common orientation towards meeting others' needs, they differ on some dimensions that may affect children's evaluations of prosocial enactment or refusal (e.g., Dunfield, 2014; Paulus et al., 2012). Nevertheless, little is known about whether varied types of prosocial behaviors are evaluated similarly or differently.

With respect to helping, specifically, research suggest that it is often perceived as morally desirable; however, choosing not to help others (or refusing to help) may not always be evaluated negatively or perceived as prohibited (e.g., Janoff-Bulman et al., 2009). In fact, helping is typically considered desire-based, commendatory, and discretionary (Janoff-Bulman et al., 2009). For instance, social responsibility is tempered with caution when helping is costly or

dangerous; that is, parents use cautionary messages to warn children about helping strangers and inform them about the risks and consequences of costly helping (Wray-Lake et al., 2012). Compared to the costs of sharing (i.e., relinquishing resources to compensate for inequality), the cost of helping is often less explicit and can take a variety of forms. Thus, inasmuch as decisions not to share more clearly violate a norm of equality, refusing to help when the cost of helping is high may be perceived as more permissible than for sharing.

Relative to helping, sharing emerges later in development as it requires understanding of ownership and fairness, and involves giving up resources (e.g., Brownell et al., 2009, 2013; Moore, 2009). Children's understanding of ownership rights may lead them to view sharing as a matter of personal choice under some circumstances (Nucci, 1981). In fact, children prioritize owners when judging who should use an object (Neary & Friedman, 2014), and owners' refusal to share is evaluated as acceptable by children and adults (Van de Vondervoort & Friedman, 2013). Also relevant to sharing, norms of fairness and equality become internalized in middle childhood (McAuliffe et al., 2017; Moore, 2007; Smith et al., 2013), which creates both social and personal obligations for children to share. The emergence of inequity aversion in pre-adolescence may explain why refusing to share or failing to compensate for inequality is sometimes evaluated negatively (e.g., Fehr et al., 2008; Kogut, 2012). Additionally, parents and educators emphasize the importance of sharing resources with siblings, friends, and peers from early years to promote and maintain positive social interactions (e.g., Ross, 2013; Waugh et al., 2015). Parental insistence on sharing may socialize children to perceive sharing as an obligation (Ross, 2013).

Lastly, compared to helping and sharing, comforting is more affectively charged as it is a response to emotional needs (Dunfield, 2014). Concern for others' welfare may thus be more

salient for emotional needs than instrumental or material needs, which may increase the desirability of comforting. Nevertheless, in contrast to helping and sharing, comforting behavior may be less expected from children, as they might have less experience in generating an appropriate behavior to alleviate others' emotional needs (Jackson & Tisak, 2001), or might themselves become distressed in the face of others' negative emotions (Eisenberg et al., 2015). Lack of capacity or knowledge in comforting others may reduce the perceived obligatoriness of the behavior.

In sum, given the varied features of helping, sharing, and comforting, individuals might evaluate prosocial enactment as a requirement, a desirable personal choice, a socially inappropriate behavior, or even a harmful and prohibited behavior (Sierksma et al., 2014). One of the aims of this study was thus to examine whether varied types of prosocial behaviors are evaluated differently and how children justify their differential judgments regarding helping, sharing, and comforting.

The Present Study

The purpose of this study was to understand whether situational factors such as intensity of need influence children's and adolescents' prosocial judgments of high cost helping, sharing, and comforting. With regard to situational factors (Nucci et al., 2017; Weller & Lagattuta, 2014), we expected to replicate previous findings that the intensity of the recipient's need (in situations involving high costs for the helper) would influence participants' prosocial judgments. Specifically, we expected that high need more than low need prosociality would be judged as desirable and obligatory, whereas low need more than high need prosociality would be evaluated as undesirable but permissible. Given that adolescents are more skilled than children in balancing their own needs vs. other's needs, we expected to find an age-related change in prosocial

judgments (Nucci et al., 2017); that is, we anticipated that children more than adolescents would use more categorical judgments such as desirable-obligatory, and undesirable-impermissible, whereas adolescents more than children would judge prosocial situations as desirable-nonobligatory, or undesirable-permissible.

Furthermore, it was expected that helping, sharing, and comforting would be evaluated differently. Since helping is typically considered a desire-based moral behavior (Janoff-Bulman et al., 2009), we expected to find a prototypical pattern for helping as desirable and non-obligatory, regardless of intensity of need. However, we expected sharing to be evaluated differently depending on the intensity of need in high-cost situations, as sharing might be perceived as a matter of personal choice in some contexts (Nucci, 1981), but a normative requirement in others (McAuliffe et al., 2017; Smith et al., 2013). With regards to comforting, given that emotional needs are more directly linked to others' welfare and ignoring others' emotions might signal a lack of moral concern, high-need comforting might be evaluated as particularly desirable, and even obligatory. However, since children may not have as much experience in alleviating others' emotional needs (Jackson & Tisak, 2001), comforting might be evaluated as undesirable-permissible, especially when the intensity of need is low.

Lastly, we aimed to document the reasoning underlying children's and adolescents' prosocial judgments. Stemming from the literature on prosocial moral reasoning (e.g., Eisenberg, 1986), we expected that other-oriented reasons such as concern for others would underlie judgments of prosocial desirability, whereas self-oriented reasons such as costs to self would be linked to judgments of undesirability. Furthermore, we expected reasons to be centered on personal choice when prosociality was deemed non-obligatory or permissible (Dahl et al., 2020).

Method

Participants

A total of 165 participants were recruited across Canada through word of mouth or online (e.g., advertisements in parenting groups on social media). Data collection occurred online via Zoom. Participants included 84 children between the ages of 8 and 10 years (M = 9.05, SD = .76), and 81 adolescents between the ages of 13 and 15 years (M = 13.68 years, SD = .83). Half of the children (*n* = 42) and 46% of the adolescents (*n* = 39) self-identified as girls, and the remaining participants as boys. Parents reported predominantly European origins (64.8%), but other ethnic backgrounds were also represented within the sample (0.6% Aboriginal origins, 3% African origins, 7.3% East and Southeast Asian origins, 5.5% South Asian origins, 6.1% West Central Asian and Middle Eastern origins, 4.2% Latin, Central and South American origins, .6% Oceania origins, and 7.3% mixed ethnicities). The participants' parents were highly educated, with 70.9% of them having at least completed a university degree. The families were primarily affluent, with 72.1% of parents reporting household incomes over $60,000 CAD per year. The study received ethical approval from the Office of Research at Concordia University (Appendix J).

Measures and Procedure

Prosocial Judgment Hypothetical Vignettes

To assess how children and adolescents judged prosocial situations with high costs but high or low intensity of need, different age-appropriate hypothetical stories were designed. Previous studies have examined distinctions between children's judgments of prosociality as a function of the cost of helping, revealing little individual variation when the cost of helping is

low (e.g., Sierksma et al., 2014). Consequently, the hypothetical stories in the present study all depicted situations that were high in costs for the actor (helper). Moreover, prosocial judgments across different types of prosociality are rarely documented (e.g., Jackson & Tisak, 2001); thus, this study included prosocial situations that depicted opportunities to help, share, and comfort. In sum, the design included a total of six vignettes that presented (a) high need/high cost and (b) low need/high cost prosocial situations for each type of prosociality (e.g., helping, sharing, comforting). All stories involved a prosocial opportunity wherein one child (recipient) needs to be helped, shared with, or comforted and another child (actor) needs to decide whether or not to provide that assistance. No information was given about the relationship between the actor and the recipient.

To ensure that hypothetical stories were perceived as high cost and low or high need (depending on the condition), 12 stories (two for each condition) were pretested in a pilot study. A detailed description of the pilot study is available at: https://mfr.osf.io/render?url=https://osf.io/2za5c/?direct%26mode=render%26action=download%26mode=render. The finalized set of six stories were read aloud to participants, presented with accompanying images to facilitate comprehension. A full description of the hypothetical vignettes is available in Appendix B or at the following link: https://mfr.osf.io/render?url=https://osf.io/h4qmk/?direct%26mode=render%26action=download%26mode=render. The gender of the actor and the recipient in the stories matched that of the participant. As a manipulation check, participants were asked to rate the recipient's level of need ("How much does [name recipient] need help?") and the cost of prosociality for the actor ("How much will [name of helper] have to give up to help [name of recipient]?") on a four-point scale (1 = not at all to 4 =very much; Sierksma et al., 2014). As depicted in Table 1, based on a series

of paired-sample t-tests, the level of need was rated as greater in the high need stories than in the low need stories (*p*s < .05, Cohen's *ds* = 1.19 to 1.37). Intensity of need was similarly rated as high in three high need stories (*ps* > .05), and low in three low need stories (*ps* > .05; see Table 1). All stories were rated as similarly costly, except the cost of sharing in the low need/high cost sharing story was rated somewhat lower than that of comforting (p < .05, Cohen's d = .27).

Table 1

Descriptive statistics of intensity of need and cost of helping ratings for each story

	High need / High cost stories		Low need / High cost stories	
	Need	Cost	Need	Cost
	M (SD)	*M (SD)*	*M (SD)*	*M (SD)*
Helping	3.17 (.65)	2.98 (.81)	2.14 (.60)	2.90 (.81)
Sharing	3.28 (.67)	3.02 (.71)	2.03 (.71)	2.81 (.76)
Comforting	3.27 (.71)	3.00 (.77)	2.12 (.72)	3.08 (.81)

Next, following the procedure used by Dahl and colleagues (2020), participants were asked whether the actor should help or not and why, to assess the desirability of prosociality and the reasoning underlying their judgments. If the participant answered "yes, the actor should help," then they were asked "What if the actor does not help - would it be okay not to help?" If a participant responded, "it is okay not to help," their response was coded as evaluating the prosocial behavior as desirable but not obligatory, whereas if they responded, "it is not okay not to help," their response was coded as desirable and obligatory. On the other hand, if a participant answered "No, the actor should not help," then they were asked "What if the actor helps - would it be okay to help?" If a participants responded, "it is okay to help," their response was coded as undesirable but permissible, whereas if they responded, "it is not okay to help," it was coded as undesirable and impermissible. After answering "it is okay/not okay to help," they were also

asked to explain their reasoning (See Table 2). It is noteworthy that to simplify the questions for children, we referred to different types of prosociality as "helping" in a broad way, although the vignettes depicted situations that required helping, sharing, and comforting.

Table 2

Follow-up Questions for the Prosocial Moral Judgments-Hypothetical Vignettes

Should [the actor] help? Why?			
Yes (Desirable)		No (Undesirable)	
What if [the actor] does not help. Would it be okay not to help? Why?		*What if [the actor] helps. Would it be okay to help? Why?*	
Yes (Desirable-Not obligatory)	No (Desirable-Obligatory)	Yes (Undesirable-Permissible)	No (Undesirable-Impermissible)

Prosocial Judgment Reasoning Coding

Participants' reasoning was coded using the coding categories listed below. The reasoning categories were informed by social domain theory (e.g., Smetana et al., 2014), developed based on previous studies on prosocial moral reasoning (e.g., Eisenberg, 1986; Killen & Turiel, 1998), and elaborated using approximately 10% of the interviews to capture themes emerging from the data. Participants' reasoning was coded as reflecting the presence (1) or absence (0) of the following considerations: (a) concern for other/the recipient (e.g., *"she is sad, crying and hurt"*), (b) lack of concern for other/the recipient (e.g., *"he is not in physical pain"; "you don't need to play video games, it is not something that's necessary*"), (c) relationship concerns (e.g., *"He's going to build up a better friendship with each other*"), (d) personal choice (e.g., *"it's his choice", "if she'd wanted to help, it'd be okay*"), (e) concern for self/the actor

(e.g., *"if she [actor] helps, then her parents are gonna be very mad at her", "she is missing her test"*), (f) minimizing the cost to self (e.g., "*he could always talk to his friend over the phone*"), (g) general evaluation (e.g., "*because that would be nice*"), and (h) lack of responsibility (e.g., "*she could ask the teacher to help*"). Multiple categories could be coded for one response if a participant drew on various types of concerns in explaining their judgments. Interrater reliability was established between two coders on 20% of the data (n = 33 participants, with approximately equal representation across age group and genders) and Cohen Kappa's exceeded .84 for all categories. Any disagreements between the coders were discussed and resolved via consensus.

Plan of Analysis

Data were analyzed using General Linear Mixed Models with a logistic link function and binomial error distribution. A random intercept model was used to account for within-subject correlation. Fixed effects of intensity of need (high, low), types of prosociality (helping, sharing, comforting), age (child, adolescent), gender (boy, girl), and two-way interactions were included in the models. Sequential Bonferroni pairwise comparisons were used to interpret significant main effects and interactions, and adjusted p values are reported. Reported percentages for significant effects are estimated based on model-predicted values controlling for levels of covariates. Gender was included in all the models but analyses did not reveal any significant effects involving gender. Only significant interactions were retained below. Reasons for desirable and undesirable prosociality were analyzed separately using GLMM with types of prosociality as the repeated measures. Due to relatively small cell sizes, comparisons between types of prosociality were not conducted on reasons for desirable-obligatory and nonobligatory judgments or for undesirable-permissible and -impermissible judgments. In these instances, we report overall percentages of different reasons descriptively.

Results

Desirability of Prosociality

Acting prosocially was evaluated as desirable (i.e., the actor should help) in 56.8% of prosocial situations and undesirable (i.e., the actor should NOT help) in 43.2% of prosocial situations. The estimated subject variance was .81 (*SE* = .19, 95% CI = .50 – 1.31). The model indicated significant main effects for intensity of need, type of prosociality, age, and a significant interaction between intensity of need and type of prosociality (Table 3). As expected, results indicated that 77% of high need and 38% of low need prosocial acts were evaluated as desirable. Sharing (64%) and comforting (62%) were evaluated as desirable significantly more than helping (50%). As hypothesized, 8–9-year-old children evaluated prosocial acts as desirable 71% of the time, whereas 13-14-year-old adolescents evaluated prosocial acts as desirable 45% of the time. Last, as depicted in Figure 1, when the intensity of need was high, comforting was evaluated as desirable (86%) more than helping (70%) and sharing (71%), whereas when the intensity of need was low, sharing was evaluated as desirable (57%) more than helping (29%) and comforting (30%) (See Table 3 for the contrasts).

Table 3

Estimates of Parameters Predicting the Desirability of Prosociality

Parameter	Coefficient (SE)	Test	*p*	95% Confidence intervals
Intensity of need	2.68 (.24)	$t = 10.96$	< .001	(2.20) – (3.16)
Types of prosociality		$F = 7.76$	< .001	
Comfort vs. Help	.13 (.04)	$t = 3.14$	= .003	(.04) – (.22)
Comfort vs. Share	-.02 (.04)	$t = -.49$	= .62	(-.09) – (.06)
Help vs. Share	-.15 (.04)	$t = -3.70$	= .001	(-.24) – (-.05)
Age group	1.06 (.19)	$t = 5.37$	< .001	(.67) – (1.45)
Gender	-.11 (.19)	$t = -.57$	= .57	(-.49) – (.27)
Intensity of need * Types of prosociality		$F = 19.26$	< .001	
High need (Comfort vs. Help)	.16 (.04)	$t = 3.77$	= .001	(.06) – (.26)
High need (Share vs. Help)	.01 (.05)	$t = .13$	= .89	(-.09) – (.11)
High need (Share vs. Comfort)	-.15 (.04)	$t = -3.73$	= .001	(-.25) – (-.06)
Low need (Comfort vs. Help)	.01 (.05)	$t = .27$	=.78	(-.08) – (.10)
Low need (Share vs. Help)	.28 (.05)	$t = 5.55$	< .001	(.16) – (.40)
Low need (Share vs. Comfort)	.27 (.05)	$t = 5.18$	< .001	(.15) – (.38)

Note. N participants = 165, N observations = 990. Intensity of need (1 = high need), age group (1 = children), gender (1 = female). Pairwise contrasts are indented in the first column. Sequential Bonferroni correction was used for pairwise corrections and *p* values were adjusted accordingly. Effect sizes are exponentiated values of coefficients.

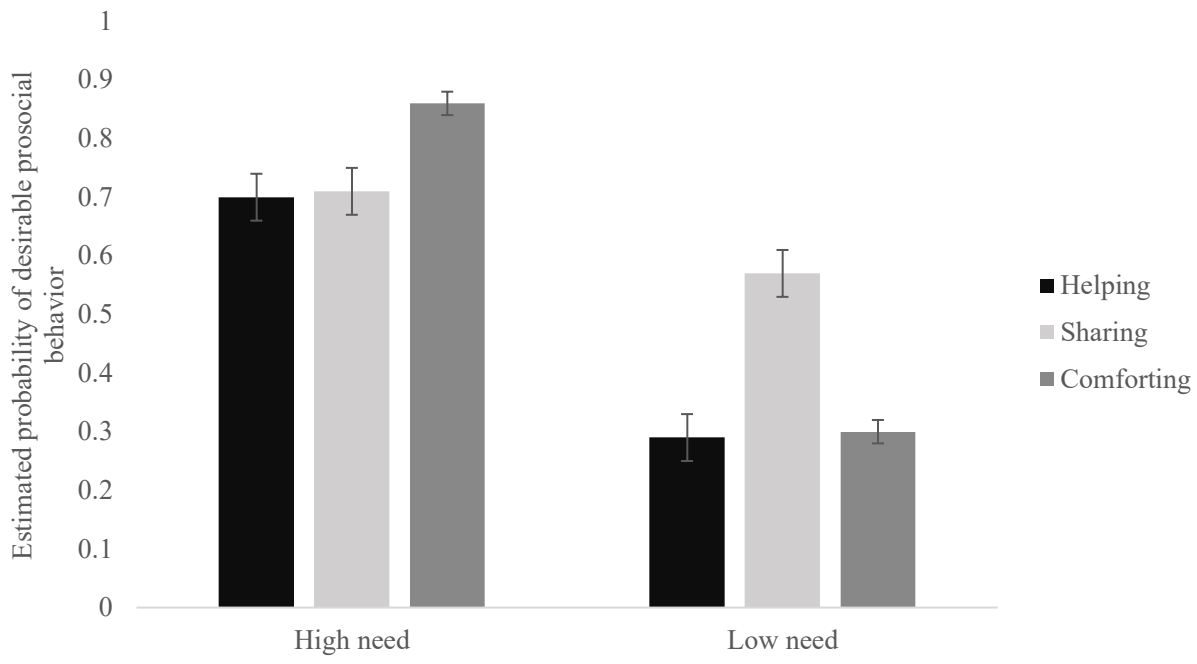


Figure 1. Estimated probabilities of desirable prosocial behavior: Intensity of need by types of prosociality

When participants were asked *why* engaging in prosociality was desirable, the most commonly cited reasons were concern for others (67.5%), lack of cost to self (37.5%), general evaluation (22.3%), and relationship concerns (13.8%). Since other reasons such as lack of concern for others were not given as explanations for why prosociality was desirable, they were omitted from the following analysis. The GLMM models revealed significant main effects of types of prosociality on the likelihood of referring to concern for others (F (2, 554) = 10.93, p < .001), minimizing the cost to self (F (2, 554) = 10.82, p < .001), relationship concerns (F (2, 554) = 26.39, p < .001), and general evaluation (F (2, 554) = 5.37, p = .005). Concern for others was mentioned as a reason for the desirability of comforting significantly more than for sharing and helping. Participants minimized the cost to self for helping significantly more than comforting and sharing. Relationship concerns were mentioned as a reason for sharing significantly more

than comforting, followed by helping. General evaluation was given as a reason for helping significantly more than sharing and comforting (See Figure 2).

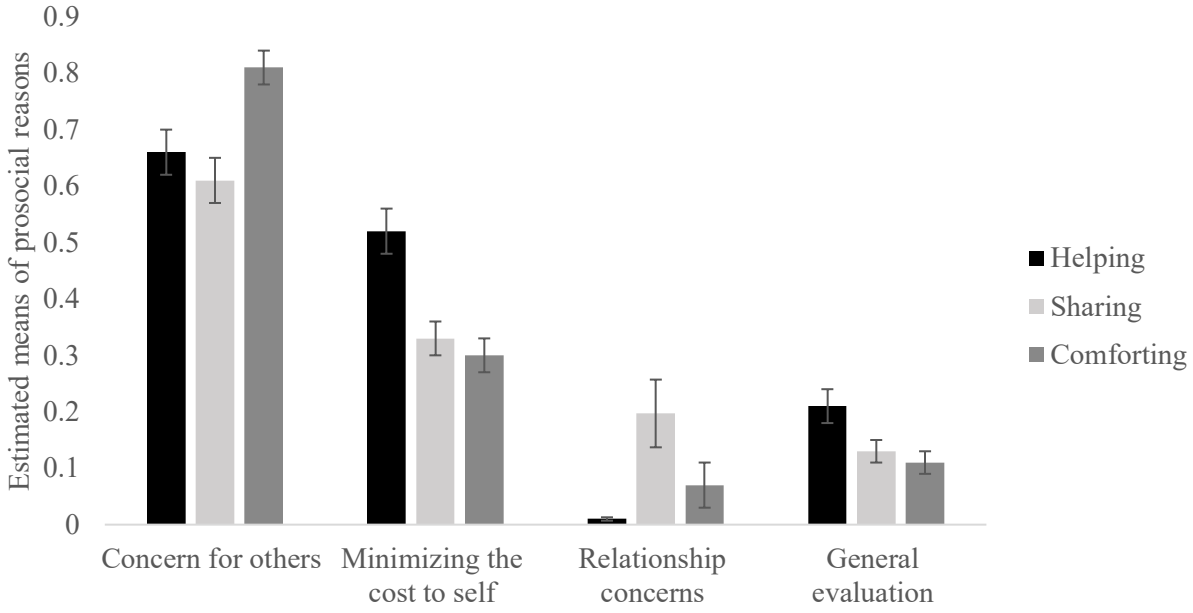


Figure 2. Reasons for the desirability of comforting, helping, and sharing

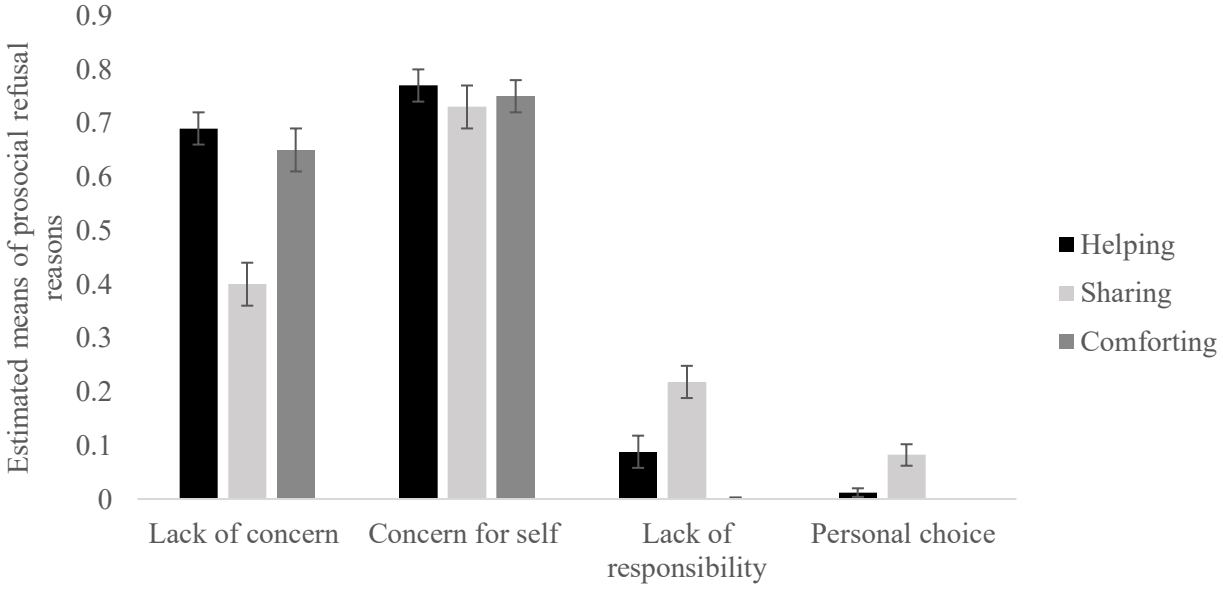


Figure 3. Reasons for the undesirability of comforting, helping, and sharing

When participants were asked *why* engaging in prosociality was undesirable, reasons such as concern for self (75%), lack of concern for the recipient (59%), lack of responsibility (11%), and personal choice (3%) were given. Since other reasons such as concern for others were not given as explanations for why prosociality was undesirable, they were omitted from the following analysis. The GLMM models revealed significant main effects of types of prosociality for lack of concern for the recipient (F (2, 424) = 12.95, $p < .001$), and personal choice (F (2, 554) = 532.89, $p < .001$). Concern for self and lack of responsibility was mentioned similarly across types of prosociality (*ps* = .7, .3, respectively). Lack of concern for others was more often given as a reason for why helping and comforting were undesirable as compared to sharing. Personal choice was given as a reason for the undesirability of sharing significantly more than helping and comforting (See Figure 3).

Obligatoriness of Desirable Prosociality

Overall, 41.4% of desirable prosocial acts were evaluated as obligatory (i.e., the actor should help, and it is NOT okay not to help), and 58.6% were evaluated as non-obligatory (i.e., the actor should help, but it is okay not to help). The estimated subject variance was 1.94 (*SE* = .6, 95% CI = .99 – 3.80). The model indicated significant main effects for intensity of need and type of prosociality (Table 4). As hypothesized, the results showed that 52% of high need compared to 1.7% of low need situations were evaluated as desirable-obligatory (rather than desirable-nonobligatory). In line with our hypothesis, comforting (41%) and sharing (38%) were evaluated as desirable-obligatory more than helping (20%) (See Table 4 for contrasts).

Given that reasons for the obligatoriness or nonobligatoriness of desirable prosociality were based on smaller numbers of responses, we report these results descriptively. When participants were asked *why* engaging in prosociality was obligatory, concern for others (80%)

was used more than other reasons to justify the obligatoriness of prosocial behaviors. Conversely, concern for self (54%) and lack of concern for others (38%), followed by lack of responsibility (14%) and personal choice (10%) were used to justify why prosocial behaviors were desirable but not obligatory.

Table 4

Estimates of Parameters Predicting the Obligatoriness of Desirable Prosociality

Parameter	Coefficient (SE)	Test	*p*	95% Confidence intervals
Intensity of need	1.61 (.21)	$t = 7.59$	< .001	(1.19) – (2.02)
Types of prosociality		$F = 11.94$	< .001	
Comfort vs. Help	.02 (.05)	$t = .49$	= .62	(-.07) – (.12)
Comfort vs. Share	-.188 (.06)	$t = -3.32$	= .002	(-.31) – (-.06)
Help vs. Share	-.21 (.05)	$t = -3.88$	< .001	(-.34) – (-.08)
Age group	.50 (.30)	$t = 1.63$	= .10	(-.10) – (1.65)
Gender	.37 (.31)	$t = 1.18$	= .23	(-.24) – (.98)

Note. Intensity of need (1 = high need), age group (1 = children), gender (1 = female). Pairwise contrasts are indented in the first column. Sequential Bonferroni correction was used for pairwise corrections and *p* values were adjusted accordingly. Effect sizes are exponentiated values of coefficients.

Permissibility of Undesirable Prosociality

Overall, 74.1% of undesirable prosocial acts were evaluated as permissible (i.e., the actor should NOT help, but it is okay to help) and 25.9% were evaluated as impermissible (i.e., the actor should NOT help, and it is NOT okay to help). The estimated subject variance was 2.29 (*SE* = .53, 95% CI = 1.45 – 3.60). The model only revealed a significant intensity of need by type of prosociality interaction (see Table 5 and Figure 4). When the intensity of need was low, undesirable sharing (86%) and helping (81%) were evaluated as permissible more than comforting (67%). When the intensity of need was high, 91% of comforting, 86% of sharing, and

76% of helping situations were evaluated undesirable-permissible; these differences between types of prosociality in high need situations were not significant.

Table 5

Estimates of Parameters Predicting the Permissibility of Undesirable Prosociality

Parameter	Coefficient (SE)	Test	*p*	95% Confidence intervals
Intensity of need	.06 (.42)	$t = .14$	= .88	(-.76) – (.88)
Types of prosociality		$F = 1.63$	= .19	
Age group	-.06 (.34)	$t = -.16$	= .86	(-.72) – (.61)
Gender	.08 (.33)	$t = .23$	= .82	(-.58) – (.74)
Intensity of need * Types of prosociality		$F = 3.58$	= .03	
High need (Comfort vs. Help)	.15 (.07)	$t = 2.01$	= .13	(-.03) – (.32)
High need (Share vs. Help)	.09 (.07)	$t = 1.43$	= .30	(-.05) – (.25)
High need (Share vs. Comfort)	-.05 (.06)	$t = -.86$	= .38	(-.16) – (.06)
Low need (Comfort vs. Help)	-.13 (.05)	$t = -3.12$	= .03	(-.26) – (-.01)
Low need (Share vs. Help)	-.05 (.04)	$t = -1.06$	= .29	(-.04) – (.14)
Low need (Share vs. Comfort)	.18 (.06)	$t = 3.12$	= .006	(.04) – (.32)

Note. Intensity of need (1 = high need), age group (1 = children), gender (1 = female). Pairwise contrasts are indented in the first column. Sequential Bonferroni correction was used for pairwise corrections and *p* values were adjusted accordingly. Effect sizes are exponentiated values of coefficients.

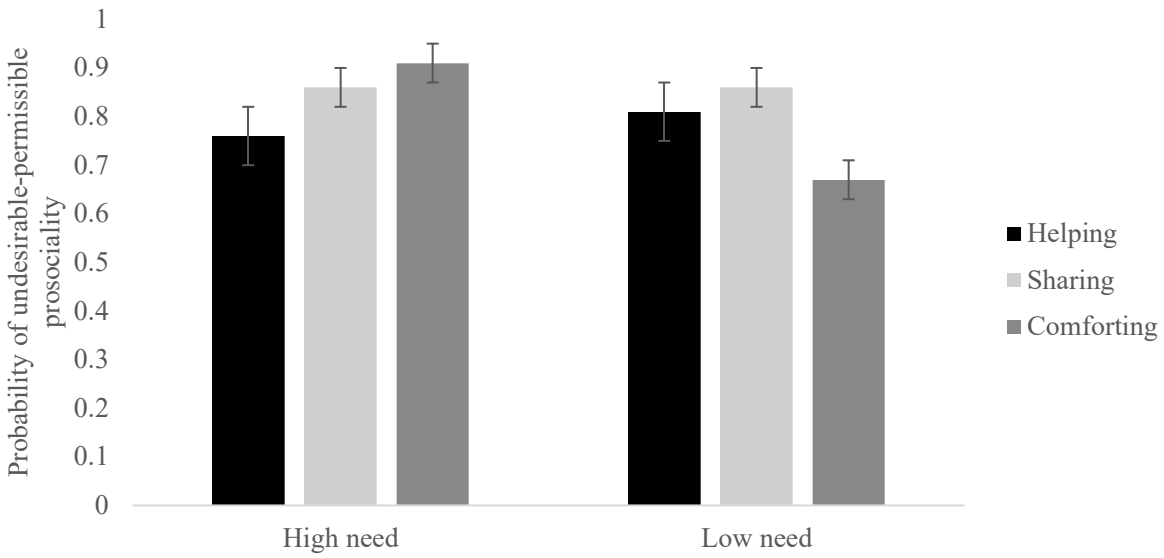


Figure 4. Probability of undesirable-permissible (relative to undesirable-impermissible) judgments: Intensity of need by types of prosociality

Given that reasons for the permissibility or impermissibility of undesirable prosociality were based on smaller numbers of responses, we report these results descriptively. When participants were asked *why* engaging in prosociality was undesirable but permissible, concern for others (46%) was given more than general evaluation (31%) and relationship concerns (21%), followed by minimizing cost to self (17%) and personal choice (14%). On the other hand, concern for self (91%) and lack of concern for others (28%) were typically used to justify why prosociality was impermissible.

Discussion

The goal of this study was to examine whether the intensity of need in high-cost prosocial situations influences children's and adolescents' prosocial judgments of helping, sharing, and comforting. Overall, documenting children's and adolescents' prosocial judgments and the reasoning underlying them sheds light on the ways in which prosocial opportunities are

understood and evaluated. The findings suggested that prosocial judgments vary by age, and also depend on the intensity of need and type of prosociality required to address the need.

Consistent with previous studies (Nucci et al., 2017), children more than adolescents evaluated prosociality as desirable (compared to undesirable). Functioning in complex social situations requires coordination of multiple concerns (e.g., cost to self vs. benefit for others), which is more challenging for younger children (Helwig & Turiel, 2002). As children grow older and develop cognitive flexibility, they become increasingly more skilled in considering multiple competing concerns (e.g., academic excellence vs. benevolence) and setting priorities among them (Dahl et al., 2020; Killen et al., 2018). In addition, expressing that one should not help someone in need (even if the need is low) may be socially difficult for children, because it might be seen as inconsistent with values and norms that they perceive as indicating selfishness. Contrary to our expectations, prosocial situations were similarly evaluated as obligatory or permissible by children and adolescents, implying that children as young as 8 understand that many prosocial actions are desired, yet discretionary (e.g., "*it's good to help, but you don't have to help*").

Also corroborating previous research (Nucci et al., 2017; Sierksma et al., 2014), when the intensity of the recipient's need was high compared to low, participants were more likely to evaluate prosociality as obligatory. To explain why prosocial behaviors were obligatory, concern for others (e.g., "*she [the recipient] is clearly upset and crying*") was the most common reason (Eisenberg, 1986), which underscores that perceived need accounts for the obligatoriness of prosocial actions. Drawing on the other's welfare to justify the obligatoriness of prosociality also implies that refusing to be prosocial when the intensity of need is high may be regarded as morally blameworthy and wrong (Sierksma et al., 2014).

Extending previous research, intensity of need was also found to influence the desirability judgments of helping, sharing, and comforting in different ways. That is, when the need was high, comforting more than helping and sharing was evaluated as desirable. Concern for others' welfare was the most frequent reason for the desirability of comforting, perhaps because comforting requires alleviating others' emotional needs (Dunfield, 2014; Hoffman, 2008). Indeed, comforting was often judged not only as desirable but also as obligatory, regardless of intensity of need (Jackson & Tisak, 2001). Conversely, when the intensity of need was low, sharing was evaluated as desirable more than other types of prosociality. When resources are not distributed equitably between the actor and the recipient, sharing may be derived from norms involving fairness even when the material need is not necessarily urgent (McAuliffe et al., 2017; Moore, 2009). However, these norms may be less salient for helping and comforting. This finding may also imply that costly sharing is a tool for children to maintain their friendships (Over, 2018; Paulus, 2016). In fact, sharing more than helping was evaluated as obligatory and relationship concerns ("*she should help because they are friends*") were more commonly mentioned as reasons for the desirability of sharing than other prosocial types. This result needs to be interpreted with caution given that the cost of sharing in low need-high cost sharing situation was evaluated lower than in other stories; nevertheless, exploratory post hoc analyses indicated that the association between perceived costs and obligatoriness in this condition was positive and not significant (r = .08), mitigating against this explanation. Lastly, minimizing the cost to self was particularly used to explain the desirability of helping behavior (e.g., "*it is just a game, he [the actor] can play in the next baseball game*"). Interestingly, compared to sharing and comforting, helping was the least desirable and least obligatory type of

prosociality. Overall, then, the pattern of findings for helping supports the desire-based and discretionary nature of this form of prosociality (e.g., Janoff-Bulman et al., 2009).

Likewise, undesirable prosocial judgments appeared to be sensitive to the type of prosociality, but only when the intensity of need was low; that is, when the recipient's need was low, undesirable helping and sharing were evaluated as permissible (rather than impermissible) proportionately more than comforting. Concern for self was the most frequent reason given for the undesirability of all types of prosociality, which illuminates how prosocial refusals are based on prudential or personal concerns under certain circumstances (i.e., high cost to self combined with the absence of the other's pressing need). This was especially the case for sharing, as personal concerns were most often given to justify the undesirability of sharing. Moreover, low need comforting was less often evaluated as permissible compared to the other types of prosociality. Engaging in comforting entails emotional costs that are more challenging than instrumental and material costs to endure. When the emotional need is low, but the cost is high, engaging in comforting may be evaluated as more impermissible than other types. One explanation could be that individuals' sensitivity to emotional needs varies and thus, it is possible that the perceived urgency of emotional needs is more heterogeneous, which results in mixed evaluation. For instance, in response to being sad over a misspelled name on a certificate (i.e., low need comforting situation), one child pointed out the lack of need by saying "*having your name misspelled isn't a life-or-death situation*", but another child emphasized on the emotional need of the recipient by saying *"[the recipient] is upset because this certificate is very important to him*". Additionally, it is likely that impermissible judgments are used in situations when the cost of prosociality (e.g., missing the school bus) outweighs the intensity of need (e.g., being sad over misspelled name).

This study has some limitations that need to be acknowledged and that suggest avenues for future research. Although hypothetical vignettes are widely used to study reasoning (e.g., Dahl et al., 2020; Eisenberg, 1986; Jackson & Tisak, 2001), individuals' evaluations may differ when they are the actors themselves rather than a third-party observer (Nadelhoffer & Feltz, 2008). It was also challenging to develop age-appropriate stories with equal prosocial costs and similar intensity of instrumental, material, and emotional needs that are relatable and plausible to both age groups. Future studies should incorporate larger sets of age-appropriate vignettes and also investigate prosocial acts with different forms of costs such as emotional and material costs. To limit contextual factors that can potentially influence prosocial judgments, the relationship between the actor and the recipient was intentionally not specified in the hypothetical vignettes. Nevertheless, almost 14% of the reasons why prosociality is desirable referred to relationship concerns. This implies that familiarity and personal history with the recipient play a role in how prosocial situations are judged (Hachey & Conry-Murray, 2020; Sierksma, 2018) and more work is needed to disentangle relationship from other contextual factors such as intensity of need. To provide a complement to reasoning about hypothetical stories, it would also be useful for future studies to investigate prosocial judgments of personal lived experiences. Lastly, individuals' prosocial (moral) evaluations and norms are broadly grounded in values that vary across cultures (Tomasello, 2021). For instance, refusing to act prosocially may be perceived as more blameworthy in a culture that places particular value on relatedness and social harmony (e.g., Keller, 2012). Thus, it is important to examine how cultural context plays a role in development of prosocial judgments.

Conclusion

This study revealed that children's and adolescents' prosocial judgements were sensitive to the intensity of need, as well as the types of prosocial behaviors required. The findings regarding prosocial judgments and reasoning shed light on how children make sense of prosocial opportunities. Children more than adolescents evaluated prosociality as desirable. High need more than low need prosociality and comforting more than other types of prosociality were evaluated as obligatory. Reasons for prosocial judgments also varied by types of prosociality; that is, concern for others, relationship concerns, and lack of cost to self were emphasized to respectively justify judgments of comforting, sharing, and helping. These findings further highlighted that different types of prosocial behaviors are construed in distinct ways (e.g., Dunfield, 2014; Paulus et al., 2012), as children drew on different reasons to evaluate each prosocial behavior.

Prosocial Refusal Reasoning and Judgment: From Responses to Hypothetical Vignettes to Reflections on Past Experiences

The findings of Study 1 revealed that children's and adolescents' prosocial judgments vary as a function of intensity of need and types of prosociality. This is consistent with recent studies suggesting that prosocial judgment is context dependent (Komolova & Wainryb, 2011; Sierksma et al., 2014; Weller & Laguttata, 2014). Using hypothetical vignettes enabled us to systematically manipulate and examine the unique effects of needs (high vs. low) and types of prosociality (helping, sharing, and comforting) in desirability, obligatoriness, and permissibility judgment of prosocial actions. Nevertheless, individuals' third-party judgments of hypothetical vignettes may not consistently reflect how they evaluate their own naturalistic prosocial interactions that are complex and multifaceted (e.g., Gutzwiller-Helfenfinger et al., 2010; Nadelhoffer & Feltz, 2008; Turiel, 2008). Thus, to ensure the ecological validity of our findings (Dahl, 2017), Study 2 employed a methodology based on participants' narrative accounts to understand how past prosocial experiences are interpreted, evaluated, and morally judged. Personal prosocial experiences and what has been learned from these experiences can shape future prosocial decisions, especially if these prosocial experiences evoke internal conflicts or negative emotions (e.g., McLean & Thorne, 2003; Thorne et al., 2004). Indeed, Study 1 revealed that undesirable prosocial judgments are frequent and reasons why individuals evaluate a prosocial action to be desirable are distinct from their reasons for judging prosociality as undesirable. Considering that refusing to be prosocial is an inevitable social experience occurring as early as childhood (e.g., Darley & Batson, 1973; Tavassoli et al., 2020; Waugh & Brownell, 2017), it is crucial to examine how these prosocial refusal experiences contribute to the

development of prosociality from childhood to adolescence and into young adulthood, and how these experiences affect future prosocial decisions. We address these questions in Study 2.

“I wish I hadn’t helped”: Developmental Changes in Reasoning, Judgments, and Lessons Learned from Past Prosocial Experiences

Nasim Tavassoli, & Holly Recchia

Department of Education, Concordia University, Canada

Abstract

The aim of this cross-sectional study was to document children's, adolescents', and young adults' reasons for prosocial actions and refusals, emotional evaluations, and moral judgments concerning varied past prosocial experiences. We also examined whether and how varied prosocial experiences were associated with anticipated change in future prosocial decisions. A total of 253 participants included 8-9-year-old children, 13-14-year-old adolescents, and 18-25-year-old young adults were recruited. Participants narrated four prosocial experiences: when they helped and they (a) were glad and (b) regretted that they *helped*, and when they refused to help, and they (c) were glad and (d) regretted that they *did not help*. Participants' responses to follow-up questions regarding each narrative were coded. The results revealed that prosocial reasons such as hedonistic concerns, concern for others, and social obligation were differentially used to explain helping and refusing to help experiences. Other-oriented reasons were used to explain emotional evaluations of prototypical prosocial experiences (e.g., helping/glad) and self-oriented reasons were used to explain non-prototypical emotional evaluations (e.g., not helping/glad). When participants refused to help and were glad, they mostly judged their actions as right, whereas participants' moral judgments were more mixed (right and wrong) when they helped and regretted it. Lastly, non-prototypical prosocial experiences resulted in preventive change in future prosocial decisions than prototypical situations. Overall, this study illuminates how prosocial refusal experiences are interpreted and evaluated, and how past prosocial experiences can inform future prosocial choices.

Keywords: Prosocial refusals; Prosocial judgment; Emotional evaluation; Past prosocial experiences; Prosocial decision-making; Prosocial development

"I wish I hadn't helped": Developmental Changes in Reasoning, Judgments, and Lessons Learned from Past Prosocial Experiences

Prosocial behaviors refer to other-oriented actions that are intended to benefit others (Eisenberg et al., 2015). Individuals may engage in prosociality for a myriad of reasons ranging from other-oriented motives such as empathy/sympathy to self-oriented motives such as obtaining intrinsic or extrinsic rewards (e.g., Eisenberg et al., 2016). Yet not all prosocial opportunities elicit a prosocial response; there are variety of reasons why individuals do not always act prosocially. Despite the fact that prosociality is typically perceived as morally desirable, choosing not to act on behalf of others (prosocial refusal) is not typically perceived as impermissible (e.g., Janoff-Bulman et al., 2009). This can lead to mixed evaluations and context-specific behavioral decisions as people learn to navigate prosocial opportunities. That is, the varied features of prosocial situations, such as costs of helping, or consequences of helping for the helper and/or the recipient might influence how individuals emotionally and morally evaluate their prosocial enactments or refusals. Among school-aged children and adults, positive emotions are typically anticipated for acting prosocially (i.e., feeling glad for having helped) and negative emotions are expected to result from refusing to be prosocial (i.e., experiencing regret for not helping; Krettenauer et al., 2011; Malti & Ongley, 2014). Yet it is also likely that individuals sometimes regret acting prosocially or are glad that they refused to be prosocial. Arguably, such non-prototypical prosocial experiences that are conflictual or that deviate from expectations may evoke more meaning-making or lessons learned (e.g., McLean & Thorne, 2003). Studying past non-prototypical prosocial experiences is particularly important because this can document the breadth of such experiences and how different types of prosocial experiences may guide future prosocial decisions.

The aim of this study was to examine developmental changes in prosocial (refusal) reasoning, emotional evaluations, and moral judgments of prototypical and non-prototypical prosocial experiences, as well as to examine whether and how different types of prosocial experiences are associated with anticipated change in future prosocial decisions. We expected developmental changes in these aspects of reasoning and judgment from middle childhood to adolescence, inasmuch as this period is characterized by developments in moral reasoning and self-understanding, as well as the formation of moral identity (Eisenberg et al., 2015; Hardy & Carlo, 2011). In addition, examining developmental changes beyond adolescence and into young adulthood can broaden our understanding concerning the development of prosocial decision making. Transitioning from family and school environments to a larger society and community provide young adults with varying prosocial opportunities while navigating different social expectations compared to when they were younger (Arnett, 2007).

Conceptual Underpinnings of Prosocial (Moral) Reasoning

In studying prosocial (moral) reasoning, three concepts are foregrounded in theorizing about moral reasoning development: phenomenalism, structuralism, and constructivism (Kauffman, 1987). First, phenomenalism assumes that morality should be understood from the individuals' point of view by considering individuals' reasons and constructions of moral meaning (Kauffman, 1987). Structuralism, in turn, indicates that the structure or patterns of thought is more revealing than the content of judgments and reasoning. Moral beliefs and principles are bound together and shape a form of thinking; that is, without understanding individuals' moral world view, it is hard to understand the beliefs and actions (Kauffman, 1987). Thus, the emphasis is on understanding patterns and relations among aspects of individuals' thinking. Lastly, constructivism (e.g., Piaget, 1971) proposes that meaning is reflected and

construed through thinking and responding to everyday life encounters. Individuals actively construct and re-construct reality via their social experiences within ongoing interpersonal relationships (i.e., the constructivist-interactionist approach; Dahl, 2018). These three concepts served as the theoretical underpinnings of the current study. That is, this study centered on how experiences of prosocial actions and refusals are perceived and interpreted by individuals (phenomenalism), what patterns of thought and reasoning are observed through the individuals' recounting of real-life prosocial experiences (structuralism), and how individuals' reflections on their past interactions with potential recipients of prosociality guide their current understandings (constructivism).

Reasoning regarding Prosocial Engagement and Refusal

In the past few decades, many scholars have attempted to define, measure, and conceptualize issues related to prosocial judgment and reasoning. Eisenberg and colleagues (1979, 1983) were pioneers in research on prosocial moral dilemmas, wherein the needs or wants of one individual were described as coming into conflict with those of another individual. Costs of helping are typically depicted as personal in such dilemmas, which involve, for instance, conflicts of interest between helping an injured child or going to a friend's party. A series of longitudinal studies (e.g., Eisenberg et al., 2002, 2014) showed that hedonistic reasoning (e.g., "*she'd help because they'd give her food the next time she needed it*") decreased from preschool to age 9 and 10, whereas needs-oriented reasoning (e.g., "*she's hurt*") increased from age 4-5 to age 7-8 and leveled off at age 9-10. Subsequently, needs-oriented reasoning showed declines from adolescence into early adulthood, whereas a self-reflective empathic orientation (e.g., "*he would feel sorry for them*") increased during the same period (Eisenberg, 1986, p. 136; Eisenberg

et al., 2002, 2005, 2013). Taken together, these findings provide important descriptive information about age-related changes in prosocial reasoning across a wide range.

Nevertheless, individuals' reasoning about third-party protagonists in hypothetical situations may be different from reasoning about their own prosocial experiences (Gutzwiller-Helfenfinger et al., 2010; Turiel, 2008). Relative to hypothetical dilemmas where two predetermined values or interests are pitted against each other, in actual prosocial situations, there may be a variety of values or interests that come into conflict or act in concert simultaneously. Yet, the applicability of these patterns to children's reasoning about real-life prosocial situations has rarely been verified (Dahl, 2017). In one study, preschool children were interviewed about their prosocial behaviors toward their peers, and it was found that children referred to others' needs frequently, and hedonistic and approval-oriented reasoning were used infrequently (Eisenberg-Berg & Neal, 1979). In another study on the development of reasoning about sharing (Levin & Bekerman-Greenberg, 1980), children were given the opportunity to share pretzels with other children and then they were asked why they shared. Younger children (kindergarten and second graders) described expecting an immediate reward for their sharing, whereas older children (fourth and sixth graders) described sharing because of their relationship with the recipient.

Alongside reasoning about prosocial action, people might decide *not* to act on behalf of others for a variety of reasons. In Eisenberg's prosocial moral dilemmas (1986), hedonistic reasoning was the only reason captured to justify not assisting others. However, we believe that prosocial refusal reasoning is important in its own right and the scope of reasoning about refusing to help likely extends beyond self-oriented concerns. Relatedly, the pattern of prosocial refusal reasoning in real-life situations may differ in comparison to reasoning about hypothetical

moral dilemmas (Gutzwiller-Helfenfinger et al., 2010; Turiel, 2008), reflecting rich interpretations of complex lived experiences. Therefore, more research is needed to specifically chart the prosocial refusal reasons in individual's day-to-day interactions with others. For instance, in a simulated emergency situation at a museum, first and fourth graders reported that their reluctance to help an injured child was explained by their perceived lack of competence or assumptions that others would judge them as lacking competence, whereas seventh- and tenth-graders described a fear of disapproval and concern about the recipient's embarrassment or discomfort (Midlarsky & Hannah, 1985). In another cross-sectional study examining reasons for not helping from the early elementary to college years, younger participants more often described reasons such as lack of competence, whereas older participants more often expressed desires not to violate internalized values or to interfere in another's personal situation (Barnett et al, 1987). Lastly, a study on mother-adolescent conversations about volunteering showed that 12- to 16-year-olds discussed challenges with the setting of volunteering activity ("*I'd have to stand in the sun all day*"), as well as self-oriented concerns such as personal safety, peer judgment or rejection, and disliking the activity as reasons for not participating in volunteering activities (Lewis & Franz, 2019). Taken together, then, these studies suggest that youths' reasons for prosocial refusals partially shift with age from more self-oriented concerns to recipient-oriented concerns, although self-oriented considerations remain salient into adolescence.

Emotional Evaluation of Prosocial Enactment or Refusal

Before age 7-8, children mainly attribute positive emotions to rule breakers or transgressors who fulfill their personal desires, and they attribute negative emotions to rule compliers who inhibit their personal desires (e.g., Arsenio & Kramer, 1992; Krettenauer et al., 2008; Lagattuta, 2005). As children's cognitive abilities develop, they come to believe that

inhibiting personal desires to abide by rules that they perceive as legitimate is right and feels good (Lagattuta, 2005). Furthermore, a developmental shift in the reasoning underlying these decisions seems to occur sometime between 5 to 7 years of age; that is, 4- and 5-year-olds predict and explain emotions in relation to rule compliance (e.g., "*he feels very good because he listened to his mom*"), whereas 7-year-olds and adults refer more to consequences of the behavior (e.g., "*He feels good because if ran into the street he could have gotten hit by a car*"; Lagattuta, 2005, p.728). When applied to considerations of impacts that were avoided, this latter form of reasoning requires counterfactual thinking to imagine what would have happened if one behaved differently (McCormack et al., 2020), which is closely related to the emotional experience of regret. By around age 6, most children are capable of experiencing regret when the outcome of their behavior is harmful or unfavorable for others or does not result in the best outcome for themselves (Uprichard & McCormack, 2019). Despite developmental increases in counterfactual thinking and the experience or anticipation of regret from childhood into adolescence (McCormack et al., 2020), regret is an understudied emotion in the context of prosociality, especially in the aftermath of acting on behalf of others. On the other side of the coin, feeling self-satisfied or proud of oneself for acting prosocially is another evaluative emotion likely to be experienced in prosocial contexts. Feeling proud after engaging in prosocial behavior has been shown to increase the intention to continue acting prosocially among 10–11-year-old children (Etxebarria et al., 2015; for similar results for adults, see Michie, 2009). Anticipating positive emotions is also shown to be more predictive of helping and donating than anticipating negative emotions (Krettenauer et al., 2011). That said, less attention has paid to positive evaluative emotions in relation to the choice *not* to act prosocially (Ross, 2017). Although beyond age 7-8, individuals typically anticipate positive emotions for acting prosocially and negative emotions

for refusing to be prosocial (e.g., Krettenauer et al., 2008; Lagattuta, 2005), social interactions are complex, and it is plausible that prosocial actions and refusals may both be retrospectively experienced in varied ways (i.e., acting prosocially and regretting it or refusing to be prosocial and feeling good about it). Arguably, these emotional evaluations may be germane to the development of prosocial decision making. Nevertheless, little is known about how children, adolescents, and adults interpret these non-prototypical prosocial experiences wherein they regret engaging in prosociality or are glad for refusing to be prosocial, and whether these experiences change their future prosocial decisions.

Personal Experiences of Past Prosocial Enactments and Refusals

Recalling and narrating past experiences is an inimitable method to assess (prosocial) reasoning, as individuals spontaneously re-construct, elaborate, and reflect on their positive or negative experiences, and provide explanations and justifications for their behaviors or describe opportunities for personal growth (McLean & Thorne, 2003). Given that prosocial experiences are subjectively evaluated by individuals via the construction of narrative accounts, the recounting of events from one's personal past provides the opportunity for drawing lessons from particular life experience (i.e., meaning making; McLean & Thorne, 2003). The lessons that individuals learn from their past personal experiences and the meanings that they construct can shape their behavior in the future (Thorne et al., 2004).

Previous studies suggest that making sense of negative or difficult life events is particularly linked to personal growth and self-transformation (Thorne et al., 2004). Recounting past events is a unique milieu to reflect on conflictual or negatively valenced life events in an attempt to reach resolution; this process is argued to involve meaning making and identity development (e.g., McLean, 2008; McLean et al., 2007). Although previous studies have

examined narrative accounts of past negative (e.g., interpersonal conflicts; McLean & Thorne, 2003) or positive social events (e.g., prosocial engagements; Aknin et al., 2012; also, Wiwad & Aknin, 2017), little attention has given to accounts of prosocial refusals (i.e., when the helper chooses not to be prosocial) or prosocial events with non-prototypical emotional evaluations (i.e., acting prosocially and regretting it; refusing to be prosocial and feeling good; although see Soucie et al., 2012, for personal stories of empathy and lack thereof). Learning from past prosocial experiences is particularly important because it can influence future prosocial decisions. For example, in one study, 6-7-year-olds who experienced regret after failing to be prosocial became fairer and more competent at prosocial decision-making towards other children (Uprichard & McCormack, 2019). Thus, experiencing regret through reflecting on preferable counterfactual outcomes affects both adults' and children's decision making (Camille et al., 2004; O'Connor et al., 2014). That being said, given that self-understanding and identity undergo dramatic changes during adolescence (Hardy & Carlo, 2011), the ways in which individuals reflect on and make sense of their prosocial experiences may nevertheless change from childhood to adolescence, and consequently, may also inform their future prosocial decisions in different ways. These developmental changes were investigated in the present study.

The Present Study

The purpose of this cross-sectional study was to gain a better understanding of how school-age children, adolescents, and young adults make sense of prototypical and non-prototypical prosocial situations that they experience in everyday life. Our first goal was to investigate how individuals account for their prosocial behaviors and refusals, across experiences in which they described prototypical or non-prototypical emotional evaluations of their actions (i.e., feeling glad or regretful in light of their prosocial actions and refusals), and whether there

were age differences in such reasoning. There has been limited research on children's, adolescents', and young adults' lived experiences of prosociality in their day-to-day interactions with others. The current study explored the features of such everyday prosocial opportunities, such as the types of prosociality involved and relationships between helpers and recipients. Compared to childhood, adolescents' and adults' thinking is characterized by greater abstraction and more differentiation across situations, and this may be reflected in their prosocial reasoning (e.g., Barnett et al., 1987). Based on Eisenberg's work (e.g., Eisenberg et al., 1983, 2005, 2014), it was expected that hedonistic or self-regarding reasons for engaging in prosociality would decrease from childhood to adulthood, whereas other types of reasoning (e.g., needs-oriented, social obligation) would increase. Moreover, it was hypothesized that considerations of capacity would be more salient to younger children in accounting for prosocial refusals, as compared to adolescents and young adults (Barnett et al., 1987).

The second goal of this study was to understand individuals' explanations for their emotional evaluations of their prosocial actions and refusals (i.e., being glad or regretful), and how these explanations may vary across age. Based on previous studies (e.g., Sierksma et al., 2014), it was expected that participants would more often discuss concerns for the self in explaining emotional evaluations in non-prototypical prosocial experiences (i.e., regret for helping and being glad for refusing to help), whereas concern for others was expected to be described for emotional evaluations in prototypical prosocial experiences (i.e., regret for refusing to help and being glad for helping). Similar to the age-related pattern above for self- and other-oriented reasoning about prosociality (Midlarsky & Hannah, 1985), it was also expected that children would refer more to self-oriented concerns, whereas other-oriented concerns would be mentioned more by adolescents and young adults.

The third goal of this study was to understand how individuals morally judge their prosocial (in)actions, and whether moral judgments vary across age groups. In prototypical prosocial situations, behavior and emotional evaluations are concordant (e.g., helping/glad, not helping/regret); therefore, it was expected that these actions and refusals would homogenously be evaluated as right and wrong, respectively. On the other hand, when behavior and emotional evaluations are not aligned in non-prototypical prosocial situations (i.e., not helping/glad; helping/regret), we expected to observe more varied moral judgments. In such non-prototypical situations, it was expected that prosocial refusals in not helping/glad events would be judged as right decisions due to prudential reasons (e.g., self-care or self-protection), whereas helping that was regretted would nevertheless be evaluated as the right decision for moral reasons (e.g., others' welfare). It was also expected that children would be more likely to consistently judge prosocial actions as right and inactions as wrong regardless of their emotional evaluations, whereas adolescents and young adults would be more likely to see prosocial situations as multifaceted and thus make more varied judgments of different prosocial (in)actions (Nucci et al., 2017; Turiel, 1983).

The last goal of this study was to examine whether varied types of prosocial experiences were associated with participants' descriptions of subsequent changes in their prosocial decision-making, and whether these patterns varied across age groups. Given that meaning making and changes in behavior may be more common in the context of negatively valenced or conflictual experiences (McLean, 2005; McLean & Thorne, 2003), it was expected that these experiences (helping/regret, not helping/glad, and not helping/regret) would result in more reported change in subsequent prosocial behaviors as compared to helping/glad experiences. Since self-reflection on past personal experiences is closely tied to identity development in the adolescent years (Hardy

& Carlo, 2011; McLean & Pasupathi, 2012), it was expected that change in future prosociality would be reported more among adolescents and young adults than children.

Method

Participants

A total of 254 participants were recruited. Participants included 84 children between ages 8 and 10 (M = 9.05 years, SD = .76), 81 adolescents between ages 13 to 15 (M = 13.68 years, SD = .83), and 89 young adults between ages 18 to 27 (M = 21.10 years, SD = 1.87). One child was excluded from the study due to missing more than one narrative (N = 253). Half of the children (n = 42) and 46% of the adolescents (n = 39) self-identified as girls, and 85% of the young adults self-identified as women (n = 76; roughly representing the proportions of men and women in the undergraduate psychology program where recruitment took place); the remaining participants self-identified as boys/men. Parents of children and adolescents reported predominantly European origins (64.8%), but other ethnic backgrounds were also represented within the sample (0.6% Aboriginal origins, 3% African origins, 7.3% East and Southeast Asian origins, 5.5% South Asian origins, 6.1% West Central Asian and Middle Eastern origins, 4.2% Latin, Central and South American origins, 0.6% Oceania origins, and 7.3% mixed ethnicities). Demographic information for the young adult sample indicated that 65.2% reported European origins, 13.5% West Central Asian and Middle Eastern origins, 9% Latin, Central and South American origins, 3.4% African origins, 3.4% Asian origins, and 5.6% mixed or other ethnicities. Written informed consent was obtained from young adults and parents of children and adolescents, and assent to participate in the study was obtained from children and adolescents. Families of children and adolescents received a 25$ Amazon e-gift card and young adults received one research course

credit as an incentive for participation in the study. The study received IRB approval from the Concordia University Human Research Ethics Committee (Appendices J and K).

Procedure

Data collection with children and adolescents was conducted online via Zoom. Young adults' data were collected in-person at private rooms at Concordia University. During individual semi-structured interviews, participants were asked to recount past prosocial experiences in which: (1) they could have helped someone, but they didn't and now that they think about it, they wish they had helped (not helping/regret), (2) they could have helped someone, but they didn't and now that they think about it, they are glad that they didn't help (not helping/glad), (3) they helped someone and now that they think about it, they wish they hadn't helped (helping/regret), and (4) they helped someone and now that they think about it, they are glad that they helped (helping/glad; See Appendix C). The elicitation order of the first three events was counterbalanced; however, the helping/glad event were always elicited last to finish on a positive note. After participants had provided open-ended narrative accounts of all four prosocial experiences, the interviewer asked a series of follow-up questions about each event. Responses to these follow-up questions formed the primary focus of the current analysis (See Appendix E for a sample of prosocial experiences narrated by participants). Specifically, participants were asked about the reasons why they engaged (or refused to engage) in prosocial behavior ("what was the main reason that you helped/didn't help?"), the reason why they are glad (or regret) their prosocial choice ("why are you glad that you helped/didn't help?"; "why do you wish you helped/didn't help?"), whether they think their prosocial enactment or refusal was right ("do you think helping/not helping was the right thing to do? Why/why not?"), and whether the prosocial

experience changed their future prosocial decisions ("did this event change how you make decisions about helping other people?").

Narrative Descriptive Information

In total, 994 prosocial experiences were narrated by participants. The age range for this study was partially selected based on past research demonstrating that children in middle childhood are able to construct coherent narrative accounts of their past experiences; conversely, narratives of preschoolers and first graders tend to be less elaborated (Wainryb et al., 2005). Nevertheless, one child was excluded from the study due to missing more than one narrative, and in 18 other instances, participants failed to nominate individual events (1.8%) for reasons such as "*this never happened to me," "I can't think of anything," or "I always help."* All participants narrated a time when they helped and they were glad. Eight participants (4 children and 4 adolescents) could not narrate a time when they helped and they regretted it; nine participants (7 children and 2 adolescents) could not narrate a time when they refused to help and they were glad that they didn't help; and one child could not narrate a time when they refused to help and they regretted it. All four events were narrated by each young adult in the sample.

Coding

Interviews were digitally audiotaped and were transcribed verbatim. Participants' responses to the follow-up questions were coded by one of two coders. All coding categories described below were coded as presence = 1 or absence = 0. Interrater reliability was established on 20% of the data (with approximately equal representation across age groups and genders) and Cohen's Kappas were calculated for all coding categories. Any disagreements between the

coders were discussed and resolved via consensus. The detailed coding scheme, examples, and Cohen's *kappa*s for each category are reported in Appendix D.

Prosocial Engagement and Refusal Reasons

Reasons for helping or refusing to help were coded based on an adaptation of Eisenberg's (1986, 1991) prosocial moral reasoning coding categories (See Appendix D). This included hedonistic reasons, concern for others' needs or lack thereof, social obligation or lack thereof, the helper's emotions, capacity or lack thereof, deservingness of recipient, and unelaborated evaluation.

Emotional Evaluation

Individuals' explanations of why they were glad or regretful for helping or refusing to help were coded as concerns related to self (i.e., the helper), other (i.e., the recipient), and/or the relationship between the helper and recipient (See Appendix D). Concerns related to the self included references to the cost to self, general evaluation of their own behavior, and outcomes for the self (i.e., instrumental and psychological impacts). Other-oriented concerns included references to concern for others, deservingness of others, and outcome for others. References to outcomes for both the self and others were further coded as whether the outcome was present, referring to a decision that led to a positive or negative outcome, or absent, a decision that prevented a positive or negative outcome. Lastly, relationship-oriented concerns included any references to outcomes for the relationship or role-related obligations.

Moral Judgments

Participants were asked whether their helping or refusing to help was the right decision and why (i.e., moral judgments). Their response to this follow-up question was coded as: (1) yes, it was the right thing to do, or (2) no, it was not the right thing to do (κ=.97). Participants'

justifications for their response were further coded based on social domain theory (Turiel, 1983) as moral, social, or prudential reasons (See Appendix D). Personal reasons were never given to explain moral judgments of helping or not helping.

Change in Future Prosociality

To capture participants' views on whether the prosocial experience has changed their future prosociality, as a follow-up question, they were asked: "did this event change how you make decisions about helping other people? Why/why not?". The participants' responses to this question were coded as "yes it did change" or "no, it didn't change". If participants responded "yes [the event changed my future prosocial decisions]", then the change was coded as promotive or preventive of future prosociality. Types of change were further coded as (See Appendix D): (1) being aware of surrounding including others' needs, (2) understanding one's own capacity in helping others, (3) become more/less proactive/spontaneous, (4) changes in motivation to help others, (5) learning a lesson about the self. When participants respond "no [the event did not change my future prosocial decisions]," we did not consider their reasons further, but it is worth noting that their responses did not necessarily indicate a lack of reflection on the experience. For example, they referred to factors such as the event's lack of importance ("*It's not something that really stands out and teaches me a lesson for future instances*"), the event's context dependency ("*it really depends on the context…"; "It was kind of like a specific situation*"), or consistency of their own behavior ("*because that's something I always do"*, "*if another person asks me, I still would do it. It is just the person who I am*").

Plan of Analyses

Features of narrated events such as relationship context and type of prosociality are presented first; as these percentages are provided for descriptive purposes, they were not

analyzed further using inferential tests. Subsequently, overall frequencies of reasons for prosocial actions/refusals, as well as emotional evaluations, were contrasted individually using Friedman's tests (summed across events within each participant, thus resulting in a possible range of 0 to 4 for each reason) and *p*-values were adjusted for pairwise comparisons. Then, the data were analyzed using Generalized Linear Mixed Models (GLMM) with a logit link function and binomial error distribution given that the dependent variables (e.g., the presence or absence of each reason for helping or not helping, whether participants indicated that the experience had changed or did not change their future prosociality, etc.) were all dichotomous. Models included random intercepts for participants and fixed effects of age groups (children, adolescents, adults), gender, prosocial event (helping, not helping), evaluation (glad, regret), and two-way interactions of prosocial event by evaluation, age by prosocial event, and age by evaluation. Non-significant interactions (*ps* > .05) were trimmed from the models and only significant interactions were reported. Sequential Bonferroni pairwise comparisons were conducted on the significant effects and interactions. All percentages reported in the interpretation of GLMM analyses are model-predicted values that are adjusted for covariates.

Results

Descriptions of The Content of Prosocial Experiences

Among 994 narrated prosocial experiences, participants referred to variety of recipients (see Table 1). Overall, 32% of the narrated events were about friends, 21% peers, 17% strangers, 11% siblings, 9% parents, the rest about other relatives and authority figures (κ=1.0). The recipients of prosociality varied across event types and age groups. For example, participants narrated experiences about friends less when they regretted refusing to help, whereas they narrated about strangers more when they regretted refusing to help. Children more than

adolescents and adults described experiences with peers, siblings, and parents, whereas the prevalence of events involving strangers increased with age.

The types of prosociality by event type and age group are presented in Table 2. Most events involved helping, followed by sharing, jointly helping and comforting, comforting, and lastly protecting (κ=.87). In 56% of events, the narrator was the only person present to help (single helper), and in 40% of events, there were multiple individuals present who could potentially help (multiple helpers; κ=.78). Single helper experiences were narrated more in helping than not helping events, whereas multiple helper stories were narrated more in not helping than helping events (Table 2).

Table 1

Recipient of Prosociality in The Narrated Stories by Prosocial Event, Evaluation, and Age Group

		Prosocial event				Age group		
	Total	Helping/Glad	Helping/Regret	Not helping/Glad	Not helping/Regret	Children	Adolescents	Young adults
Friend	32.2%	37.2%	39.6%	31.6%	20.6%	29.0%	34.7%	29.2%
Peer	21.5%	12.3%	26.9%	29.9%	17.5%	29.4%	21.1%	14.9%
Stranger	17.6%	16.6%	11.0%	16.0%	26.6%	5.6%	15.4%	30.3%
Sibling	11.6%	10.3%	11.4%	10.7%	13.9%	16.6%	10.1%	8.4%
Parent	9.3%	11.9%	7.3%	3.7%	13.9%	12.5%	9.7%	5.9%
Relative	3.3%	5.1%	2.0%	3.3%	2.8%	1.9%	2.5%	5.3%
Authority figure	1.9%	1.6%	1.2%	2.0%	2.8%	2.5%	2.8%	0.6%
Other	2.6%	5.1%	0.4%	2.9%	2.0%	1.3%	2.5%	3.9%

Table 2

Content of The Narrated Stories by Prosocial Event, Evaluation, and Age Group

		Prosocial event				Age group		
	Total	Helping/ Glad	Helping/ Regret	Not helping/ Glad	Not helping/ Regret	Children	Adolescents	Young adults
Types of prosociality								
Helping	70.5%	68.4%	73.1%	73.8%	67.1%	69.7%	73.9%	68.3%
Sharing	10.6%	9.1%	10.6%	11.1%	11.5%	6.6%	12.3%	12.6%
Comforting	6.7%	9.1%	6.5%	3.7%	7.5%	4.7%	4.1%	11.0%
Protecting	5.1%	5.9%	4.1%	4.9%	5.6%	5.3%	6.3%	3.9%
Helping & Comforting	7.0%	7.5%	5.7%	6.6%	8.3%	13.8%	3.5%	4.2%
Potential helper								
Single helper	55.9%	61.3%	70.2%	46.7%	45.6%	42.2%	56%	68.3%
Multiple helpers	39.6%	32.8%	24.9%	50.8%	50.0%	49.7%	38.4%	31.7%
Not specified	4.4%	5.9%	4.9%	2.5%	4.4%	8.1%	5.7%	0%

Prosocial Engagement and Refusal Reasoning

Overall, participants used different reasons to varying degrees in explaining why they helped or refused to help. A Friedman test revealed a significant difference between the reasons, $\chi^2(6) = 543.60$, $p < .001$. Pairwise comparison indicated that hedonistic concerns ($M = 1.65$, $SD = .94$) and concerns for others ($M = 1.55$, $SD = .95$) were the most frequent reasons cited, followed by social obligation ($M = 1.19$, $SD = .93$), and then capacity ($M = .59$, $SD = .71$) and the helper's emotions ($M = .51$, $SD = .70$). The recipient's deservingness ($M = .38$, $SD = .66$) and unelaborated evaluations ($M = .19$, $SD = .45$) were the least frequent reasons discussed (adjusted ps $< .05$). No other pairwise comparisons were significant.

To examine variations in reasons given for prosocial behaviors and refusals across age groups and types of events, GLMM analyses were conducted for each reason separately. With regards to hedonistic concerns, main effects of prosocial event ($F(1, 986) = 136.85$, $p < .001$), and evaluation ($F(1, 986) = 7.24$, $p = .007$), as well as a significant age group by prosocial event interaction ($F(2, 986) = 4.83$, $p = .008$) were found (See Table 3). Pairwise comparisons revealed that hedonistic concerns were used more as a reason to refuse helping (61%) than to help (23%), and more when participants were regretful (45%) than glad (36%). Contrary to predictions, children referred less than teenagers and adults to hedonistic reasons for refusing to help, whereas all age groups used hedonistic reasons similarly to explain why they helped (Figure 1).

In terms of concern for others, main effects of prosocial event ($F(1, 988) = 256.85$, $p < .001$), and evaluation ($F(1, 988) = 29.37$, $p < .001$) were found (See Table 3). Pairwise comparisons revealed that concern for others was given more as a reason for helping (63%) than refusing to help (14%), and more when participants were glad (44%) than regretful (27%).

With regards to social obligation, main effects of age group ($F(2, 986) = 5.03$, $p = .007$), gender ($F(1, 986) = 4.80$, $p = .03$), and prosocial event ($F(1, 986) = 38.10$, $p < .001$), as well as a significant age group by prosocial event interaction ($F(2, 986) = 5.99$, $p = .03$) were found (Table 3). Girls/women (31%) referred to social obligation more than boys/men (24%). Social obligation was used to explain helping (37%) more than refusing to help (19%). Adults (35%) used social obligation to explain their prosocial decisions more than children (23%), but not more than adolescents (26%). This pattern for age was moderated by prosocial event type, such that adults used social obligation more than children and adolescents to explain helping, but the age difference was not significant for refusing to help (Figure 1).

In terms of capacity, the analysis revealed main effects of evaluation ($F(1, 986) = 7.19$, $p = .007$) and age group ($F(2, 986) = 3.35$, $p = .03$), as well as a significant age group by prosocial event interaction ($F(2, 986) = 5.34$, $p = .005$) (Table 3). Capacity was used to explain prosocial decisions more in regretful (15%) than glad situations (10%). Overall, adults (17%) referred to capacity more than children (10%) and adolescents (10%). However, this pattern was qualified by event type in an unexpected way: adults and adolescents used capacity more than children to explain helping, whereas adults and children used capacity more than adolescents to explain refusals to help (Figure 1).

Lastly, with regards to the helper's emotion, a main effect of age group ($F(2, 988) = 7.20$, $p = .001$) and a marginal main effect of evaluation ($F(1, 988) = 3.37$, $p = .06$) were found (Table 3). Children (6%) less than adolescents (14%) and adults (15%) used emotions to explain why they helped or refused to help. The helper's emotions were described as reasons more in regretful (13%) than glad situations (10%).

Table 3

Parameter Estimates Predicting Individuals' Prosocial Engagement or Refusal Reasons

	Hedonistic reasons *b (SE)*	Concern for others *b (SE)*	Social obligation *b (SE)*	Capacity *b (SE)*	Helper's emotion *b (SE)*
Intercept	.87 (.20)**	-1.96 (.21)**	-1.61 (.23)**	-1.96 (.28)**	-1.61 (.22)**
Age group					
Adults	.09 (.24)	-1.74 (.22)	.01 (.27)	.63 (.32)*	.13 (.23)
Children	-.60 (.23)*	-.38 (.22)	.02 (.28)	.61 (.32)	-.84 (.26)**
Gender	-.14 (.16)	.03 (.19)	.36 (.16)*	-.08 (.22)	-.01 (.22)
Prosocial event	-1.77 (.24)**	2.28 (.14)**	.79 (.26)**	.17 (.30)	-.07 (.17)
Evaluation	-.37 (.13)**	.75 (.14)**	.02 (.14)	-.45 (.17)**	-.31 (.17)
Prosocial event * Age group					
*Adults * prosocial action*	-.28 (.34)	-	.77 (.35)*	-.13 (.38)	-
Children prosocial action*	.73 (.34)*	-	-.42 (.37)	-1.27 (.43)**	-
N observations (participants)	994 (253)	994 (253)	994 (253)	994 (253)	994 (253)

Note. *$p < .05$, **$p < .01$. Age group (Adolescents = 0); Gender (boy/man = 0); Prosocial event (prosocial refusal= 0); Evaluation (regret = 0). Effect sizes are exponentiated values of coefficients (e.g., the odds ratio for the effect of prosocial event on hedonistic reasons = .17).

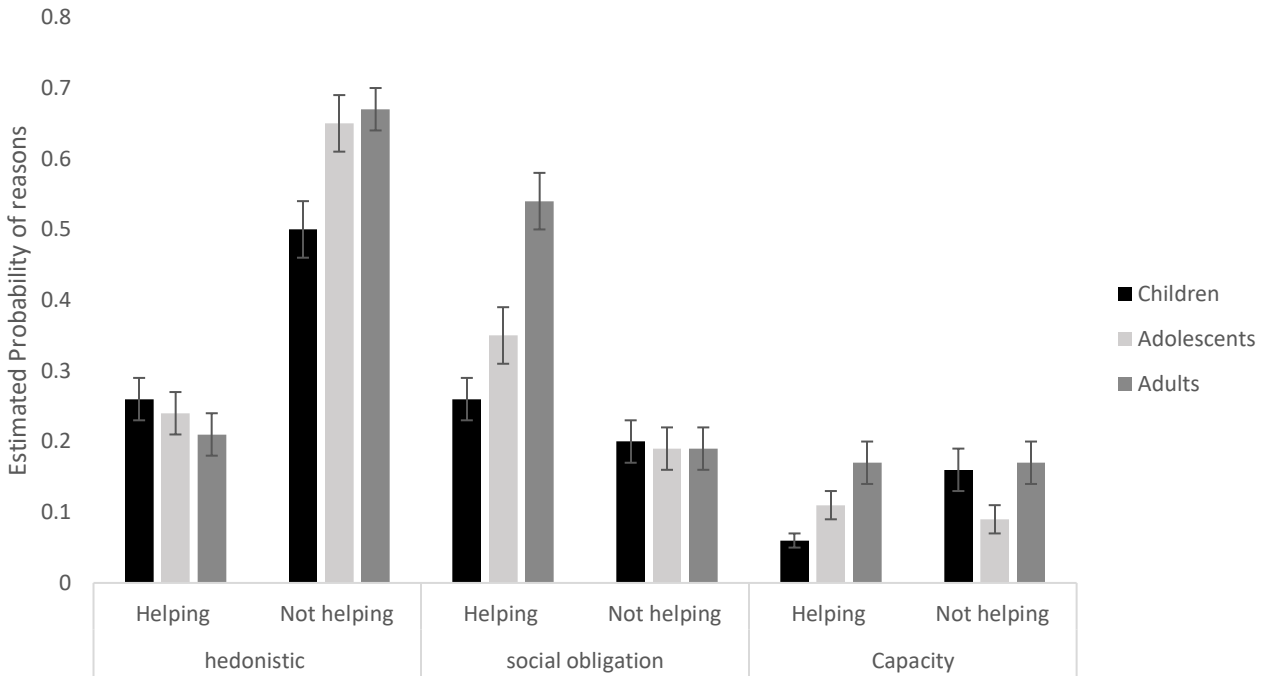


Figure 1. Estimated probabilities of prosocial engagement and refusal reasons as a function of age group

Emotional Evaluation of Prosocial Engagement and Refusal

Overall, to explain why they were glad or regretful for helping or not helping, participants referred to other-oriented concerns (M = 2.45, SD = 1.0) and self-oriented concerns (M = 2.21, SD = 1.03) more than relationship-oriented concerns (M = .43, SD = .6), χ^2 (2) = 291.49, $p < .001$. To understand whether the evaluations of prosocial behaviors and refusals varied as a function of age and type of event, GLMM analyses were conducted on each evaluation concern separately. A significant prosocial event by evaluation interaction was found for other-oriented concerns, $F(1, 987) = 79.71$, $p < .001$ (Table 4). Other oriented concerns were more often used to explain why participants were glad (rather than regretted) that they helped, whereas these reasons were more often used to explain why participants regretted (rather than were glad) that they refused to help (Figure 2). Similarly, a significant prosocial event by

evaluation interaction was found for self-oriented concerns, $F(1, 987) = 56.68$, $p < .001$ (Table 4). Self-oriented concerns were particularly used to explain why participants regretted (rather than were glad) that they had helped, and why they were glad (rather than regretted) that they had refused to help (Figure 2). Lastly, a main effect of prosocial event ($F(1, 987) = 4.20$, $p = .04$) and a significant prosocial event by evaluation interaction ($F(1, 987) = 20.38$, $p < .001$) were found for relationship-oriented concerns (Table 4). Relationship-oriented concerns showed a similar pattern to other-oriented concerns, in that they were used to explain why participants were glad (rather than regretful) that they had helped and regretful (rather than glad) that they had refused to help (Figure 2).

Table 4

Parameter Estimates Predicting Individuals' Emotional Evaluation of Prosocial Situations

	Other-oriented *b (SE)*	Self-oriented *b (SE)*	Relationship-oriented *b (SE)*
Intercept	1.08 (.19)**	-.13 (.18)	-1.80 (.26)**
Age group			
Adults	.06 (.19)	.28 (.18)	.51 (.27)
Children	-.17 (.18)	-.07 (.17)	.10 (.27)
Gender	.22 (.16)	-.06 (.15)	-.35 (.23)
Prosocial event[1]	-1.26 (.19)**	.98 (.18)**	-.581 (.29)*
Evaluation[1]	-1.20 (.19)**	.74 (.18)**	-1.37 (.37)**
Prosocial event * Evaluation	2.38 (.26)**	-1.95 (.26)**	2.13 (.47)**
N observations (participants)	994 (253)	994 (253)	994 (253)

Note. *$p < .05$, **$p < .01$. Age group (Adolescents = 0); Gender (boy/man = 0); Prosocial event (prosocial refusal= 0); Evaluation (regret = 0). Effect sizes are exponentiated values of coefficients.

[1]Although the coefficients for prosocial event and evaluation were statistically significant in this table, the overall F tests were not. Only fixed effects with significant F values were followed up with pairwise comparisons.

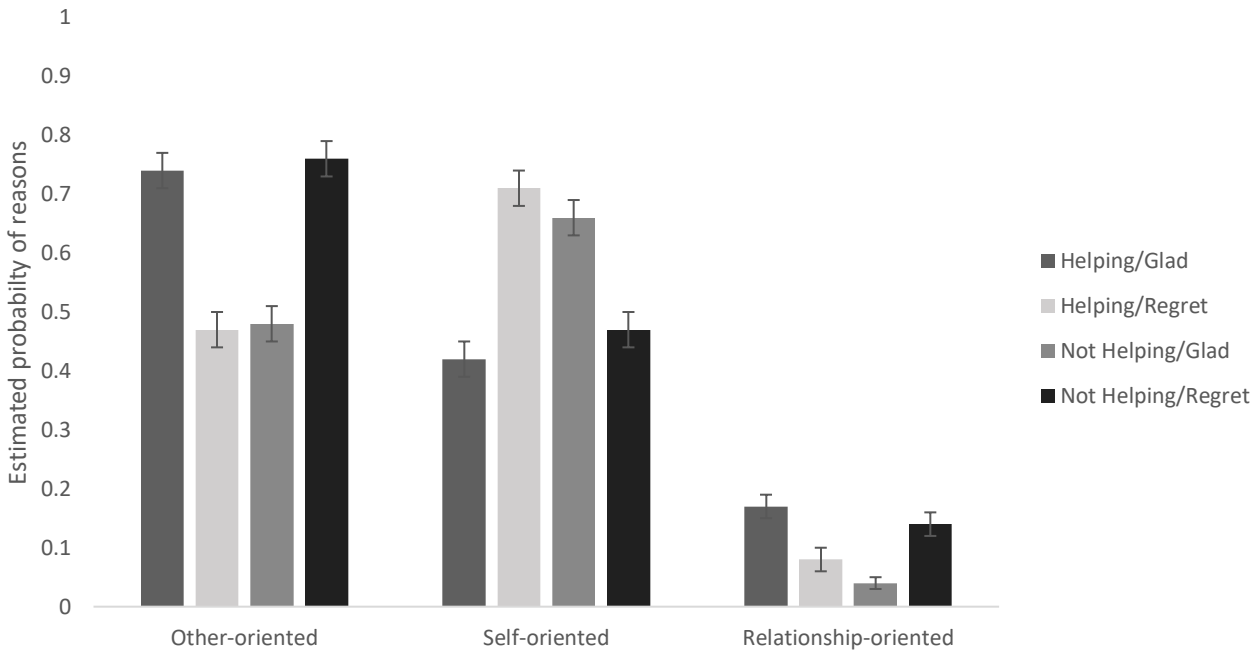


Figure 2. Estimated probabilities of evaluation reasons as a function of prosocial events and evaluation condition

Emotional Evaluation: Types of Other- and Self-Oriented Concerns

Among other-oriented concerns, outcome for others (M = 1.26, SD = .95) and concern for others (M = 1.10, SD = .94) were more frequently mentioned than the others' deservingness (M = .43, SD = .70); χ^2 (2) = 103.43, p < .001. The difference between the outcome for others and concern for others was not significant (adjusted p = .54). Considering the types of outcomes for others, instrumental outcomes were referenced more than psychological outcomes; χ^2 (1) = 15.82, p < .001 (Figure 3). Additionally, outcomes for others were most often reported as the presence of positive outcomes, followed by the presence of negative outcomes and lastly absence of negative and positive outcomes, which did not significantly differ (adj p > .05); χ^2 (3) = 100.38, p < .001 (Figure 4).

Among self-oriented concerns, outcome for the self (M = 1.52, SD = .97) was the most frequent reason given for being glad or regretful, followed by concern/cost for the self (M = .71,

SD = .66), and lastly general evaluation of one's own behavior (*M* = .38, *SD* = .54); χ^2 (2) = 147.60, $p < .001$. In contrast to outcomes for others, psychological outcomes for the self were mentioned more than instrumental outcomes for the self, χ^2 (1) = 8.61, $p = .003$ (Figure 3). Moreover, outcomes for the self were most often reported as the presence of a negative outcome, followed by the presence of a positive or absence of a negative outcome, and lastly absence of a positive outcome; χ^2 (3) = 129.08, $p < .001$ (Figure 4). The difference between presence of positive and absence of negative outcomes was not significant (adj $p = .31$).

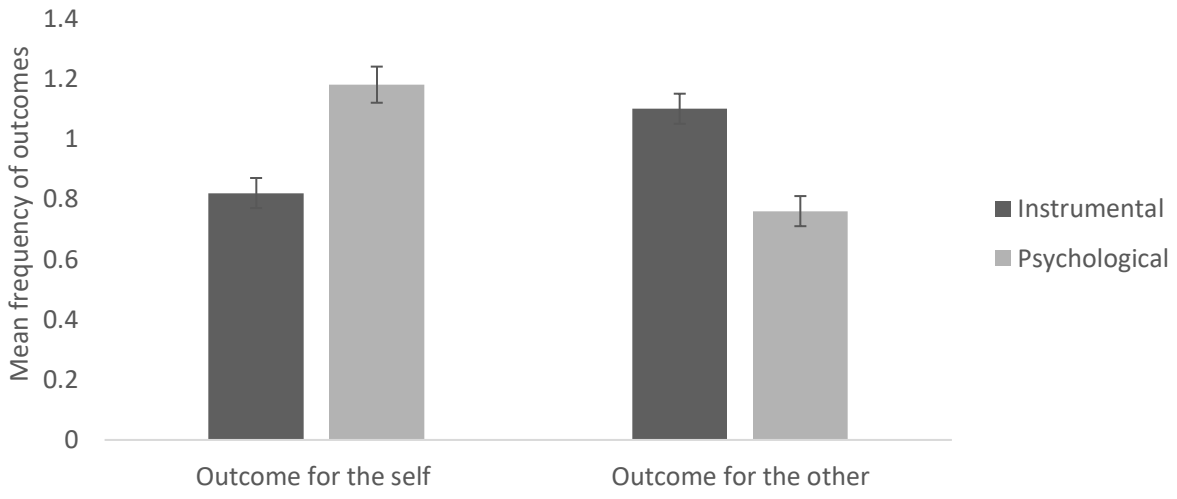


Figure 3. Mean frequencies of instrumental or psychological outcomes for the self and the other

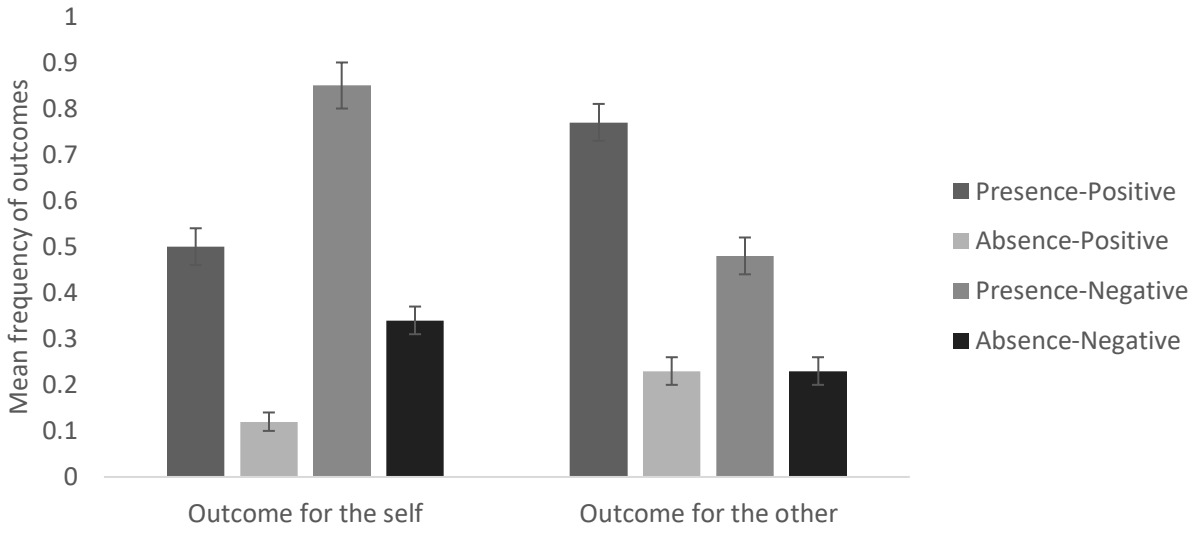


Figure 4. Mean frequencies of the presence and absence of positive and negative outcomes for the self and the other

Moral Judgments of Non-Prototypical Stories

As expected, all prosocial actions when participants were glad that they had helped (helping/glad) were evaluated as right (100%), and the majority of prosocial refusals when participants regretted that they refused to help (not helping/regret) were evaluated as wrong (86%). Furthermore, reasons for moral judgments in these instances tended to largely mirror concerns evident in reasons for helping/not helping and reasons for being glad/regretful (e.g., what I did was right because it met her needs; it was wrong that I didn't help because it had a negative impact on her). Given these considerations, we restricted our analysis of moral judgments to the non-prototypical events in which participants regretted helping or were glad for refusing to help.

To understand whether moral judgments in non-prototypical prosocial situations varied as a function of age and type of event, a GLMM analysis was conducted. A significant main effect

of event type was found, F (1, 487) = 29.63, $p < .001$. When participants refused to help and were glad, they mostly judged their actions as right (81% right, 19% wrong). Conversely, participants' judgments were more varied when they helped and regretted it (57% right, 43% wrong).

Table 5

Parameter Estimates Predicting Moral Judgments

	Prudential reasons *b (SE)*	Moral reasons *b (SE)*
Intercept	-.10 (.35)	.13 (.27)
Age group		
Adults	.47 (.44)	.09 (.35)
Children	-.84 (.47)	.44 (.35)**
Gender	-.24 (.32)	.46 (.24)
Non-prototypical event	-2.65 (.32)**	.79 (.32)*
Moral judgment	-2.81 (.60)**	-.03 (.22)
Non-prototypical * Age group		
*Adults * helping/regret*	.03 (.45)	-.33 (.44)
*Children * helping/regret*	1.47 (.49)**	-1.55 (.45)**
Non-prototypical event * Moral judgment	5.23 (.69)**	-
N observations (participants)	492 (253)	492 (253)

Note. *$p < .05$, **$p < .01$. Age group (Adolescents = 0); Gender (Boy/man = 0); Non-prototypical prosocial event (not helping/glad= 0); Moral judgment (right = 0). Effect sizes are exponentiated values of coefficients.

Moreover, to understand whether references to moral or prudential reasons for judgments varied across age groups, genders, event types (help/regret vs. not help/glad), and type of moral judgment (right vs. wrong), GLMM analyses were conducted (Table 5). Social reasons were excluded from the following analysis due to low frequency (7%). With regards to prudential

reasons, the analysis revealed significant age group by event type, $F(2, 483) = 5.88$, $p = .003$, and moral judgment by event type interactions, $F(1, 483) = 55.86$, $p < .001$. Children used prudential reasons less than adults, but not adolescents, when they refused to help and were glad, whereas all age groups used prudential reasons similarly when they helped and regretted it (Figure 5). Prudential reasons were particularly used when participants were glad for refusing to help and evaluated their actions as right (rather than wrong), as well as when they regretted helping and evaluated it as wrong (rather than right) (Figure 6). In terms of moral reasons, a significant age group by event type interaction was found, $F(2, 484) = 6.73$, $p = .001$. Children used moral reasons less than adults and adolescents when they helped and regretted it, whereas all age groups used moral reasons similarly when they refused to help and were glad (Figure 5).

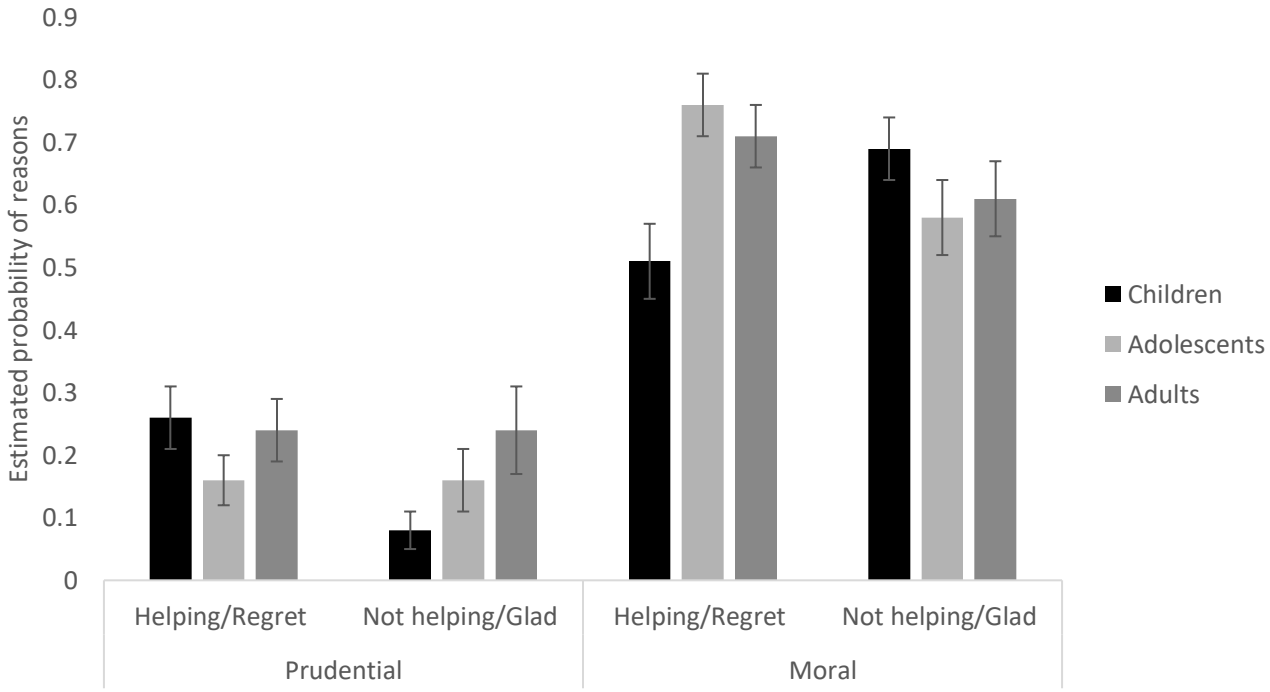


Figure 5. Estimated probabilities of prudential and moral reasons used by children, adolescents, and adults regarding non-prototypical events

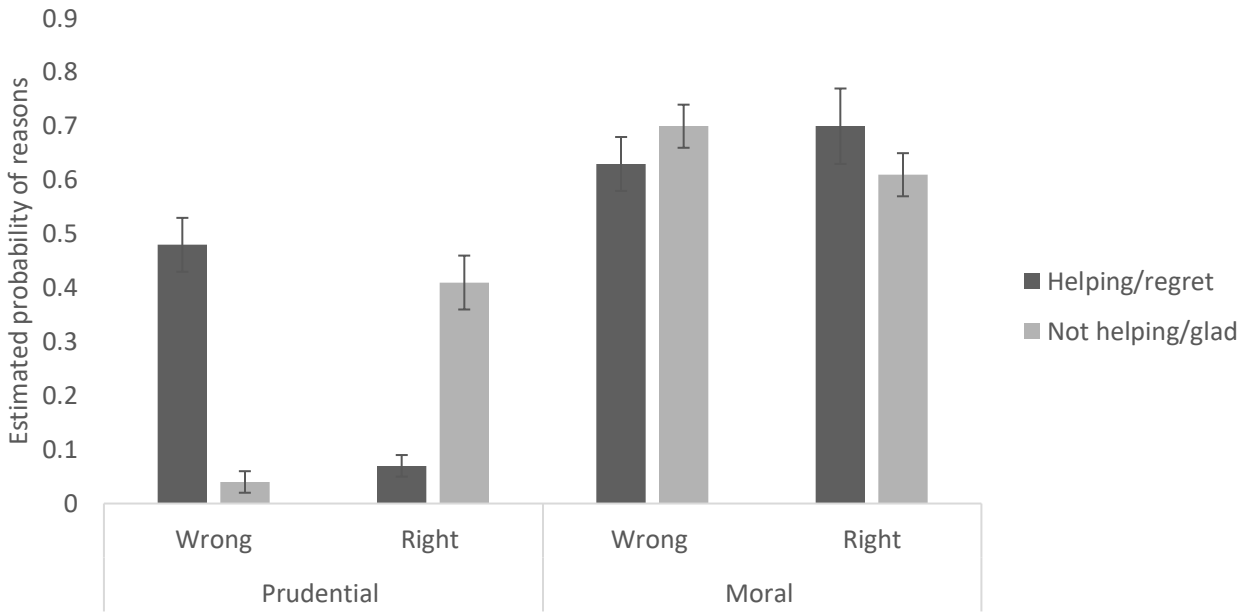


Figure 6. Estimated probabilities of prudential and moral reasons used to explain moral judgments for non-prototypical events (the interaction for moral reasons was not significant and is presented only for the purpose of comparison)

Change in Future Prosocial Intentions

Participants were asked whether their prosocial experiences changed their future prosocial intentions. It is noteworthy that children in the youngest group could not indicate whether experiences had changed their future prosociality for nine events. Those data points were excluded from the following analysis. Of the remaining responses, 62% of prosocial experiences were reported to result in a change. GLMM analyses indicated main effects of prosocial event ($F(1, 979) = 25.10$, $p < .001$) and evaluation ($F(1, 979) = 71.57$, $p < .001$; see Table 5). As expected, change in future prosocial intentions was reported more as a result of not helping (70%) than helping experiences (55%), as well as more for regretful (75%) than glad situations (49%).

Among those who reported a change, the change was described as preventive of future prosociality for 40% of events and promotive for 60% of events. GLMM analyses on the likelihood of reporting preventive (relative to promotive) changes in prosociality revealed main effects of age group ($F(2, 601) = 11.41$, $p < .001$), and evaluation ($F(1, 601) = 9.55$, $p = .002$), as well as a prosocial event by evaluation ($F(1, 601) = 107.99$, $p < .001$) interaction (Table 6). Children (9%) reported preventive change (as opposed to promotive) less than adolescents (29%) and adults (29%). Preventive change was reported more when participants had helped but regretted it (rather than being glad), as well as more when participants had not helped but were glad (rather than regretting it; Figure 7).

Additionally, among those who reported a change, children could not explain *how* their prosocial experience has changed their future prosociality in 32 instances (18%), compared to 11 instances among teenagers (5%), and one instance among adults (.4%). These data points were excluded from the following analysis. With regards to different types of change, change in motivation ($M = 1.30$, $SD = 1.05$) and proactivity ($M = .65$, $SD = .79$) were the most frequent types, followed by similar numbers of references to change in the self ($M = .44$, $SD = .74$), capacity ($M = .41$, $SD = .63$), and need ($M = .36$, $SD = .61$), $\chi^2 (4) = 177.18$, $p < .001$. The difference between motivation and proactivity was significant.

Table 6

Parameter Estimates Predicting Change in Future Prosocial Intentions

	Change (Yes or No) *b (SE)*	Preventive or Promotive [1] *b (SE)*
Intercept	1.60 (.20)**	-2.21 (.37)**
Age group		
Adults	-.14 (.21)	-.004 (.34)
Children	-.41 (.21)*[3]	-1.34 (.32)**[3]
Gender	.03 (.18)	-.26 (.29)
Prosocial event	-.66 (.13)**	4.40 (.39)** [2]
Evaluation	-1.12 (.13)**	3.52 (.37)**
Prosocial event * Evaluation	-	-9.95 (.95)**
N observations (participants)	985 (253)	608 (241)

Note. *$p < .05$, **$p < .01$. Age group (Adolescents = 0); Gender (Boy/man = 0); Prosocial event (prosocial refusal= 0); Evaluation (regret = 0); Change (yes = 1, no = 0); Types of change (preventive = 1, promotive = 0). Effect sizes are exponentiated values of coefficients.

[1] For preventive/promotive change, the random intercept was excluded from the model to reduce multicollinearity. The same pattern of findings was observed with and without the inclusion of random intercept.

[2] Although the prosocial event coefficient is statistically significant, the F test was not found to be significant.

[3] Although the children's coefficient compared to adolescents is statistically significant, the F test for the overall age effect was not found to be significant.

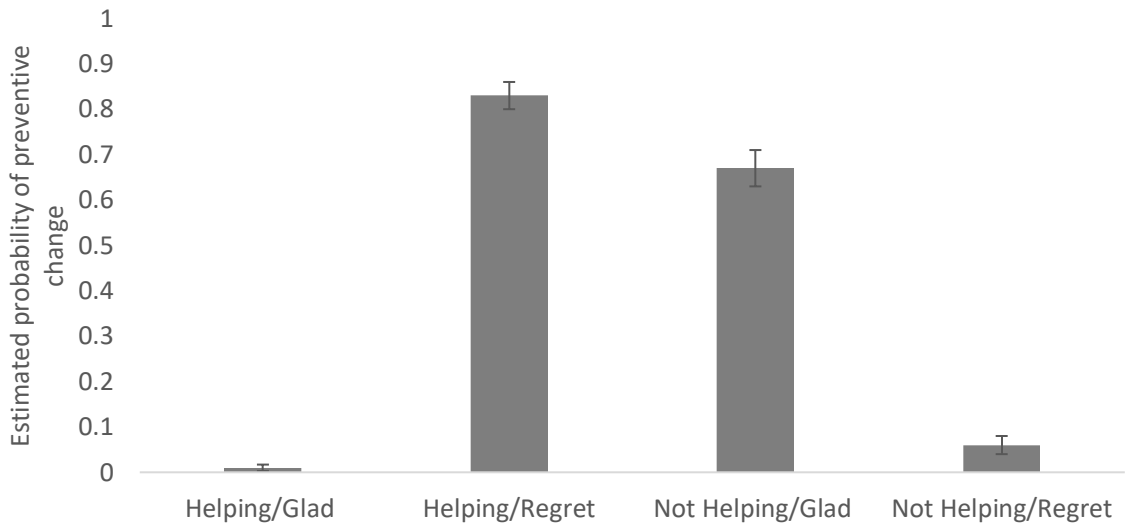


Figure 7. Estimated probabilities of preventive change (relative to promotive change) by type of prosocial event

Discussion

The aim of this cross-sectional study was to document children's, adolescents', and young adults' reasons for prosocial actions and refusals, emotional evaluations, and moral judgments concerning prototypical and non-prototypical prosocial experiences, as well as to examine whether and how different types of prosocial experiences are associated with anticipated change in future prosocial decisions. The findings are discussed in detail below.

Prosocial Engagement and Refusal Reasoning

Corroborating previous findings (e.g., Eisenberg et al., 2005), concern for others and social obligations were the most common reasons that people described for helping others. But importantly, concern for others' needs also arose as a reason for prosocial refusals. Anecdotally, reasons for helping often centered on others' immediate needs (e.g., *"there was a hole in his pants and…his knee, it was bleeding*"), whereas prosocial refusals were more often guided by concern for others' deferred needs (e.g., *"if I just gave them the answers, then they wouldn't*

learn it"). The latter form of concern for others requires the recognition that refraining from immediate assistance can be more beneficial for the recipient in the long term, despite the recipient's current wishes. For instance, one 9-year-old girl decided not to help her younger sister with spelling and in response to why she refused to help, she said:

> It was, I think, the day or week before school and to get in the school you had to know how to spell your name. And when she asked me for help, like, I thought that I won't always be able to like go to her class and just tell her how to spell her name. She had to know how to do it by herself.

Similarly, social obligation was discussed as a reason to help more than refuse to help. This was reflected in the descriptive information collected from participants' narrative accounts; that is, helping arose more when the narrator was the only available helper (single helper), whereas refusing to help arose more when there were multiple individuals present who could potentially help (multiple helpers), indicating the role of obligation and diffusion of responsibility in prosocial decision-making. This is consistent with the bystander non-intervention theory showing that children (as young as age 5) and adults are less likely to help someone in need when bystanders are present than when they are alone (e.g., Fischer et al., 2011; Plötner et al., 2015). Nevertheless, the salience of concerns with social obligation varied across age groups; adults discussed social obligation more than children and adolescents to explain helping. Compared to childhood, social norms and role-related expectations and responsibilities are better defined in adulthood (Pratt et al., 2003; Youniss & Yates, 1997). For instance, a young adult described helping her father after undergoing an operation by referring to her role-related responsibility as a daughter:

Because he was in need of me. And it wasn't even a question of "Ugh, do I have time, do I not?" It's... he's my dad, it's my- like almost my *duty* to help him and it was like a no-brainer.

Additionally, we expected that lack of capacity would be discussed more by children than older age groups to explain prosocial refusals (Barnett et al., 1987; Midlarsky & Hannah, 1985). However, the findings revealed that both adults and children referred to lack of capacity similarly and more than adolescents when they refused to help. Although adults often mentioned lack of capacity as a reason to refuse helping, their lack of capacity seemed to be often more circumstantial in nature (e.g., *"I didn't have any change with me"*), whereas children typically noted their lack of competence (e.g., "*Because I was too small and I was still wearing my floating, I didn't really know how to swim"*). Moreover, adults and adolescents referred to their own capacity to help more than children, indicating a developing sense of agency and self-understanding among older age groups (e.g., Recchia et al., 2015).

In line with previous studies, hedonistic concerns were the most commonly cited reason to refuse helping (e.g., Eisenberg et al., 2002, 2014). However, in contrast to the hypothesis, hedonistic concerns were mentioned less by children than adolescents and adults as reasons for refusing to help, whereas no age difference was found in the use of hedonistic reasons to explain helping, in that they were used infrequently across all age groups. It is possible that hedonistic reasons focus more on concrete self-gains when they are used to explain helping ("*She'd help because they'd give her food the next time she needed it*"; Eisenberg, 1986, p. 136; Eisenberg et al., 2005, 2014). These self-oriented attributions may be less evident when children are reasoning about their own actions as compared to the actions of others (Eisenberg-Berg & Neal, 1979; Recchia et al., 2015). Conversely, the majority of hedonistic reasons used to explain refusing to

help in this study were stated in the form of concerns centered around preventing self-loss (e.g., "*because I knew the consequences if I got caught. Obviously, I wouldn't want to get in trouble*"). Thus, preventing self-loss as a reason for refusing to help appeared to become more salient by adolescence. This finding may reflect adolescents' increasing ability to simultaneously consider self vs. others' needs (Nucci et al., 2017), as well as age-related differences in the perceived legitimacy of standing up for your own needs relative to those of others (e.g., Komolova & Wainryb, 2011). Additionally, these findings are consistent with recent findings based on Reinforcement Sensitivity Theory (RST) showing that behavioral activation system (BAS) or sensitivity to rewards remains stable from childhood to adulthood (Luking et al., 2013; Pagliaccio et al., 2016). On the other hand, behavioral inhibition system (BIS) or sensitivity to punishment showed steep increase from childhood to young adulthood (Pagliaccio et al., 2016), which may partly explain why children referred to hedonistic reasons in the context of refusals to help less frequently.

Interestingly, when the decision to help or refuse to help was centered on the helper (rather than the recipient), as in the case of hedonistic concerns or helper's capacity considerations, it was more likely that individuals regretted their choices. Conversely, when their prosocial choices were guided by concern for others, individuals were more likely to be glad than regretful about their decisions, including when they ultimately refused to help. This is an intriguing finding, in that it suggests that individuals' evaluations of their own prosociality depends on how they perceive their motivations or underlying intentions to act. This further highlights the critical role of other-orientation in informing individuals' experiences of regret. In this sense, the prosociality literature will benefit from taking into account individuals' understandings of their own goals and capabilities to get a fuller picture of prosocial processes.

Emotional Evaluation of Prosocial Experiences

To explain why they were glad or regretful vis-à-vis their prosocial decisions, participants referred to both other- and self-oriented concerns to a similar extent, but these concerns varied based on the types of prosocial experiences. That is, other-oriented concerns were mentioned more in the context of prototypical prosocial experiences: when participants were glad for helping or regretted a prosocial refusal. On the other hand, self-oriented concerns were more salient when evaluating non-prototypical prosocial experiences: when individuals were glad for refusing to help or regretted their helping behaviors. These findings imply that the counterfactual emotion of regret is experienced for both self-oriented (i.e., intrapersonal regret) and other-oriented reasons (i.e., interpersonal regret), supporting recent propositions that regret is a multidimensional emotion (Uprichard & McCormack, 2019). Yet, intrapersonal regret was experienced after helping, and interpersonal regret after refusing to help, indicating that these forms of regret may be differently motivated (Corbett et al., 2021). As an example, one adolescent described experiencing intrapersonal regret after helping her sister with a family issue, which incurred costs for her relationship with her father: "*because nowadays, I am not on terms with my father at all. It's just like, I feel kind of guilty about not having wanted to do it, but I still, like overall, wish I hadn't [helped].*" On the other hand, interpersonal regret was expressed by another adolescent after refusing to assist her sibling: "*because a few days later, I saw how stressed she was because of math, and it really made me feel bad that I could've helped her like by preventing that stress from coming."* Self-oriented concerns were also discussed when participants were glad for refusing to help, typically expressed as self-satisfaction or relief from having avoided potential costs or negative outcomes of helping (e.g., "*if I got involved*

[pranking/bullying other kids], *it would not be nice. I could have got detentions, so I am pretty glad that I didn't do it*").

Moreover, an important prerequisite for regret is a recognition that the actor had a personal responsibility in determining the outcome (McCormack et al., 2020). Regretting past prosocial actions necessitates a comparison between actual (e.g., what happened when I helped) and counterfactual outcomes (what would have happened if I hadn't helped), where the counterfactual outcomes are more ideal in this instance. Conversely, being glad for refusing to help requires even more abstract counterfactual considerations because actual outcomes of refusing to help (or inaction) are viewed as preferable to counterfactual outcomes (what would have happened if I helped). In this sense, although most of 8-9-year-old children were able to recount and narrate these events, it is also worth noting that being glad for refusing to help was the most difficult experience for the younger participants to recall. Correspondingly, among outcomes for the helper, the *presence* of negative outcomes was discussed more when individuals regretted helping, whereas *absence* (or prevention) of negative outcomes was mentioned more as a reason for being glad after refusing to help.

Taken together, these findings suggest that outcomes for the helper and the recipient played a central role in how prosocial experiences are evaluated emotionally. Although this may superficially imply a utilitarian or consequence-oriented approach to prosociality, understanding the role of outcomes in emotional evaluation of prosociality may warrant a deeper exploration. Considering that all prosocial events included a potential recipient who was in need (or perceived need) of assistance, references to outcomes may simply suggest that individuals are goal-oriented in their assessments of their prosocial choices. In fact, when the outcomes for the recipient were used to explain evaluations of prosocial decisions, the focus was mostly on instrumental

outcomes reflecting concrete perceived needs (e.g., "*I'm glad I helped because he got a good grade*"). Given that prosociality is defined by assisting others to reach their goals (Eisenberg et al., 2015), it makes sense that helpers' emotional evaluations would be guided by whether they met recipients' needs. On the other hand, psychological outcomes were discussed more for the helpers than the recipients when accounting for why they were glad or regretful. This finding implies that helpers did not typically reflect on their actions in relation to instrumental gains for the self, but rather in terms of psychological impacts, perhaps because they experienced some forms of psychological reward for their prosociality (e.g., "*this made me happy*"), or they did not fully anticipate the personal psychological costs of helping (e.g., *"it caused me a lot of stress*"). Another explanation for the preponderance of outcome-focused reasons may be that participants were explicitly asked to reflect on and evaluate their prosocial (in)actions, and outcomes were tangible part of prosocial experiences that could be easily discussed. In this sense, further analyses of participants' open-ended narratives would provide complementary information about the aspects of their experiences that were most salient to them.

Lastly and contrary to predictions, no age effects were observed for self- or other-oriented concerns. Since children's motivation to help or refuse to help are argued to be more self-oriented or hedonistic compared to older children and adults (e.g., Eisenberg et al., 2005), it was expected that their emotional evaluation of prosociality would also be more self-oriented. However, the findings revealed that children, similar to adolescents and adults, took into account different aspects of prosocial situations such as outcomes for both the helper and the recipient.

Moral Judgments of Non-Prototypical Prosocial Situations

Non-prototypical prosocial situations are interesting contexts to study how prosociality is judged morally. While only 19% of participants judged their choice of prosocial refusal as wrong

when they were glad about refusing to help, almost half (43%) judged their choice of prosocial behavior as wrong when they regretted helping, whereas the other half (57%) judged it to be the right choice despite their regrets. In line with Janoff-Bulman and colleagues' (2009) propositions, these findings indicate that not all prosocial actions and refusals are judged unequivocally as right and wrong respectively, and emphasize the necessity of examining emotional evaluations (glad/regretful) and prescriptive judgments (right/wrong) separately. Although helping others is often perceived as morally desirable, choosing not to help others (or refusing to help) may not always be evaluated as wrong (Janoff-Bulman et al., 2009). Thus, depending on how children reflect on a prosocial situation and make sense of it, they might judge their prosocial actions and refusals in varied ways such as an acceptable personal choice, a socially inappropriate behavior, or an unaccepted behavior (e.g., Sierksma et al., 2014).

Furthermore, as emphasized by social domain theory (e.g., Smetana et al., 2014), different forms of reasoning can underlie prescriptive judgments. Prosocial choices might not be consistently guided by moral concerns since individuals' prosociality might be based on nonmoral issues such as personal concerns (Nucci et al., 2017). Although moral reasons were predominantly used to explain moral judgments in non-prototypical situations, children also used prudential reasons to explain why refusing to help was the right choice or helping was the wrong choice, indicating that personal costs of helping also informed prescriptive judgments. Interestingly, moral reasons were used similarly often across non-prototypical situations to explain why helping or refusing to help was right or wrong. It seems that regardless of prosocial (in)action, individuals draw on concern for others' welfare and justice in explaining both right and wrong evaluations. In this sense, while prosocial actions may be guided by moral considerations such as fairness and justice, not all prosocial behaviors have moral roots and

indeed, sometimes people might choose not to act prosocially for moral reasons (Smetana et al., 2014; Nucci, 2014). Lastly, as compared to adults, children less often used prudential reasons to explain their moral judgments when they refused to help and were glad, and also less often referred to moral reasons in the context of helping that was regretted. This pattern may have arisen, at least in part, because adults provided more multifaceted explanations where multiple categories were coded (18% of explanations with more than one reason), whereas children mostly provided one explanation (4% with more than one reason).

Past Prosocial Experiences Can Change Future Prosocial Decisions

One important feature of studying past prosocial experiences is to understand whether and how these experiences influence future prosocial decisions. In line with other narrative studies (McLean, 2008; Thorne et al., 2004), the findings revealed that negative or conflictual prosocial experiences, which call for more reflection, resulted in more change in future prosocial decisions; that is, anticipated future change was mentioned more when individuals refused to help than helped, and more when they regretted their prosocial decisions than when they were glad.

Approximately half of the prosocial experiences that resulted in a change were reported to prevent future prosociality, overwhelmingly in the context of non-prototypical prosocial experiences. This highlights the crucial role of past prosocial experiences in how individuals interpret, evaluate, and act on prosocial opportunities. Previous studies suggest that experiencing regret after failing to be prosocial led children and adults to make more prosocial choices (Camille et al., 2004; O'Connor et al., 2014; Uprichard & McCormack, 2019). Our findings also speak to the opposite: that regret following *acting* prosocially apparently has a preventive effect on future prosocial intentions.

In terms of age-related differences, children in this sample (in comparison to adolescents and adults) particularly reported the future change in their prosociality to be promotive rather than preventive. It is possible that children more than older age groups perceived prosociality as an unequivocally desirable behavior, and thus were less likely to draw lessons that were preventive in nature. That is, although children sometimes described learning a lesson from their experiences, they may have been less willing than the older groups to acknowledge cases in which they intended to be less prosocial in the future. In this sense, children may also have reported future change as promotive to conform with the social appeal of prosocial actions. Children more than older age groups also had difficulty explaining *how* prosocial experiences changed their future prosociality, which might be due to dramatic changes in self-understanding and identity formation that occur in adolescence (Hardy & Carlo, 2011).

When discussing how prosocial experiences changed future prosocial decisions, participants often cited changes in their motivations to be prosocial. They specifically discussed becoming more/less selective in terms of who they help (*"if you see that the person isn't deserving of it, then you should maybe not help*") and more/less strategic in relation to weighing self-related considerations ("*I would still help out my friends but maybe not to the extent that like I would help them more than I help myself*"), and more concerned with self-integrity and moral commitments through anticipating moral emotions and upholding social norms ("*Because of how I felt after I did it, after I realized what I'd done, that now I like think a bit more, I'm like 'oh wait, remember before? Like that happened and I didn't feel good', so I might then give them the money.")*. These examples underline varied ways in which past prosocial actions and refusals can impact prosocial motivation, and suggest that this is an important avenue for future work.

Limitations

This study has some limitations that need to be acknowledged, suggestive of directions for future research. As noted in other narrative studies (e.g., Wainryb et al., 2005), 8-9-year-old children had some difficulty recalling past prosocial experiences. Particularly, recounting a time when participants were glad for refusing to help was challenging for all age groups because they needed to evaluate a behavior/situation that has not occurred. That said, rich narrative accounts were obtained across all age groups. Although participants were reminded that there were no right or wrong answers, it is possible that some responses were influenced by social desirability concerns. This was especially noticeable in the younger age group when they reported that impacts on their future prosocial decisions were mainly promotive. Some young adults and adolescents also acknowledged the normative nature of prosocial action by making statements such as "*this sounds very selfish, but I was tired*". It is also important to note that helping and glad experiences were always elicited last, so as to end this portion of the interview protocol on a positive note. For this reason, we cannot rule out order effects in explaining findings pertaining to this event (e.g., that less self-change was reported for these experiences). Moreover, young adults in this study were mostly women and they were recruited from a university Psychology program, and thus the observed patterns may not generalize to university students in other disciplines or same-aged peers outside of a university context. Lastly, children's and adolescents' data were collected online via Zoom. Although online data collection has become common during the pandemic, distractions in the home environment and Zoom fatigue were inevitable, especially for younger children.

Conclusion

Overall, this cross-sectional study added to the growing literature on the development of prosocial (refusal) reasoning by (1) showcasing different types of prosocial opportunities and dilemmas that children, adolescents, and young adults encounter in their everyday lives, (2) highlighting the importance of interpersonal and intrapersonal regret in evaluating prosocial choices, (3) emphasizing that not all prosocial decisions or evaluations have moral roots, and (4) documenting the preventive effect of non-prototypical past prosocial experiences on future prosocial decisions. Our findings underscore that people experience both positive and negative emotions following prosocial interactions. Given that past prosocial experiences appear to impact motivations to assist others in the future, parents and educators may play an important role in helping children reflect on, make sense of, and learn from their prosocial experiences. For instance, putting prosocial opportunities into perspective from both the helper's and the recipient's points of view may improve perspective taking as well as problem solving abilities, and help children navigate these situations more thoughtfully. Relatedly, parents and educators can leverage children's and adolescents' experiences of interpersonal and intrapersonal regret to help them learn from their experiences and teach them how to make sensible other-oriented choices while considering their own needs and desires. Last but not least, the large corpus of narratives collected in this study serves as an instructive depository of events and opportunities that children, adolescents, and young adults face in their day-to-day interactions with others. That is, these events speak to common and age-appropriate moral dilemmas that could be used as the basis of ecologically valid stimuli and stories to help children explore boundaries in prosocial giving (e.g., no need to help everyone all the time), costs of helping and outcomes (e.g., the cost

and the consequences of helping someone cheat on a test), and recognizing their capacity to help or finding multiple ways of helping others (e.g., finding win-win solutions).

General Discussion

The overall aim of this dissertation was to understand how individuals interpret, evaluate, and make decisions about the prosocial experiences they encounter daily. Although we also explored children's, adolescents' and adults' reflections on prosocial *actions*, our focus on understanding interpretative, motivational, emotional, and moral aspects of prosocial *refusal*s was particularly novel and addressed a key gap in the literature. Specifically, in Study 1, we investigated whether situational factors such as intensity of need and types of prosociality influence children's and adolescents' judgments regarding the desirability, as well as obligatoriness or permissibility of high cost helping, sharing, and comforting. In Study 2, we examined developmental consistencies and changes in prosocial (refusal) reasoning, emotional evaluations, and moral judgments of children's, adolescents', and young adults' prototypical and non-prototypical prosocial experiences, as well as whether and how different types of prosocial experiences are associated with anticipated change in future prosocial decisions.

Theoretical Contributions

The findings of this dissertation contribute to the growing body of literature on the development of prosocial moral reasoning and judgment. Although (prosocial) moral reasoning and judgment has been studied in the past (e.g., Eisenberg et al., 2002, 2014), situations when actors decide not to help others, or when they experience non-prototypical moral emotions in the aftermath of their actions have been overlooked. Using both responses to hypothetical vignettes and recollections of past prosocial experiences, the findings of this dissertation broadened our understanding of how individuals interpret, reason, and make decisions when encountering varied forms of prosocial experiences as well as whether these processes show different patterns

across age. Particularly, this dissertation contributed to scholarship on motivational (e.g., reasoning informing the desirability of prosociality), as well as moral and emotional (e.g., evaluative emotions) components of prosocial decision making.

Eisenberg's model of prosocial moral reasoning (1986) broadly underlined that individuals' predominant forms of reasoning are influenced by a combination of individual differences (e.g., personal values and goals) and contextual factors (e.g., cost of helping, characteristics of recipient). Although linked, reasoning and judgment are not the same. Reasoning refers to pattern of thought that stem from beliefs and can be an important determinant of behavior (e.g., Colby & Kohlberg, 1987). Judgment is a decision that is reached through the reasoning process. While Eisenberg's model does not explicitly distinguish between reasoning and judgment, more recent research has emphasized on distinct roles of prosocial judgment and reasoning, and studied reasoning to better understand judgment (e.g., Dahl et al., 2020). In line with previous studies, the findings from this dissertation provide evidence that prosocial judgment is sensitive to the context of its application. For instance, Study 1 showed that the intensity of the recipient's need influenced the desirability and obligatoriness of prosocial actions. Moreover, Study 1 provided novel evidence that prosocial judgment varies by the type of prosociality; for instance, comforting and sharing were evaluated as desirable and obligatory more than helping. These findings thus suggest that addressing emotional and material needs is evaluated as more obligatory than addressing instrumental needs; therefore, the type of prosocial action that is required to address a need is an important factor in how prosocial situations are judged. The context sensitivity of prosocial judgments was also evident in Study 2. Participants experienced both regret and satisfaction vis-à-vis their past prosocial experiences, in relation to both self- and other-oriented concerns such as outcomes to the helper and the

recipient, or costs of helping. Taken together, then, our findings confirm that prosocial (in)actions may be judged as obligatory, non-obligatory, permissible, and impermissible, and these judgments are meaningfully related to how opportunities are interpreted (Janoff-Bulman et al., 2009; Kahn, 1992).

Furthermore, this dissertation revealed meaningful connections between evaluative emotions and how children, adolescents, and adults make sense of past prosocial interactions. A few decades ago, Kohlberg (1981) claimed that moral reasoning is the most influential factor in moral decision making. However, without considering emotions, cognitive approaches to morality do not provide a full picture of individuals' judgments and decisions (e.g., Eisenberg et al., 2015; Wainryb & Recchia, 2012). In the context of prosociality, the emotions of the prosocial agent are relevant in a variety of ways: (1) emotions may be the reason for an (in)action (e.g., "*I helped because I felt bad for her"; "I didn't help because I was scared*"), (2) emotions may be experienced following an (in)action (e.g., regret following refusing to help, pride following a prosocial act), and (3) emotions may be anticipated for future (in)actions. Thus, emotions may both inform and result from prosocial decision-making processes and judgments, either directly or indirectly. For instance, a person may evaluate a prosocial action as more obligatory if they expect to experience strong negative evaluative emotions following refusing to help. Although prompts in Study 1 did not directly elicit information about emotions, participants nonetheless referred to emotions reflecting other-oriented concerns in explanations for why agents ought to help (e.g., *"[the helper] feels sad for [the recipient]*"; i.e., emotions underlying endorsements of actions). This is consistent with the literature on empathy-related responding, suggesting that empathy may stimulate other-oriented moral reasoning (Hoffman, 2000; Malti & Ongley, 2014). A link between prosocial reasoning and empathy was similarly observed in Study 2, when

participants referred their own emotions to explain why they helped or refused to help (e.g., "*I feel bad for him*"). Nonetheless, these references to emotions were not limited to empathy; participants also referred to other types of emotions to explain their choice of action (e.g., "*I didn't help because I was scared*"). In turn, the novel contribution of Study 2 was to reveal that both negative and positive evaluative emotions are experienced following helping and refusing to help (emotions in the aftermath of actions). Specifically, Study 2 highlighted that (1) the counterfactual emotion of regret is experienced in the context of prosociality for both self-oriented (i.e., intrapersonal regret) and other-oriented reasons (i.e., interpersonal regret; Uprichard & McCormack, 2019), and (2) positive evaluative emotions such as self-satisfaction or pride can be experienced not only following engaging in prosociality, but also after refusing to do so. Emotion language was also observed in relation to moral judgments of actions. For instance, in explaining why refusing to help was the right thing to do, prudential reasons included references to emotional outcomes: "[not helping was the right thing to do because] *I didn't get hurt*". Lastly, references to emotional consequences were not always self-oriented; in fact, participants also referred to others' emotions, mainly in the context of psychological outcomes for others (e.g., "*I am glad I helped because he felt better*.") Overall, these findings indicate the multifaceted role of emotions in prosocial judgment and decision making.

In this study, moral judgments of prototypical prosocial experiences were relatively homogenous: helping was consistently evaluated as right when individuals were glad for helping, and refusing to help was consistently evaluated as wrong when they regretted it. Conversely, moral judgments in the non-prototypical prosocial experiences were more varied, especially when individuals regretted helping others. Moreover, individuals used moral reasoning across a variety of contexts to explain why prosocial engagements and refusals were both right or wrong,

indicating that regardless of prosocial (in)action, individuals draw on concern for others' welfare and justice to account for their judgments. On the other hand, prudential reasons were particularly used when participants evaluated their refusals to help as right when they were glad for not helping, as well as when they evaluated helping as wrong when they regretted helping. In line with social domain theory, then, these findings emphasize that it is important to capture the varied forms of reasoning underlying individuals' judgments, as their reasoning may reflect both moral and nonmoral concerns (Nucci et al., 2017; Turiel, 1983).

Another key contribution of this dissertation is highlighting the role of prosocial refusal experiences in prosocial development. Although overlooked, prosocial refusals are critical social experiences for several reasons. First, as social beings, it is impossible to help everyone all the time; therefore, refusing to be prosocial is an inevitable social experience that can shape how individuals interpret and evaluate prosocial experiences. The prevalence of prosocial refusal experiences (e.g., Darley & Batson, 1973; Demetriou & Hay, 2004; Tavassoli et al., 2020) implies that processes of prosocial development may be informed by experiences of both engaging in or refusing to engage in prosociality. Second, prosocial refusals are natural prosocial dilemmas wherein (1) considerations for self outweigh concerns for others or (2) considerations for the long term wellbeing of others outweigh their immediate need. In this regard, prosocial refusals may lead to mixed evaluations of prosocial (in)actions; although ignoring others' needs may be typically deemed an undesired behavior, prioritizing oneself or others' long-term needs does not necessarily show a lack of compassion for others. Third, refusing to help others is a social context distinct from transgressive morality; that is, emotional and moral judgment of prosocial refusals may be unique in that unlike harming others, refusing to help is not necessarily judged as impermissible (e.g., Janoff-Bulman et al., 2009).

Corroborating previous experimental and observational studies (e.g., Darley & Batson, 1973; Demetriou & Hay, 2004; Dunfield & Kuhlmeier, 2013; Tavassoli et al., 2020), the findings of Study 1 showed that approximately half of the prosocial actions depicted in the hypothetical vignettes were evaluated as undesirable, underlining the prevalence of third-party judgments that is acceptable to refuse to help. To explain why engaging in prosociality is undesirable, participants referred to concern for self/helper (e.g., *"[the helper] has something really important, she could get a medal or a trophy, or like money and that's pretty much important")* and lack of concern for the other/recipient (e.g., *"if [the recipient] has one damaged painting, it's not that big of a deal"*). This contrasts with reasons why individuals judged prosociality as desirable, which most often centered on concern for others (e.g., *"because Harry [the recipient] needs help collecting his drawings"*). Looking closer at the reasons behind judgments, it seems that desirability and undesirability judgments are dissimilarly motivated (i.e., moral vs. prudential concerns).

Moreover, study 2 documented the breadth of everyday prosocial refusal experiences. Specifically, in light of the costs of helping and the outcome for the helper and the recipient, some prosocial refusals may be followed by positive emotions. When refusing to help is not justified based on concerns for others, it may have an adaptive function as it protects the potential helper from costs and risks of helping. This was also reflected in the findings related to change in future prosocial decisions; that is, changes in future prosocial decisions were reported more for both non-prototypical and negatively valenced prosocial experiences. Particularly, non-prototypical prosocial situations when individuals regretted helping or were glad for refusing to help, resulted in more preventive change in future prosocial choices, especially in terms of motivation to help. This is an important novel contribution in the prosociality literature as it

shows that past prosocial experiences and lessons learned from these experiences may impact the interpretation of prosocial situations, the desirability of prosocial actions, and importantly, the intensity of prosocial motivation to act. Based on the constructivist-interactionist perspective, varied social interactions between individuals and their social environment provide different affordances for development of social knowledge and competence (Carpendale & Lewis, 2015; Dahl, 2018). Thus far, prosocial refusal experiences have been disregarded in the literature in explaining the development of prosocial judgment and decisions. The findings of this dissertation provide unique evidence for the importance of these experiences.

Lastly, although there were some differences in how children, adolescents, and young adults interpreted and evaluated social situations, the findings of this dissertation also revealed many consistencies in prosocial judgments and decisions across age groups. Study 1 showed that children more than adolescents evaluated prosociality as desirable (compared to undesirable). This is consistent with previous studies indicating that as children grow older and develop cognitive flexibility, they become increasingly more skilled in considering multiple competing concerns (Dahl et al., 2020; Killen et al., 2018; Nucci et al., 2017). Nevertheless, obligatoriness and permissibility judgments were rated relatively similarly across age groups, suggesting that children and adolescents have comparable views about the discretionary nature of prosociality. Moreover, when explaining why they helped or refused to help in Study 2, children used some reasons such as social obligation less than older age groups; however, not all predicted age-related changes (e.g., Eisenberg et al., 2002, 2005, 2014) in patterns of reasoning were confirmed. Additionally, Study 2 did not reveal age differences in the reasoning underlying evaluative emotions (regretful, glad) between children, adolescents, and young adults. This may imply that similar patterns of reasoning and evaluation are employed by children, adolescents,

and young adults to interpret prosocial opportunities, although the nature of recalled social situations also varied by age. Specifically, considering the content of narrated events descriptively, adolescents and adults recounted prosocial experiences that were more complex, with multiple competing considerations (See samples of narratives, Appendix E). The relationships in which prosocial experiences occurred also varied with age: children narrated events about peers, siblings, and parents more than adolescents and young adults, whereas there was an age progression in narrating stories about strangers, suggesting a developmental change in the context of prosocial opportunities. Although this speaks to the importance of considering the relationship context in studying prosocial judgments and decisions (Chalik & Dunham, 2020; Hachey & Conry-Murray, 2020), it is challenging to separate age differences in predominant forms of reasoning from developmental changes in social experiences. In this sense, one of the advantages of using hypothetical vignettes in Study 1 was that it allowed us to examine developmental changes in a consistent context across age groups. Lastly, children less than adolescents and adults reported the future change in their prosociality to be preventive. One explanation could be that, similar to the findings of Study 1, children may evaluate prosociality as more consistently desirable than older age groups. To conclude, this dissertation illuminated some developmental changes in desirability judgment of prosocial situations across age, but also a number of consistencies in patterns of reasoning and evaluation in interpreting real-life prosocial opportunities.

Practical Implications

The findings of this dissertation have some practical implications as well. Across both studies, our results underline that prosocial decision-making requires actively reflecting on and weighing competing concerns about self and other. In this respect, supporting children and

adolescents in navigating the complexity of social situations is imperative. Making sense of past prosocial experiences help support individuals' sense of agency and deliberate decision-making processes (e.g., Pasupathi & Wainryb, 2010), by reflecting on how they judged a prosocial situation and how they felt following helping or refusing to help. Aligned with this, narrative approaches to moral education in the classroom encourage children to recount stories of their own real-life prosocial moral dilemmas, which enables them to reflect on their experience from their own perspective and supports their sense of authorship (Tappan & Brown, 1989). The narrative approach to moral education can be facilitated formally through interviews by teachers or peers, and conversational training, or informally by keeping journals, crafting arts, and acting in dramatic play (Bouchard, 2002; Ornaghi et al., 2014; Tappan & Brown, 1989). Moreover, parent-child conversations or co-narrations of morally laden experiences also provide unique opportunities for meaning making and agency development (Recchia et al., 2013; Pasupathi et al., 2022). In these ways, establishing safe non-judgmental environments both at home and in the classroom for individuals to reflect on their past prosocial experiences can help them examine their emotions, thoughts, and judgments associated with specific social situations and learn from their past experiences.

Moreover, based on a meta-moral cognition framework (Bajovic & Rizzo, 2021), encouraging *critical moral discourse* about prosocial and moral issues can improve children's understandings of the mutuality of perspectives (i.e., to view both self and others in ways reflecting complex psychological systems of values, beliefs, and attitudes), self-reflective moral reasoning, and emotional awareness (Eisenberg et al., 2014; Nucci et al., 2015). During dialogues with age-mates, individuals can construct (and reconstruct) their moral thinking and feelings. Considering that lack of capacity was cited as a reason for prosocial refusals, engaging

in a mental role-play can equip individuals with multiple strategies to handle different prosocial situations and increase their sense of self-efficacy in intervening. For instance, in the case of standing up (or refusing to stand up) for victims of bullying, individuals may take the perspectives of bully, victim, and bystander to evaluate the costs of helping (or not helping), and the impacts of intervention for all the parties involved.

Moreover, the types of narratives recounted by participants in Study 2 can be used as stimuli to facilitate conversations between children and parents or educators in promoting a balanced assessment of prosocial situations, to support counterfactual thinking and an understanding of the mutuality of perspectives, as well as problem-solving skills (See Appendix E for examples of narratives). This is particularly important because Study 1 suggested that children may be less attuned to the costs of helping than adolescents. Scaffolding counterfactual and future-oriented thinking with regards to potential costs of helping and associated outcomes will help children to develop a more nuanced assessment of social situations and it may prevent potentially risky behaviors. Although parents and educators aim to socialize children to be caring, compassionate, and prosocial, it is also crucial for children to learn self-protective skills, such as setting boundaries in prosocial giving, concerns regarding personal safety, Stranger Danger, and avoiding risk taking (Wray-Lake et al., 2012). Studies on young adults have suggested that an *excessive* concern for others and consistently prioritizing others' needs before one's own (i.e., unmitigated communion) is associated with more interpersonal problems and lower self-esteem (Fritz & Helgeson, 1998). As such, it is necessary to encourage prosociality accompanied with instructive messages about self-protection and discussion of the threshold of self-sacrifice.

Future Directions

The findings of this dissertation also open new avenues for research. In Study 1, we investigated judgments regarding the desirability as well as obligatoriness and permissibility of high cost prosociality. However, the link between emotional evaluations and prosocial judgments requires further exploration. For instance, future studies can ask participants about how the helper and the recipient would feel after helping or refusing to help when they evaluated a prosocial action as obligatory, non-obligatory, permissible, or impermissible. This would help to illuminate whether emotional evaluations depend on how prosocial situations are judged. Moreover, experiences of evaluative emotions and prosocial judgments have been shown to be substantively culture-specific. In some cultural contexts, self-sacrifice and devotion are highly valued and socialized and thus, refusing to help may be evaluated as particularly negative (e.g., Jia et al., 2019; Malti & Keller, 2010). Although participants in this dissertation represented relatively affluent families with varied cultural backgrounds, cross-cultural comparison research is needed to investigate the unique effect of culture and socioeconomic status on self-evaluative emotions with regards to helping and refusing to help. Furthermore, Study 2 did not examine whether past prosocial experiences predict actual behavioral change, but rather the focus was on what participants reported as the anticipated impact of past experiences on their future prosociality. Forthcoming studies should implement longitudinal designs to investigate prospective effects of reflection on non-prototypical prosocial experiences on actual behavioral change.

Overall, we believe that the findings of this dissertation serve as a starting point for more research on prosocial refusals. One important question, for example, concerns how prosocial refusals experiences are integrated into or reconciled with individuals' moral selves. The moral

self has been shown to be an important source of prosocial motivation for adults, linking moral judgment to action (e.g., Blasi, 1983; Hardy & Carlo, 2011). More work is required to examine how prosocial refusal experiences inform and change individuals' thinking about themselves as moral agents. Future studies should implement varied methodologies such as observations, interviews, and experimental designs to better understand the interrelated links between emotional evaluation, prosocial judgment and reasoning, and prosocial decision making in everyday experiences. The literature on prosocial refusals can also benefit from longitudinal studies to examine the long-term effects of prosocial refusal experiences on prosocial motivation and actions.

References

Aknin, L. B., Dunn, E. W., & Norton, M. I. (2012). Happiness runs in a circular motion: evidence for a positive feedback loop between prosocial spending and happiness. *Journal of Happiness Studies*, *13*(2), 347–355. https://doi.org/10.1007/s10902-011-9267-5

Arnett, J. J. (2007). Emerging adulthood: What is it, and what is it good for? *Child Development Perspectives*, *1*(2), 68–73. https://doi.org/10.1111/j.1750-8606.2007.00016.x

Arsenio, W. F., & Gold, J. (2006). The effects of social injustice and inequality on children's moral judgments and behavior: Towards a theoretical model. *Cognitive Development*, *21*(4), 388-400. https://doi.org/10.1016/j.cogdev.2006.06.005

Arsenio, W. F., & Kramer, R. (1992). Victimizers and their victims: Children's conceptions of the mixed emotional consequences of moral transgressions. *Child Development*, *63*(4), 915–927. https://doi.org/10.2307/1131243

Bajovic, M., & Rizzo, K. (2021). Meta-moral cognition: Bridging the gap among adolescents' moral thinking, moral emotions and moral actions. *International Journal of Adolescence and Youth*, *26*(1), 1–11. https://doi.org/10.1080/02673843.2020.1867206

Barnett, Mark A., Thompson, M. A., & Schroff, J. (1987). Reasons for not helping. *The Journal of Genetic Psychology*, *148*(4), 489–498. https://doi.org/10.1080/00221325.1987.10532487

Blasi, A. (1983). Moral cognition and moral action: A theoretical perspective. *Developmental Review*, *3*(2), 178–210. https://doi.org/10.1016/0273-2297(83)90029-1

Bloom, P. (2018). *Against empathy: The case for rational compassion*. Harper Collins, New York, New York.

Bouchard, N. (2002). A narrative approach to moral experience using dramatic play and writing. *Journal of Moral Education*, *31*(4), 407–422. https://doi.org/10.1080/0305724022000029644

Brownell, C. A., Svetlova, M., & Nichols, S. (2009). To share or not to share: When do toddlers respond to another's needs? *Infancy*, *14*(1), 117–130. https://doi.org/10.1080/15250000802569868

Brownell, C. A., Svetlova, M., Anderson, R., Nichols, S. R., & Drummond, J. (2013). Socialization of early prosocial behavior: parents' talk about emotions is associated with sharing and helping in toddlers: Parent talk & toddler prosocial behavior. *Infancy*, *18*(1), 91–119. https://doi.org/10.1111/j.1532-7078.2012.00125.x

Camille, N., Coricelli, G., Sallet, J., Pradat-Diehl, P., Duhamel, J. R., & Sirigu, A. (2004). The involvement of the orbitofrontal cortex in the experience of regret. *Science*, *304*(5674), 1167-1170. https://doi.org/10.1126/science.1094550

Carnes, N., & Janoff-Bulman, R. (2012). Harm, help, and the nature of (Im)moral (In)action. *Psychological Inquiry*, *23*(2), 137–142. https://doi.org/10.1080/1047840X.2012.667768

Carpendale, J. I. M., & Lewis, C. (2015). The development of social understanding. In R. M. Lerner (Ed.), *Handbook of Child Psychology and Developmental Science* (pp. 1–44). John Wiley & Sons, Inc. https://doi.org/10.1002/9781118963418.childpsy210

Chalik, L., & Dunham, Y. (2020). Beliefs about moral obligation structure children's social category-based expectations. *Child Development*, *91*(1), e108–e119. https://doi.org/10.1111/cdev.13165

Colby, A., & Kohlberg, L. (1987). The measurement of moral judgment. New York: Cambridge University Press.

Corbett, B., Feeney, A., & McCormack, T. (2021). Interpersonal regret and prosocial risk taking in children. *Cognitive Development*, *58*, 101036. https://doi.org/10.1016/j.cogdev.2021.101036

Dahl, A. (2017). Ecological commitments: Why developmental science needs naturalistic methods. *Child Development Perspectives*, *11*(2), 79–84. https://doi.org/10.1111/cdep.12217

Dahl, A. (2018). How, not whether: Contributions of others in the development of infant helping. *Current Opinion in Psychology*, *20*, 72–76. https://doi.org/10.1016/j.copsyc.2017.07.038

Dahl, A., Gross, R. L., & Siefert, C. (2020). Young children's judgments and reasoning about prosocial acts: Impermissible, suberogatory, obligatory, or supererogatory? *Cognitive Development*, *55*, 100908. https://doi.org/10.1016/j.cogdev.2020.100908

Darley, J. M., & Batson, C. D. (1973). "From Jerusalem to Jericho": A study of situational and dispositional variables in helping behavior. *Journal of Personality and Social Psychology*, *27*(1), 100–108. https://doi.org/10.1037/h0034449

Darwall, S. (2013). "Bipolar obligation." In S. Darwall, *Morality, authority, and law: Essays in second-personal ethics* I, pp. 20–39. Oxford University Press.

Demetriou, H., & Hay, D. F. (2004). Toddlers' reactions to the distress of familiar peers: The importance of context. *Infancy*, *6*(2), 299–318. https://doi.org/10.1207/s15327078in0602_9

Dunfield, K. A. (2014). A construct divided: Prosocial behavior as helping, sharing, and comforting subtypes. *Frontiers in Psychology*, *5, 958*. https://doi.org/10.3389/fpsyg.2014.00958

Dunfield, K. A., & Kuhlmeier, V. A. (2013). Classifying prosocial behavior: Children's responses to instrumental need, emotional distress, and material desire. *Child Development*, *84*(5), 1766–1776. https://doi.org/10.1111/cdev.12075

Eisenberg, N. (1986). *Altruistic emotion, cognition, and behavior*. Lawrence Erlbaum Associates.

Eisenberg, N., Cumberland, A., Guthrie, I. K., Murphy, B. C., & Shepard, S. A. (2005). Age Changes in Prosocial Responding and Moral Reasoning in Adolescence and Early Adulthood. *Journal of Research on Adolescence*, *15*(3), 235–260. https://doi.org/10.1111/j.1532-7795.2005.00095.x

Eisenberg, N., Guthrie, I. K., Cumberland, A., Murphy, B. C., Shepard, S. A., Zhou, Q., & Carlo, G. (2002). Prosocial development in early adulthood: A longitudinal study. *Journal of Personality and Social Psychology, 82*(6), 993–1006. https://doi.org/10.1037/0022-3514.82.6.993

Eisenberg, N., Hofer, C., Sulik, M. J., & Liew, J. (2014). The development of prosocial moral reasoning and a prosocial orientation in young adulthood: Concurrent and longitudinal correlates. *Developmental Psychology, 50*(1), 58–70. https://doi.org/10.1037/a0032990

Eisenberg, N., Lennon, R., & Roth, K. (1983). Prosocial development: A longitudinal study. *Developmental Psychology*, *19*(6), 846–855. https://doi.org/10.1037/0012-1649.19.6.846

Eisenberg, N., Miller, P. A., Shell, R., McNalley, S., & Shea, C. (1991). Prosocial development in adolescence: A longitudinal study. *Developmental Psychology, 27*(5), 849–857. https://doi.org/10.1037/0012-1649.27.5.849

Eisenberg, N., Shell, R., Pasternack, J., Lennon, R., Beller, R., & Mathy, R. M. (1987). Prosocial development in middle childhood: A longitudinal study. *Developmental Psychology, 23*(5), 712–718. https://doi.org/10.1037/0012-1649.23.5.712

Eisenberg, N., Spinrad, T. L., & Knafo-Noam, A. (2015). Prosocial development. In M. E. Lamb & R. M. Lerner (Eds.), *Handbook of child psychology and developmental science: Socioemotional processes* (pp. 610–656). John Wiley & Sons, Inc. https://doi.org/10.1002/9781118963418.childpsy315

Eisenberg, N., Spinrad, T.L., & Sadovsky, A. (2006). Empathy-related responding in children. In M. Killen, & J. Smetana (Eds.), *Handbook of moral development* (pp. 517–549). Mahwah, NJ: Lawrence Erlbaum.

Eisenberg, N., VanSchyndel, S. K., & Spinrad, T. L. (2016). Prosocial motivation: Inferences from an opaque body of work. *Child Development*, *87*(6), 1668–1678. https://doi.org/10.1111/cdev.12638

Etxebarria, I., Ortiz, M. J., Apodaca, P., Pascual, A., & Conejero, S. (2015). Pride as moral motive: moral pride and prosocial behaviour/El orgullo como motivación moral: orgullo moral y conducta prosocial. *Infancia y Aprendizaje*, *38*(4), 746-774. https://doi.org/10.1080/02103702.2015.1076267

Fehr, E., Bernhard, H., & Rockenbach, B. (2008). Egalitarianism in young children. *Nature*, *454*(7208), 1079–1083. https://doi.org/10.1038/nature07155

Fischer, P., Krueger, J. I., Greitemeyer, T., Vogrincic, C., Kastenmüller, A., Frey, D., Heene, M., Wicher, M., & Kainbacher, M. (2011). The bystander-effect: A meta-analytic review on bystander intervention in dangerous and non-dangerous emergencies. *Psychological Bulletin*, *137*(4), 517–537. https://doi.org/10.1037/a0023304

Fritz, H. L., & Helgeson, V. S. (1998). Distinctions of unmitigated communion from communion: self-neglect and overinvolvement with others. *Journal of Personality and Social Psychology*, *75*(1), 121. https://doi.org/10.1037/0022-3514.75.1.121

Gutzwiller-Helfenfinger, E., Gasser, L., & Malti, T. (2010). Moral emotions and moral judgments in children's narratives: Comparing real-life and hypothetical transgressions. *New Directions for Child and Adolescent Development*, *2010*(129), 11–31. https://doi.org/10.1002/cd.273

Hachey, E., & Conry-Murray, C. (2020). Children's judgements of the obligation to help: The role of relationships. *European Journal of Developmental Psychology*, *17*(5), 761–772. https://doi.org/10.1080/17405629.2020.1749046

Hardy, S. A., & Carlo, G. (2011). Moral identity: What is it, how does it develop, and is it linked to moral action?. *Child Development Perspectives*, *5*(3), 212–218. https://doi.org/10.1111/j.1750-8606.2011.00189.x

Helwig, C. C., & Turiel, E. (2002). Children's social and moral reasoning. In P. K. Smith & C. H. Hart (Eds.), *The Blackwell handbook of childhood social development* (pp. 476–490). Blackwell.

Hepach, R., Vaish, A., Grossmann, T., & Tomasello, M. (2016). Young children want to see others get the help they need. *Child Development*, *87*(6), 1703–1714. https://doi.org/10.1111/cdev.12633

Hoffman, M. L. (2000). *Empathy and moral development: Implications for caring and justice*. Cambridge University Press.

Hoffman, M. L. (2008). Empathy and prosocial behavior. In M. Lewis, J. Haviland-Jones, & L. Barrett (Eds.), *Handbook of emotions* (pp. 440–455). New York, NY: Guilford Press.

House, B. R., & Tomasello, M. (2018). Modeling social norms increasingly influences costly sharing in middle childhood. *Journal of Experimental Child Psychology*, *171*, 84–98. https://doi.org/10.1016/j.jecp.2017.12.014

Jackson, M., & Tisak, M. S. (2001). Is prosocial behaviour a good thing? Developmental changes in children's evaluations of helping, sharing, cooperating, and comforting. *British Journal of Developmental Psychology*, *19*(3), 349–367. https://doi.org/10.1348/026151001166146

Janoff-Bulman, R., Sheikh, S., & Hepp, S. (2009). Proscriptive versus prescriptive morality: Two faces of moral regulation. *Journal of Personality and Social Psychology*, *96*(3), 521–537. https://doi.org/10.1037/a0013779

Jia, F., Li, L., & Krettenauer, T. (2019). Self- and other-evaluative moral emotions in prosocial contexts: A comparison of Chinese and Canadian adolescents. *PsyCh Journal*, *8*(2), 203–211. https://doi.org/10.1002/pchj.261

Kahn, P. H. (1992). Children's obligatory and discretionary moral judgments. *Child Development*, *63*(2), 416–430. https://doi.org/10.2307/1131489

Kauffman, K. (1987). Theoretical introduction to the measurement of moral judgment. In A. Colby & L. Kohlberg, *The measurement of moral judgment* (pp. 1- 60). Cambridge University Press

Keller, H. (2012). Autonomy and relatedness revisited: Cultural manifestations of universal human needs: Autonomy and relatedness. *Child Development Perspectives*, *6*(1), 12–18. https://doi.org/10.1111/j.1750-8606.2011.00208.x

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. https://doi.org/10.1207/s15327795jra0803_4

Killen, M., Elenbaas, L., & Rizzo, M. T. (2018). Young children's ability to recognize and challenge unfair treatment of others in group contexts. *Human Development*, *61*(4–5), 281–296. https://doi.org/10.1159/000492804

Kogut, T. (2012). Knowing what I should, doing what I want: From selfishness to inequity aversion in young children's sharing behavior. *Journal of Economic Psychology*, *33*(1), 226–236. https://doi.org/10.1016/j.joep.2011.10.003

Kohlberg, L. (1981). The philosophy of moral development: Moral stages and the idea of justice. San Francisco: Harper & Row.

Komolova, M., & Wainryb, C. (2011). 'What I want and what you want': Children's thinking about competing personal preferences: Thinking about competing preferences. *Social Development*, *20*(2), 334–352. https://doi.org/10.1111/j.1467-9507.2010.00589.x

Köster, M., & Kärtner, J. (2019). Why do infants help? A simple action reveals a complex phenomenon. *Developmental Review*, *51*, 175-187. https://doi.org/10.1016/j.dr.2018.11.004

Krettenauer, T., Jia, F., & Mosleh, M. (2011). The role of emotion expectancies in adolescents' moral decision making. *Journal of Experimental Child Psychology*, *108*(2), 358–370. https://doi.org/10.1016/j.jecp.2010.08.014

Krettenauer, T., Malti, T., & Sokol, B. W. (2008). The development of moral emotion expectancies and the happy victimizer phenomenon: A critical review of theory and application. *International Journal of Developmental Science*, *2*(3), 221–235. https://doi.org/10.3233/DEV-2008-2303

Lagattuta, K. H. (2005). When you shouldn't do what you want to do: Young children's understanding of desires, rules, and emotions. *Child Development*, *76*(3), 713–733. https://doi.org/10.1111/j.1467-8624.2005.00873.x

Levin, I., & Bekerman-Greenberg, R. (1980). Moral judgment and moral behavior in sharing: A developmental analysis. *Genetic Psychology Monographs*, *101*(2), 215–230. https://psycnet.apa.org/record/1980-25360-001

Lewis, M. B. E., & Franz, S. (2019). Mothers' and adolescents' conversations about volunteering: Insights into the reasons and socialization processes. In D. J. Laible, G. Carlo, & L. M. Padilla-Walker (Eds.), *The Oxford handbook of parenting and moral development* (pp. 269–286). Oxford University Press. https://doi.org/10.1093/oxfordhb/9780190638696.013.21

Luking, K. R., & Barch, D. M. (2013). Candy and the brain: Neural response to candy gains and losses. *Cognitive, Affective, & Behavioral Neuroscience*, *13*(3), 437–451. https://doi.org/10.3758/s13415-013-0156-8

Malti, T., & Keller, M. (2010). The development of moral emotions in a cultural context. In W. F. Arsenio & E. A. Lemerise (Eds.), *Emotions, aggression, and morality in children: Bridging development and psychopathology* (pp. 177–198). American Psychological Association. https://doi.org/10.1037/12129-009

Malti, T., & Ongley, S. (2014). The development of moral emotions and moral reasoning. In M. Killen & J. Smetana (Eds.), *Handbook of moral development* (2nd ed., pp. 163–183). New York, NY: Psychology Press.

Malti, T., Gummerum, M., Keller, M., & Buchmann, M. (2009). Children's moral motivation, sympathy, and prosocial behavior. *Child Development*, *80*(2), 442-460. https://doi.org/10.1111/j.1467-8624.2009.01271.x

McAuliffe, K., Raihani, N. J., & Dunham, Y. (2017). Children are sensitive to norms of giving. *Cognition*, *167*, 151–159. https://doi.org/10.1016/j.cognition.2017.01.006

McCormack, T., Feeney, A., & Beck, S. R. (2020). Regret and decision-making: A developmental perspective. *Current Directions in Psychological Science*, *29*(4), 346–350. https://doi.org/10.1177/0963721420917688

McLean, K. C. (2008). The emergence of narrative identity: Narrative identity. *Social and Personality Psychology Compass*, *2*(4), 1685–1702. https://doi.org/10.1111/j.1751-9004.2008.00124.x

McLean, K. C., & Pasupathi, M. (2012). Processes of identity development: Where I am and how I got there. *Identity*, *12*(1), 8-28. https://doi.org/10.1080/15283488.2011.632363

McLean, K. C., & Thorne, A. (2003). Late adolescents' self-defining memories about relationships. *Developmental Psychology*, *39*(4), 635–645. https://doi.org/10.1037/0012-1649.39.4.635

McLean, K. C., Pasupathi, M., & Pals, J. L. (2007). Selves creating stories creating selves: A process model of self-development. *Personality and Social Psychology Review*, *11*(3), 262–278. https://doi.org/10.1177/1088868307301034

Michie, S. (2009). Pride and gratitude: How positive emotions influence the prosocial behaviors of organizational leaders. *Journal of Leadership & Organizational Studies*, *15*(4), 393–403. https://doi.org/10.1177/1548051809333338

Midlarsky, E., & Hannah, M. E. (1985). Competence, reticence, and helping by children and adolescents. *Developmental Psychology, 21*(3), 534–541. https://doi.org/10.1037/0012-1649.21.3.534

Miller, P. A., Eisenberg, N., Fabes, R. A., & Shell, R. (1996). Relations of moral reasoning and vicarious emotion to young children's prosocial behavior toward peers and adults. *Developmental Psychology*, *32*(2), 210. https://doi.org/10.1037/0012-1649.32.2.210

Moore, C. (2009). Fairness in children's resource allocation depends on the recipient. *Psychological Science*, *20*(8), 944–948. https://doi.org/10.1111/j.1467-9280.2009.02378.x

Nadelhoffer, T., & Feltz, A. (2008). The actor–observer bias and moral Intuitions: Adding fuel to Sinnott-Armstrong's fire. *Neuroethics*, *1*(2), 133–144. https://doi.org/10.1007/s12152-008-9015-7

Neary, K. R., & Friedman, O. (2014). Young children give priority to ownership when judging who should use an object. *Child Development*, *85*(1), 326–337. https://doi.org/10.1111/cdev.12120

Nucci, L. (1981). Conceptions of personal issues: A domain distinct from moral or societal concepts. *Child Development*, *52*(1), 114. https://doi.org/10.2307/1129220

Nucci, L. P. (2014). The personal and the moral. In M. Killen and J. Smetana (Eds.), *Handbook of moral development*, 2nd Edition (pp. 538-558). Mahwah, NJ: Erlbaum.

Nucci, L., Turiel, E., & Roded, A. D. (2017). Continuities and discontinuities in the development of moral judgments. *Human Development*, *60*(6), 279–341. https://doi.org/10.1159/000484067

O'Connor, E., McCormack, T., & Feeney, A. (2014). Do children who experience regret make better decisions? A developmental study of the behavioral consequences of regret. *Child Development*, *85*(5), 1995-2010. https://doi.org/10.1111/cdev.12253

Oakley, B. A. (2012). *Pathological altruism*. Oxford University Press.

Olson, K. R., & Spelke, E. S. (2008). Foundations of cooperation in young children. *Cognition*, *108*(1), 222-231. https://doi.org/10.1016/j.cognition.2007.12.003

Ornaghi, V., Brockmeier, J., & Grazzani, I. (2014). Enhancing social cognition by training children in emotion understanding: A primary school study. *Journal of Experimental Child Psychology*, *119*, 26–39. https://doi.org/10.1016/j.jecp.2013.10.005

Over, H. (2018). The influence of group membership on young children's prosocial behaviour. *Current Opinion in Psychology*, *20*, 17–20. https://doi.org/10.1016/j.copsyc.2017.08.005

Pagliaccio, D., Luking, K. R., Anokhin, A. P., Gotlib, I. H., Hayden, E. P., Olino, T. M., Peng, C.-Z., Hajcak, G., & Barch, D. M. (2016). Revising the BIS/BAS Scale to study development: Measurement invariance and normative effects of age and sex from childhood through adulthood. *Psychological Assessment*, *28*(4), 429–442. https://doi.org/10.1037/pas0000186

Pasupathi, M., & Wainryb, C. (2010). Developing moral agency through narrative. *Human Development*, *53*(2), 55-80. https://doi.org/10.1159/000288208

Pasupathi, M., Wainryb, C., Bourne, S. V., & Oldroyd, K. (2022). Mothers and friends as listeners for adolescent anger narration: Distinct developmental affordances. *Developmental Psychology*, *58*(4), 778-791. https://doi.org/10.1037/dev0001322

Paulus, M. (2016). Friendship trumps neediness: The impact of social relations and others' wealth on preschool children's sharing. *Journal of Experimental Child Psychology*, *146*, 106–120. https://doi.org/10.1016/j.jecp.2016.02.001

Paulus, M., Kühn-Popp, N., Licata, M., Sodian, B., & Meinhardt, J. (2013). Neural correlates of prosocial behavior in infancy: Different neurophysiological mechanisms support the emergence of helping and comforting. *NeuroImage*, *66*, 522–530. https://doi.org/10.1016/j.neuroimage.2012.10.041

Piaget, J. (1971). The theory of stages in cognitive development. In D. R. Green, M. P. Ford, & G. B. Flamer, *Measurement and Piaget.* McGraw-Hill.

Plötner, M., Over, H., Carpenter, M., & Tomasello, M. (2015). Young children show the bystander effect in helping situations. *Psychological Science*, *26*(4), 499–506. https://doi.org/10.1177/0956797615569579

Pratt, M. W., Norris, J. E., Alisat, S., & Bisson, E. (2013). Earth mothers (and fathers): Examining generativity and environmental concerns in adolescents and their parents. *Journal of moral education*, *42*(1), 12-27. https://doi.org/10.1080/03057240.2012.714751

Recchia, H. E., Wainryb, C., Bourne, S., & Pasupathi, M. (2015). Children's and adolescents' accounts of helping and hurting others: Lessons about the development of moral agency. *Child Development*, *86*(3), 864–876. https://doi.org/10.1111/cdev.12349

Recchia, H., Wainryb, C., & Pasupathi, M. (2013). "Two for Flinching": Children's and adolescents' narrative accounts of harming their friends and siblings. *Child Development*, *84*(4), 1459–1474. https://doi.org/10.1111/cdev.12059

Ross, H. S. (2013). Effects of ownership rights on conflicts between toddler peers: Toddlers' ownership rights. *Infancy*, *18*(2), 256–275. https://doi.org/10.1111/j.1532-7078.2012.00121.x

Ross, J. (2017). You and me: Investigating the role of self-evaluative emotion in preschool prosociality. *Journal of Experimental Child Psychology*, *155*, 67-83. https://doi.org/10.1016/j.jecp.2016.11.001

Sheikh, S., & Janoff-Bulman, R. (2010). The "shoulds" and "should nots" of moral emotions: A self-regulatory perspective on shame and guilt. *Personality and Social Psychology Bulletin*, *36*(2), 213–224. https://doi.org/10.1177/0146167209356788

Sierksma, J. (2018). Costs of helping only influence children's intention to help ethnic out-group peers. *Journal of Experimental Child Psychology*, *173*, 85–99. https://doi.org/10.1016/j.jecp.2018.03.016

Sierksma, J., Thijs, J., Verkuyten, M., & Komter, A. (2014). Children's reasoning about the refusal to help: The role of need, costs, and social perspective taking. *Child Development*, *85*(3), 1134–1149. https://doi.org/10.1111/cdev.12195

Smetana, J. G., Jambon, M., & Ball, C. (2014). The social domain approach to children's moral and social judgments. In M. Killen & J. G. Smetana (Eds.), *Handbook of moral development* (2nd ed., pp. 23–45). New York, NY: Psychology Press.

Smith, C. E., Blake, P. R., & Harris, P. L. (2013). I should but I won't: Why young children endorse norms of fair sharing but do not follow them. *PLoS ONE*, *8*(3), e59510. https://doi.org/10.1371/journal.pone.0059510

Sohail, S., Dunfield, K. A., & Chernyak, N. (2021). Dissociable mechanisms for diverse prosocial behaviors: Counting skills predict sharing behavior, but not instrumental

helping. *Journal of Cognition and Development*, 1–15. https://doi.org/10.1080/15248372.2021.1998064

Soucie, K. M., Lawford, H., & Pratt, M. W. (2012). Personal stories of empathy in adolescence and emerging adulthood. *Merrill-Palmer Quarterly, 58(2)*, 141-158. https://www.jstor.org/stable/23098460

Svetlova, M., Nichols, S. R., & Brownell, C. A. (2010). From instrumental to empathic to altruistic helping: Toddlers' prosocial behavior. *Child Development*, *81*(6), 1814–1827. https://doi.org/10.1111/j.1467-8624.2010.01512.x

Tangney, J. P., Stuewig, J., & Mashek, D. J. (2007). Moral emotions and moral behavior. *Annual Review Psychology*, *58*, 345-372. https://doi.org/10.1146/annurev.psych.56.091103.070145

Tappan, M., & Brown, L. M. (1989). Stories told and lessons learned: Toward a narrative approach to moral development and moral education. *Harvard Educational Review*, *59*(2), 182–206. https://doi.org/10.17763/haer.59.2.d364up55vx875411

Tavassoli, N., Howe, N., & DeHart, G. (2020). Investigating the development of prosociality through the lens of refusals: Children's prosocial refusals with siblings and friends. *Merrill-Palmer Quarterly*, *66*(4), 421–446. https://doi.org/10.13110/merrpalmquar1982.66.4.0421

Thorne, A., McLean, K. C., & Lawrence, A. M. (2004). When remembering is not enough: Reflecting on self-defining memories in late adolescence. *Journal of Personality*, *72*(3), 513–542. https://doi.org/10.1111/j.0022-3506.2004.00271.x

Tomasello, M. (2021). *Becoming human: A theory of ontogeny*. Belknap Press of Harvard University press.

Turiel, E. (1983). The development of social knowledge: Morality and convention. New York, NY: Cambridge University Press.

Turiel, E. (2008). Thought about actions in social domains: Morality, social conventions, and social interactions. *Cognitive Development*, *23*(1), 136–154. https://doi.org/10.1016/j.cogdev.2007.04.001

Turiel, E. (2018). Reasoning at the root of morality. In K. Gray & J. Graham (Eds.), *Atlas of moral psychology* (pp. 9–19). The Guilford Press.

Uprichard, B., & McCormack, T. (2019). Becoming kinder: Prosocial choice and the development of interpersonal regret. *Child Development*, *90*(4), e486–e504. https://doi.org/10.1111/cdev.13029

Van de Vondervoort, J. W., & Friedman, O. (2015). Parallels in preschoolers' and adults' judgments about ownership rights and bodily rights. *Cognitive Science*, *39*(1), 184-198. https://doi.org/10.1111/cogs.12154

Wainryb, C., & Recchia, H. E. (2012). Emotion and the moral lives of adolescents: Vagaries and complexities in the emotional experience of doing harm. *New Directions for Youth Development*, *2012*(136), 13–26. https://doi.org/10.1002/yd.20035

Wainryb, C., Brehl, B. A., Matwin, S., Sokol, B. W., & Hammond, S. (2005). Being hurt and hurting others: Children's narrative accounts and moral judgments of their own interpersonal conflicts. *Monographs of the Society for Research in Child Development*, *70*(3), i–122. http://www.jstor.org/stable/3701399

Warneken, F. (2015). Precocious prosociality: Why do young children help?. *Child Development Perspectives*, *9*(1), 1-6. https://doi.org/10.1111/cdep.12101

Warneken, F., & Tomasello, M. (2006). Altruistic helping in human infants and young chimpanzees. *Science*, *311*(5765), 1301-1303. https://doi.org/10.1126/science.1121448

Waugh, W. E., & Brownell, C. A. (2017). "Help yourself!" What can toddlers' helping failures tell us about the development of prosocial behavior? *Infancy*, *22*(5), 665–680. https://doi.org/10.1111/infa.12189

Waugh, W., Brownell, C., & Pollock, B. (2015). Early socialization of prosocial behavior: Patterns in parents' encouragement of toddlers' helping in an everyday household task. *Infant Behavior and Development*, *39*, 1–10. https://doi.org/10.1016/j.infbeh.2014.12.010

Weller, D., & Lagattuta, K. H. (2014). Children's judgments about prosocial decisions and emotions: Gender of the helper and recipient matters. *Child Development*, 85(5), 2011–2028. https://doi.org/10.1111/cdev.12238

Wiwad, D., & Aknin, L. B. (2017). Motives matter: The emotional consequences of recalled self- and other- focused prosocial acts. *Motivation and Emotion*, *41*(6), 730–740. https://doi.org/10.1007/s11031-017-9638-2

Wray-Lake, L., Flanagan, C. A., & Maggs, J. L. (2012). Socialization in context: Exploring longitudinal correlates of mothers' value messages of compassion and caution. *Developmental Psychology*, *48*(1), 250–256. https://doi.org/10.1037/a0026083

Youniss, J., & Yates, M. (1997). *Community service and social responsibility in youth*. University of Chicago Press.

Appendix A

Overview of Data Collection Procedure

Children and Adolescents (online)
• Description of study and Assent (Appendices H & I) • Narrative interview [2] (Appendix C)
Break
• Hypothetical prosocial judgment vignettes [1] (Appendix B)
Break
• Director task –perspective taking ability • Index of Empathy for Children and Adolescents (IECD) • Revised Unmitigated Communion Scale – Adapted • Adaptation of Unmitigated Agency subscale of EPAQ • Prosocial Self-Image – Adapted • Children Social Desirability – Short scale (CSD-S) • Helping and sharing task • Debriefing
Young Adults (in-person)
The following questionnaires were completed online by young adults. • Consent form (Appendix G) • Demographic information [2] • Prosocial Motivation Questionnaire • Prosocial Refusal Hypothetical Questionnaire

Participants who agreed to be interviewed, participated in the second part of the study in-person. • Narrative interview [2] (Appendix C)
Parents (online)

The following questionnaires were completed by parents before the online session with children and adolescents.
• Consent form (Appendix F)
• Demographic questionnaire [1&2]
• Questionnaires about the child:
  o Prosocial Tendency Measure (PTM – parent report)
  o Children's Prosocial Self-Image (parent report)
• Questionnaires about the parent:
  o Parenting Styles and Dimensions Questionnaire (PSDQ)
  o Prosocial Tendency Measure (PTM – Adult version)
  o Early Adolescent Temperament Questionnaire – Revised (EATQ-R parent report)

An online parent session was typically scheduled within two weeks after the child's session. • Narrative interview • Hypothetical prosocial judgment vignettes

Note. All tasks or measures marked with a [1] denote those included in Study 1, whereas tasks or measures marked with a [2] denote those included in Study 2 of this dissertation. Other tasks were included as part of the broader study but do not form the focus of the two manuscripts included in this dissertation.

Appendix B

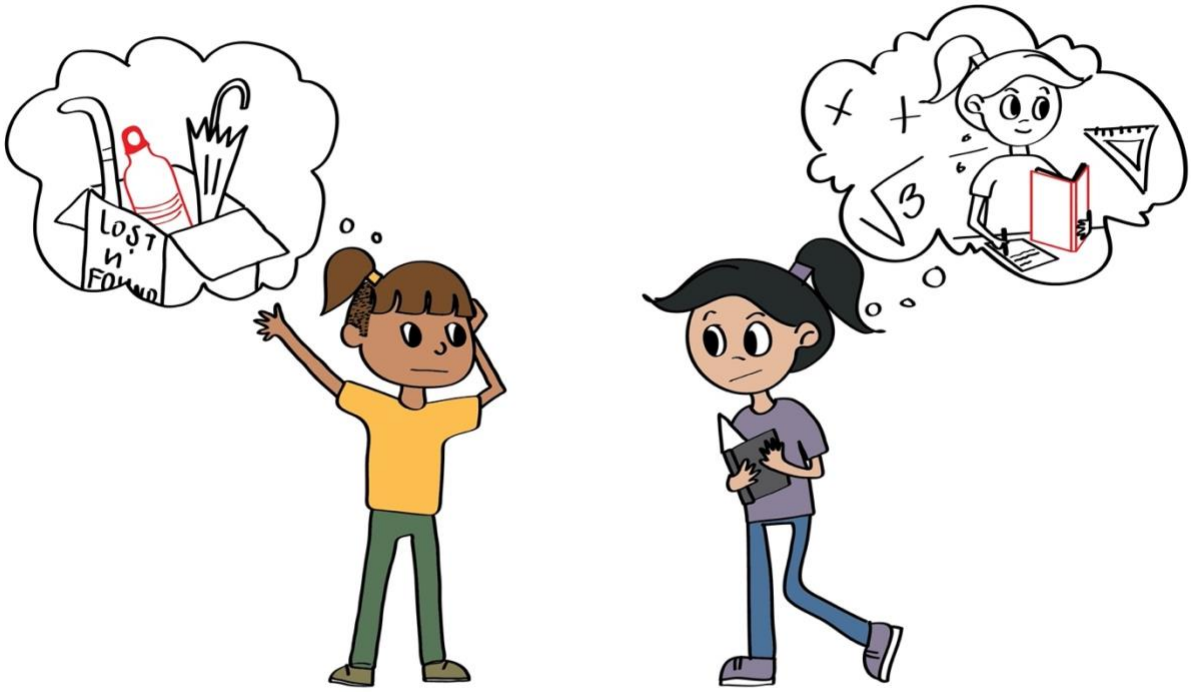
Hypothetical Prosocial Judgment Vignettes – Girl Version [1]

Helping: High Need - High Cost

Anna is on the way home from her painting class. She is planning to show her drawings in an art show next day. It is very windy, and the wind blows all her drawings out of her hands and if the drawings get damaged, she cannot paint them again before the art show. Emily is on her way to play in a baseball championship game against another team. Emily is afraid if she stops to help Anna pick up her drawings, she will be late for the game and won't be allowed to play.

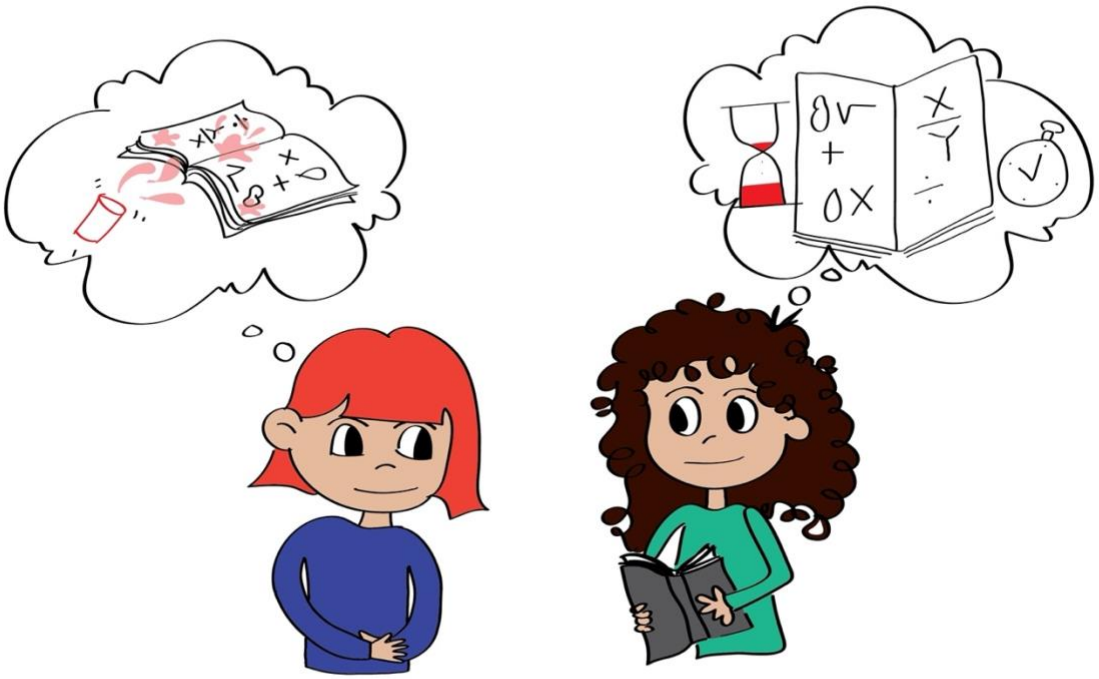
[1] Illustration credit goes to Alina Gutierrez. Please contact the author for the version of vignettes and illustrations presented to boys.

Helping: Low Need - High Cost



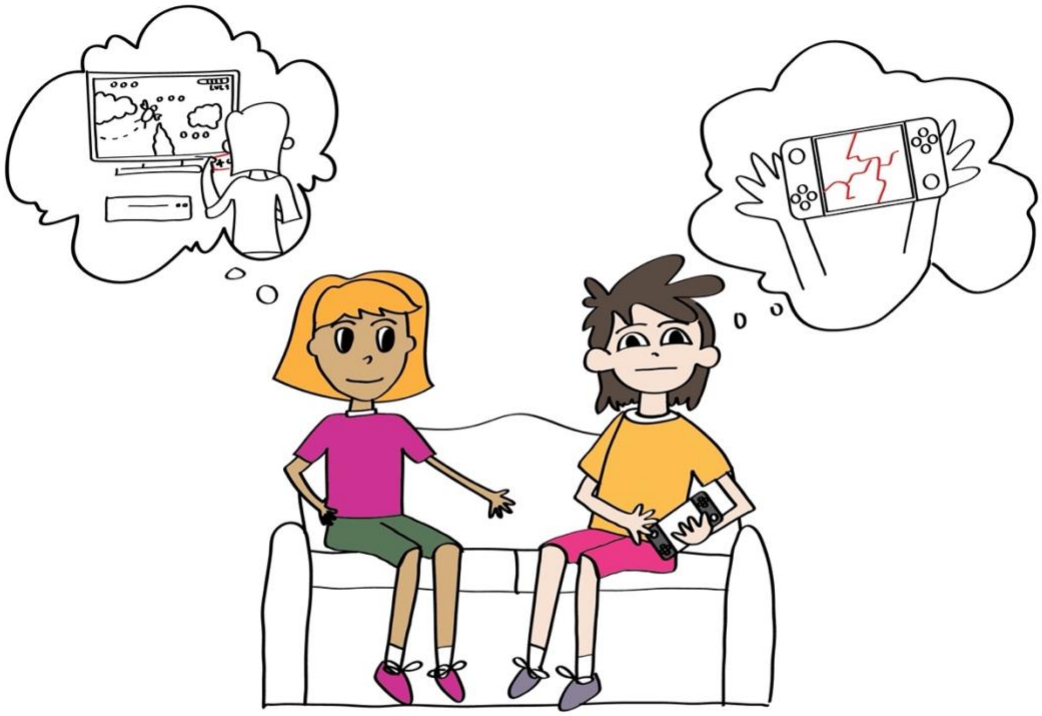
Emma left her water bottle at school and now she wants to check the lost and found box. She asks Olivia to help her to find the box. Olivia has an exam in half an hour, and she is worried if she helps Emma, she won't have enough time to get ready for the test.

Sharing: High Need - High Cost



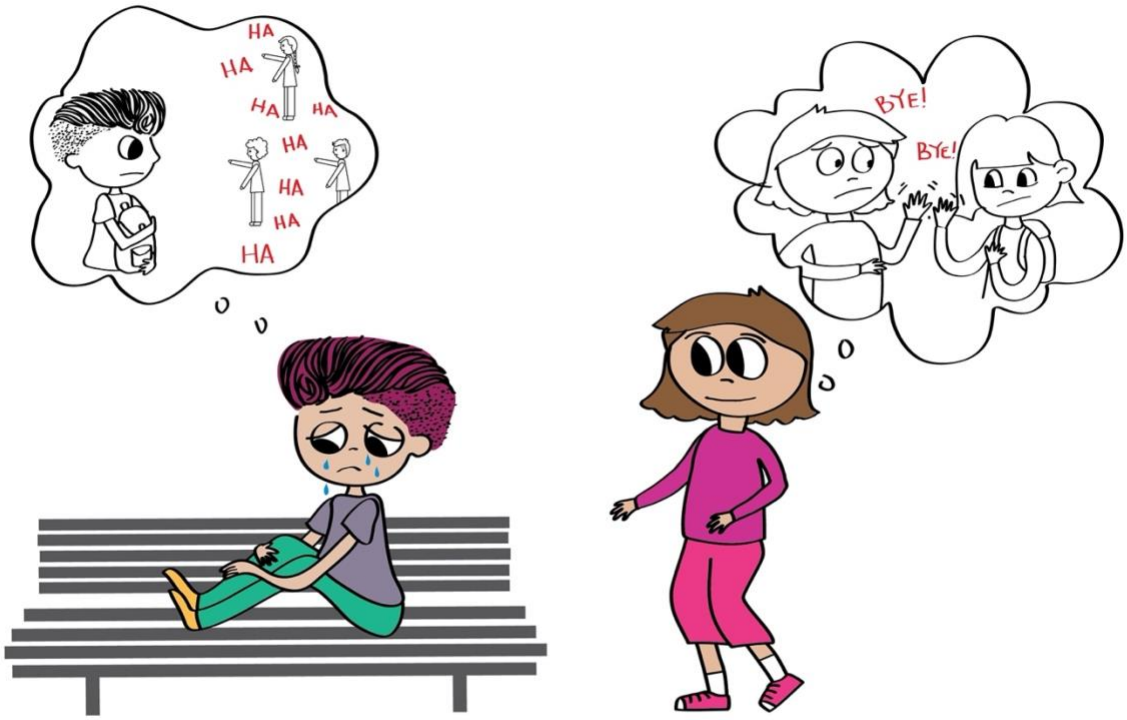
One day before an exam, Sara's sister accidentally spilled her drink all over Sara's math book. The math book is damaged, and Sara cannot use it to study. Sara asks Nicole if she can borrow her math book. But Nicole is worried if she lends her book to Sara, she won't have enough time to study for the exam herself.

Sharing: Low Need - High Cost



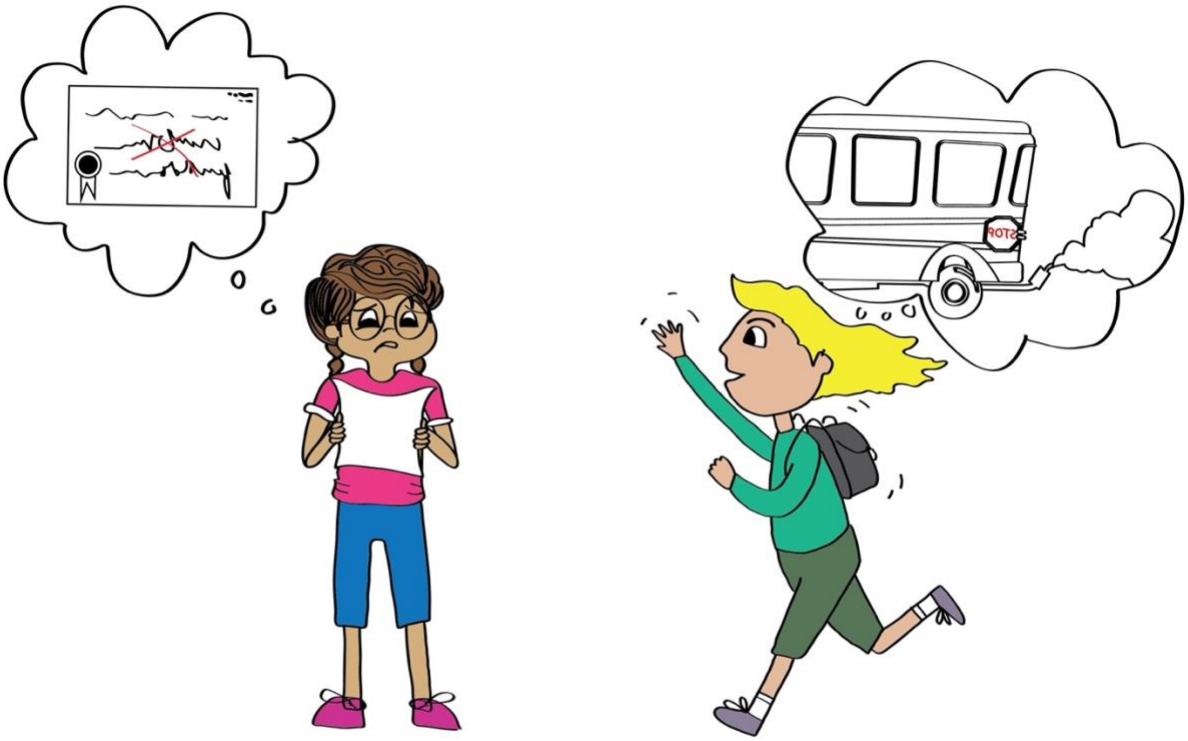
Chloe wants to play videos games, but her Nintendo switch is broken recently. She asks Julie if she can borrow hers, but Julie is worried that Chloe might damage her switch.

Comforting: High Need - High Cost



Mary is teased one day by a group of kids after school and is feeling really sad. She is sitting all alone on a bench and Laura sees that she is crying. Laura is trying to leave school quickly because she is going to say goodbye to her best friend who is leaving on a trip for the whole summer. Laura is afraid if she stops to talk with Mary, she will not be able to see her friend before she leaves.

Comforting: Low Need - High Cost



Lucie won an award at school but when she got the award certificate, she sees that her last name is spelled incorrectly. She asked her teacher to have a new certificate printed out, but her teacher said that it was not possible. Lucie is upset. After school, Kim sees that Lucie is upset. She is worried that if she stops to talk to Lucie, she will miss her school bus and she will get in trouble with her parents because she will have no way to get home.

Appendix C

Narrative Interview Questions

Not helping/ regret

I want you to think of a time when **you could have helped someone but you didn't. And now that you think about it you wish you had helped**. Think of a time that you remember well, and that was important to you. Take your time, you don't need to rush, and just let me know when you think of one. Tell me everything you remember about that time.

Ok, great, thanks for sharing that story. Excellent, That's a great story. We'll come back to this in a little bit, but I want to ask you about a few other times first.

*The first situation that you told me about was when _____, and now that you think about it, you wish you had helped. I just have a few more questions for you about that time.

1. What was the main reason that you didn't help?
2. Why do you wish you helped?
3. Do you think that not helping was the right thing to do? Why/why not?
4. Did this event change how you make decisions about helping other people? Tell me more about that.

Not helping/ glad

I want you to think of a time when **you could have helped someone but you didn't. And now that you think about it you are glad you didn't help.** Think of a time that you remember well, and that was important to you. Take your time, you don't need to rush, and just let me know when you think of one. Tell me everything you remember about that time.

*Okay great. And the third situation that you told me about was when _____, and now that you think about it, you are glad that you didn't help. I just have a few more questions for you about that time.

1. What was the main reason that you didn't help?
2. Why are you glad that you didn't help?
3. Do you think that not helping was the right thing to do? Why/why not?
4. Did this event change how you make decisions about helping other people? Tell me more about that.

Helping/ regret

I want you to think of a time when **you helped someone and now that you think about it you wish you hadn't done it.** Think of a time that you remember well, and that was important to you. Take your time, you don't need to rush, and just let me know when you think of one. Tell me everything you remember about that time.

Ok, great, thanks for sharing that story. Excellent, That's a great story.
We'll come back to this in a little bit, but I want to ask you about a few other times first.

*Ok, great. And the second situation that you told me about was when_____, and now that you think about it, you wish you didn't help. I just have a few more questions for you about that time.

1. What was the main reason why you helped?
2. Why do you wish you hadn't done it?
3. Do you think that helping was the right thing to do? Why/why not?
4. Did this event change how you make decisions about helping other people? Tell me more about that.

Helping / glad

I want you to think of a time when **you helped someone and now that you think about it, you are glad you did it.** Think of a time that you remember well, and that was important to you. Take your time, you don't need to rush, and just let me know when you think of one. Tell me everything you remember about that time.

*Ok, great. And the fourth situation that you told me about was when _____, and now that you think about it, you are glad you helped. I just have a few more questions for you about that time.

1. What was the main reason why you helped?
2. Why are you glad that you helped?
3. Do you think that helping was the right thing to do? Why/why not?
4. Did this event change how you make decisions about helping other people? Tell me more about that.

*Note. Follow-up questions were asked after all prosocial experiences had been elicited and narrated.

Appendix D

Coding Scheme of Past Prosocial Experiences – Study 2

Prosocial Engagement and Refusal Reasons (Adapted from Eisenberg, 1986):

- The following categories are reasons for helping and refusing to help that were coded for responses to the first follow-up question.
- Multiple reasons could be coded for one response.

Prosocial Engagement and Refusal Reasons	**Cohen's *Kappa*s**
Hedonistic reasons refer to self-focused considerations which include direct self-gain or avoiding personal costs or consequences. ▪ Helping: *"I wanted to get more allowance."* ▪ Not Helping: *"I didn't want to get in trouble."* *Note. *"I didn't want to help"* is coded as a hedonistic reason.	.90
Concern for others' needs (or lack thereof) refers to any statements about other's needs or lack thereof. This includes concerns for both immediate and deferred needs. ▪ Helping: *"She was sad and needed someone to support her."* ▪ Not helping: *"He should learn how to do things on his own."*	.94
Social obligation (or lack thereof) refers to any references to role-related responsibilities, social or peer pressure, or lack of responsibility in terms of diffusion of responsibility. Desire to be helped (or lack thereof) is coded as an obligation. ▪ Helping: *"She is my sister."; "She asked me to help her."* ▪ Not helping: *"Someone else was helping her."*	.88
The helper's emotions refer to the helper's references to their own emotional state as a reason why they helped or did not others. This also includes anticipated emotions. ▪ Helping: *"I felt sad for him."; "I knew I would feel guilty if I don't help."* ▪ Not helping: *"I was scared."*	.96

Capacity (or lack thereof) refers to any references to the helper's circumstantial or characterological capacity, competency, or knowledge (or lack thereof) in assisting others. ▪ Helping: *"I helped because I am good at math."* ▪ Not helping: *"I didn't know a way to help it."*	.83
Deservingness of recipient refers to any statements about past behaviors of the recipient. This includes references to past reciprocity, but not future reciprocity. ▪ Helping: *"She is a nice girl."* ▪ Not helping: *"She used to bully me."; "I didn't help her because she didn't help me."* **Note.* References to the future reciprocity are coded as hedonistic reasons.	1.0
Unelaborated evaluation refers to general moral or value-based evaluations without a clear explanation of the reasoning. ▪ Helping: *"It is nice to help others"* ▪ Not helping: *"I knew it was wrong."*	1.0

Emotional Evaluation:

- The following categories are reasons why participants were glad or regretful about their prosocial decisions, coded for responses to the second follow-up question.
- Multiple emotional evaluation reasons could be coded for one response.

Emotional Evaluation	**Cohen's Kappas**
Self-oriented concerns refer to any evaluative statements directed towards the self/helper.	
▪ **Cost to self (or lack thereof)** refers to the potential (in case of not helping) or actual cost of helping. Lack of cost was cited infrequently. o E.g., "*I didn't want to get involved in that fight because if they hit my knee, it's going to hurt.*"; *"I put so much effort into that."*	.80
▪ **General evaluation of own behavior** refers to the helper's positive or negative evaluation of their own (in)action. o E.g., "*I could have helped by bringing her to the office.*" o *Note.* Statements such as "I am glad …" or "I wish I helped (or hadn't helped)…" are not coded as general evaluation by	.95

themselves because these include the criteria of narratives given by the interviewer.	
▪ **Outcomes for the self** refer to the positive or negative consequences of helping or refusing to help for the self. Each outcome was subcoded for presence or absence of a positive or negative outcome, and as instrumental or psychological (see below).	.88
o **Presence of outcome** refers to a prosocial decision that directly led to a positive or negative outcome for the self.	1.0
▪ **Presence of positive outcome**: *"I got a good grade."*	1.0
▪ **Presence of negative outcome:** *"I got detention."*	.95
o **Absence of outcome** refers to a prosocial decision that prevented a positive or negative outcome for the self.	1.0
▪ **Absence of positive outcome:** *"I didn't get a good mark."*	1.0
▪ **Absence of negative outcome:** *"I didn't get into trouble."*	.95
o **Instrumental outcome**: *"I got behind in my studies."*	.82
o **Psychological outcome**: *"My self-esteem suffered."*	.81
Other-oriented concerns refer to any evaluative statements directed towards the other/recipient.	
• **Concern for others (or lack thereof)** refers to statements that include references to others' welfare, needs, or desires (or lack thereof).	.88
o E.g., "*She needed to talk to someone."*; *"she was pretending to be sad."*	
• **Deservingness of others** refers to any positive or negative evaluative statements about the recipient's deservingness.	.95
o E.g., *"he didn't deserve all the headache."; "She is a nice person."*	
• **Outcome for others** refer to the positive or negative consequences of helping or refusing to help for the other. Each outcome was subcoded for	.86

presence or absence of a positive or negative outcome, and as instrumental or psychological (see below). o **Presence of outcome** refers to a prosocial decision that directly led to a positive or negative outcome for the other. ▪ **Presence of positive outcome:** *"Now she's all better."* ▪ **Presence of negative outcome:** *"He got in trouble."* o **Absence of outcome** refers to a prosocial decision that prevented a positive or negative outcome for the other. ▪ **Absence of positive outcome:** *"If I helped him, he'd finish faster."* ▪ **Absence of negative outcome:** *"She didn't get hurt."* o **Instrumental outcome**: *"She failed the test."* o **Psychological outcome**: *"He felt better."*	1.0 .95 .95 1.0 .95 .95 1.0 .95
Relationship-oriented concerns refer to any evaluative statements directed towards the relationship between the helper and the recipient. ▪ **Outcomes for the relationship** includes both positive and negative outcomes for the relationship between the helper and the recipient: *"We are friends now."* • **Role-related obligation**: *"I wished that I could've done that to be like a big sister."*	.90 .93

Moral Judgment Reasoning (Adapted from Turiel, 1983)**:**

- The following categories are reasons why participants judged non-prototypical situations (i.e., regretting helping and being glad for refusing to help) as right or wrong decisions, coded for responses to the third follow-up question.
- Multiple moral judgment reasons could be coded for one response.

Moral Judgment Reasoning	**Cohen's Kappas**

Moral reasons refer to concern for others' welfare, justice or fairness, and rights (or lack thereof). Outcomes of helping or refusing to help for others are generally coded as moral reasons. References to others' past behaviors and deservingness are also coded as moral reasons. ▪ **Helping – Right**: *"Because she was alone and she needed some help adjusting to some new situation"* ▪ **Helping – Wrong**: "*He kind of deserved to get stuck, cause he's always just mean with everyone and he usually gets away with it."* ▪ **Not helping – Right**: "*Because if she did copy then she would never improve her math.*" ▪ **Not helping – Wrong**: *"Because if I helped him, then, then maybe he would feel better faster?"*	.82
Prudential reasons (or lack thereof) refer to concerns for one's own safety and wellbeing. Any references to the outcomes for the self are coded as prudential concerns. Personal choices and preferences are NOT considered as prudential concerns. ▪ **Helping – Right**: *"Because I help her and if no, maybe I wouldn't have a friend."* ▪ **Helping – Wrong**: *"Because then I'll get in trouble and get expelled."* ▪ **Not helping – Right**: *"because he was going to hurt me, and I didn't want to be hurt again."* ▪ **Not helping – Wrong***: *"It would've been better if I helped, cause it makes me feel good if I helped someone."*	.90
Social reasons refer to social expectations, role-related obligations, and responsibilities. ▪ **Helping – Right**: *"Because he is my brother."* ▪ **Helping – Wrong***: *"Because they weren't my friends."* ▪ **Not helping – Right**: *"She is not even my friend, so I didn't want to help her."*	.78

▪ **Not helping – Wrong***: *"Because it is mean to not help your friend, it is like if you only use him, being a fake friend."*	

Change in Future Prosocial Decisions

- Responses to the fourth follow-up question were coded for the change in future prosocial intentions.
- Multiple categories could be coded for one response.

Change in Future Prosocial Decisions	**Cohen's Kappas**
Change: Yes /No, this code refers to whether or not past prosocial experiences changed future prosocial decisions.	.97
Promotive/ preventive change. If participants responded: [yes] past prosocial experiences changed their future prosocial decisions, then their responses are coded as whether the change was promotive or preventive. ▪ **Promotive change** refers to any statements indicating the intent to become more prosocial in the future. o E.g., *"it makes me want to help more people because …"* ▪ **Preventive change** refers to any statements indicating the intent to become less prosocial in the future. o E.g., *"I reduce it [helping] a little bit…umm to people that I don't know."* ▪ *Note.* Each references to promotive and preventive change was further coded for participants' explanation of how past prosocial experiences changed future prosocial decisions (i.e., types of change – see below).	.85
Types of change. The following categories are coded in response to *how* past prosocial experiences changed future prosocial decisions.	
▪ **Being aware of others' needs** refers to any statements about paying attention to others' needs and feelings, as well as surroundings. o E.g., *"Maybe next time, I'll pay more attention to people, like how they feel.*"	.85
▪ **Understanding own capacity** refers to any statements about understanding their own capabilities and/or limits in helping, as well as recognizing different ways of helping.	.79

○ E.g., *"Sometimes when I'm about to help someone, I just kind of think back to it, 'okay, do I know how to explain it well?' or I'll just be like 'hey dad, I think she needs help with this'."*	
▪ **Becoming proactive or spontaneous** refers to any statements about helping without being asked to do so, or on the other hand, thinking about helping or not helping more carefully. ○ E.g., *"I won't hesitate, I'll help."; "I'll think about it twice before jumping to help."*	.84
▪ **Learning a lesson about the self** refers to recognizing and learning a lesson about themselves. Self understanding does not include references to understanding their one's own capacity to help (coded separately – see above.) ○ E.g., *"It helped me realize that I don't have to say yes to everything. I could say no."*	.73
▪ **Changes in motivation to help** refers to any statements about motivation to help, characterized as one of the categories below. ○ **Becoming more/less selective** refers to any statements about *who* to help or not, or prioritizing (or not prioritizing) an individual or a relationship. ▪ E.g., *"Because I feel like sometimes when a person asks you to help them, you might not say yes because you don't know them, but if your friend was asking, you would say yes. I feel like it kind of made me want to like not play favourite with helping people."* ○ **Becoming more/less strategic** refers to any statements regarding cost-benefit analysis or prioritizing self over others.	.80

▪ E.g., *"I would still like help out my friends, but maybe not to the extent that like I would help them more than I help myself."* ○ **Referring to integrity concerns** refers to any statements about maintaining moral self, experiencing moral emotions, and social responsibility. ▪ E.g., *"Because of how I felt after I did it, after I realized what I'd done, that now I like think a bit more, I'm like 'oh wait, remember before? Like that happened and I didn't feel good', so I might then give them the money."*	

Note. All coding categories described above were coded as presence = 1, or absence = 0
* This coding category was very infrequent.

Appendix E

Samples of Prosocial Events Narrated by Participants

* Note. All names are pseudonyms.

A Sample of Children's Narratives

Helping - Regret

Participant 242 – Boy
"Well that happens a lot with my brother. I always does stuff for him and he never does stuff back. So one day, I was making my food and I was also making his food and then yeah then after that later on I wanted him to help me with something but he didn't."

Participant 103 – Girl
"Ok well, so like this person was getting bullied and so I went to go tell the bully "stop bullying her" and then the bully was like "What am I, what are you going to do about it?" and I told the teacher and they stopped. But then the girl who got bullied the next recess, she started being super mean to me and so I regretted defending her. So like, she was getting mean to me. I don't know why she did that. I defended her."

Not Helping - Glad

Participant 202 – Boy
"So, they both were not in class and both of their name was "friend 1" and "friend 2" so what happen is they were in a big argument. I think friend 1 said: "you suck, you are a whining baby" and then they kept on fighting and friend 1 was the one doing something bad to me, so I didn't want to do something good for someone who did something bad to me. That's all I remember, and I was with my friend and I just saw it."

Participant 126 – Girl

“I think it was when my sister she was learning how to spell her name, then like she knew all the letters so after she asked me for my help and then I said no because she needed to learn on her own. like, no one can like just tell you like um she already knew like the letters so and she kind of knew the place so she knew how to spell her name but she didn't know how to do it physically so I said no then she did really well at spelling her name.”

Not Helping - Regret

Participant 230 – Boy
“Well one time a friend needed me to help them with a math question, but I didn’t because I wasn’t finished my own and I said “at the end”, but then it was time for recess and he got a point lost because he didn’t get the answer right and I felt bad I didn’t help.”

Participant 127 – Girl
“Ok so there was this like at my school, when I was doing school, they served chocolate milk at lunch time and there was this boy… the chocolate milk was a dollar and this boy had 25 cents and he didn’t get a chocolate milk and I bought two and I didn’t gave it to him, I gave it to somebody else and I regret not given it to him because he looked very sad.”

Helping - Glad

Participant 206 – Boy
“I’m glad I helped my sister with this video game she was afraid of, Minecraft dungeons, because there were all these monsters popping out and she got scared and then I did the scariest one and then she hugged me.”

Participant 104 – Girl

“When there was a pre-k last year that um that they were playing on that fake like on this fake bus we have in the thing… she was outside she was like hanging on from the outside and people were shaking the bus and then she fell down on her back. I came to help her and I brought her inside and I got her an ice pack and after she felt much better. […] she hurt her back very hard on

this like black thing that's like surrounding these rocks when she fell off the bus and she hurt her back really hard. I went to get a teacher right away and I went inside with her to get her an ice pack and some stuff."

A Sample of Adolescents' Narratives

Helping - Regret

Participant 246 – Boy

"okay so at my old school, I use to get bullied a lot. Like during grade 4 to grade 6, I remember it was really long. And I used to help sometimes bullies for like their homework cause I got like vocally abused you know, like they would say mean stuff. Like one time I got hurt on the neck cause of them, so, and then sometimes I was like, I thought they weren't going to do it anymore. So like we paired up for our work, I helped them, I did most of the work, they did like nothing in a way and I regret doing that because I helped them do the work and like I was the one who did everything and you know, they got everything else"

Participant 173 – Girl

"Ok I don't know if this completely counts but sometimes my friends like let's say before we have a test at school, they ask for help because they don't know any of the answers or something or sometimes I give them answers which I regret doing that because I know that they should have done it. I'm worried that they would like get upset that I didn't help them or someone would get mad. I don't regret that I helped them but I wish I didn't help them as much as I did because I feel that I should have kind of helped them so they can understand it more, so they can remember, instead of me just telling them."

Not Helping - Glad

Participant 258 – Boy

"I think there is this one time, I think it was in grade 6 or something and then there were two boys also in grade 6, in my age, and they were fighting, hum they were pushing each other by the door at the entrance of the recess door and then they were like shoving each other. I don't know what they were fighting about but it didn't, it seems like they were fooling around and having fun but it also kind seemed of violent, they weren't having fun. There were a lot of people around them that were watching and tying to... Everybody around them weren't doing much they were just watching, laughing, and kind of telling: "Tom do this, Ben do that" I don't remember but I just saw them fighting and they decided to go on the ground fighting. I still didn't know why they were fighting, I didn't know why they were so mad at each other but I saw that they were fighting and I didn't want to go help them or tell them to stop because I didn't really want to get in the situation and then after like the two boys got in trouble and I don't know, I think that they might have to go to the office, then I think that if I would have step in then I would have to go to the office and then be like sort of witness and tell what was going on completely and I think that the two got in trouble so if I would have got in too, I would probably be in trouble too, so I think it was better that I didn't go and help them."

Participant 178 – Girl

"okay uhm (pause) somebody was crossing the street and there was a car, no, well somebody was crossing the street but they had a hard time and fell. But somebody went to go help them and they got yelled at, so I'm sort of happy I didn't go help them because I didn't want to get yelled at."

Not Helping – Regret

Participant 281 – Boy

"okay so once well at my karate club, there was this lower belt, well they, a group of lower belt that does a class before me, and then I could've went to go help in the other class and it was just before a competition and in the end, none of the people in that group did well in that competition and I was kind of thinking if I went and helped, they could've maybe done a bit better."

Participant 183 – Girl

“okay so I used to do rock climbing outside of school right? And it was, so, and it was like a semi-competitive thing that you had to do like teams to one person below the other person as they went up during competitions. And I asked to be on a team on a specific person, like a friend of mine, but you’re allowed to be multiple teams with multiple people and I didn’t want to help another girl because I didn’t want like to overtire myself before my race and now I kind of just like left her hanging. And she had to like not do it because she didn’t have a partner and I felt bad about it after”

Helping – Glad

Participant 285 – Boy

“uhm okay, uhm okay this one was, ahh I’m not sure exactly how old I was, it was when like, it was when there was this really old Xbox, well not that old, but like it was when we had this Xbox 360, which is just like this, at the time, it was kind of like a really old Nintendo, so as far as I know, I was probably 7 or 8. Uh in this one, so me and my dad, my mom and dad, or both, no, it was my dad, okay. So me and my dad, so we weren’t having a great day as in he, uhm and so we kind had been arguing all day and stuff, and my mom at the time uh she was at work and my dad was home, which you don’t really find a lot in households. Uhm, so what happened is, so my dad and me had gotten in a huge fight that morning, some time in the morning before noon, and I remember that he took away my like, I mean like my gaming stuff, and like my Xbox stuff, and like for me, at the time, that was like, you know, I was like “No!”. And so, I was mad and so I stormed off and then about an hour or two later, because I was just in my room but then I decided to go outside, like I was just doing other things, I was trying to escape him and his evilness at the time. So but then he needed my help outside fixing, oh so we had this really really crappy trampoline at the time, and it had a bunch of springs that were super loose and stuff, and no one really wanted to go on it and my parents were like “okay, we’re not going to have this if nobody is going to go on it”. And so my mom like, a day earlier she was like “okay can you come fix it?”, but he didn’t do it that day, and so then here we were next day. And so now it was like the afternoon, maybe like 2 or 3 o’clock and so I was, I was just in my room, just laying

down for a second I guess, just taking a break and then I was reading and I was doing other things. And then my dad came and like he just like "hey Brian, can you just come and help me, I guess, like take off these springs and then help me put these new ones that I got earlier". And so then after, actually, before he said that, he like apologized and stuff and he was like super sincere and so I'm like "yeah, I would love to help you, but sure, I guess I'll help you". And so it wasn't even long, it was only like 30 minutes, and then when we were done, when we were walking inside, feeling good about just being helpful I guess, you know? Well then in that case "you know what Brian, thank you for helping me, you didn't really argue when it was happening, and you did a good job and stuff, so I think that I'm going to give you the Xbox back". And me at the time I was like "oh my goodness, yes!!!" and so I went over and gave him a huge hug, and I thanked him and stuff, and then he gave it back, and then I got to play for a bit and then he needed my help a bit later, but yeah, I was just, I mean at the time, I guess I shouldn't do things, at the time, I shouldn't have necessarily done it just for that, but I didn't know that I was going to get it back, I don't know, I just did it to kind of be helpful, so yeah, I was really happy I did it I guess and I guess because of the reward so yeah."

Participant 164 – Girl

"yeah okay so I remember that in grade 6, there was something called math Olympics. So people would sign up and then there was like this math competition at this school and a lot of elementary schools participated. So I remember one day I left like the classroom to go put my lunch box away or something like that, yeah I was putting my lunch box away if you want details, and so one of my friends, so there was these two guys, they were looking at the sign-up sheet and there was this boy, he had signed up but he wasn't the brightest kid in my class but I didn't know he signed up and to me it didn't matter because if something wants to I mean, hey they want to, but these two boys I went and saw that they were looking at the sign-up sheet and they saw his name, the boy, and they were like "oh him? He's so dumb, he can't, why did he sign up for this? He's not smart enough?". And I remember even though the boy wasn't there, I had still stood up for him and I just told those two boys like "hey you shouldn't say that because I mean your names aren't on the list" something like that and just saying how "he wants to do it? He's brave, good for him, who cares" and like I just said that. And then after the boys just walked away and I was walking away too but then a teacher had heard me, my teacher, my grade

6 teacher, so she called me in the classroom and just told me “Nina I overheard, I think that’s really nice of you, thank you” so like I was really happy that I did that because now like she saw and she heard and she knew that I was a good person I guess.”

A Sample of Young Adults’ Narratives

Helping - Regret

Participant 236 – Man

“I got the perfect example. Um, this was first year of university where I was still in the high school mindset. And um, I- my friend needed- we were in a group I think it was my statistics class And we had to... no it was my research methods class sorry. And we had um, we were in a group and we had to write a group paper, but all write it differently so no plagiarism is involved. And she waited last minute and she asked me to email my paper to her. She told me that she would switch everything up, she just wanted the outline. But, she basically copy-pasted everything. And, um, we both got a very bad grade and we could have, I could’ve had a plagiarism strike on my record, so I regret helping her in that way."

Not Helping and Glad

Participant 179 – Woman

“Umm well this was probably last month, it was in front of [grocery store], uhh there was a man who was insistently asking everyone that he needed just a couple dollars to go in buy something urgent. Umm I was walking by really quickly to go pick up a pack of Oreos and at the time I knew I didn't have any change. And there was a crossing thought where it was a couple dollars, I could probably just use my debit card to get him whatever he was so insistent about. But as I was walking by I just decided no, I'm just not going to do that like I want to get in and out as fast as possible. Umm and he looked at me- and he was an older black man so I guess he zoned in on

me and figured oh I would be his best chance, so he directed his question directly towards me. As I walked by, I just said "Sorry, but I can't." And there was a moment when I felt bad, until he made a following comment like "Oh, you know, people like you like...we're part of the same group, but you don't wanna help us." And that's what I figured like, you kinda have an- like umm... almost a self-deserving attitude, that I felt was not necessary to throw that kind of little jab at me just because we're both black individuals- you don't have to feel entitled to think that I offer- I should offer you any help. So I was walking by, deciding you know... it was best that I didn't even try to help him. Cuz like he does seem to have an assy attitude under there."

Not Helping - Regret

Participant 121 – Woman

"maybe a year ago or... a year or two ago, um I was downtown walking on one of the main streets, don't remember which one, I was out shopping, and I saw a homeless person with a crutches and umm I- they had a little thing to put money so I-I dropped whatever loose change I had and just kept going. But usually it would be in my uhh nature to like stop, maybe get them like a sandwich or like offer a sandwich whatever. But I was in a rush so I just dropped change and I kept going or whatever, and then I did that whole like trip of shopping and then I came back on the other side and I see the person uhh had fainted. And umm I have the CPR thing so I went to see if uhh everything was okay, but then again I was in a rush, so I made sure that there was somebody else there that could uhh...could make sure the person like... like would call 911 but I wanted to make sure the person could be there to until 911 came cuz I had to go, I was working and I was already late as it was there, so I wanted to make sure she would- but umm... (click tongue) anyways, then I happened to have a friend that was downtown who stayed later than me cuz we were a group and I had to leave cuz I had to work, and she told me that when the ambulance came whenever she saw like the white little thing on top of the person, so I guess the person... didn't make it- I don't know what ended up happening but the assumption was that the person wasn't well because they put the little white thing on top. So now that I think of it, I wish I would've maybe stayed, maybe I could've made a difference there but I feel like I still helped but I could've done better maybe."

Helping – Glad

Participant 110 – Woman

“My mom broke her...her knee recently. Hmm... And um... I had to drive her to the hospital and I'm glad that I was able to drive her to the hospital even though I don't have my full license. I have, well I have my permanent license so like, she has her license it's okay for me to drive with her. And I had to miss a class for that but I'm glad that I missed that class and I took that chance because she really needed somebody to bring her and stay with her throughout that entire day. And then I ended up catching up on my work like throughout the night afterwards but I'm glad that I had stayed with her throughout that day.”

Appendix F

Parent Consent Form - Online

INFORMATION AND CONSENT FORM

Study Title: How kids/teens and their parents think about helping others in different social situations

Researcher: Nasim Tavassoli
Researcher's Contact Information: Department of Education (FG.6.117), Concordia University, 1455 de Maisonneuve West, Montreal, QC H3G1M8
nasim.tavassoli@gmail.com

Faculty Supervisor: Dr. Holly Recchia
Faculty Supervisor's Contact Information: Department of Education (FG.6.133), Concordia University, 1455 de Maisonneuve West, Montreal, QC H3G1M8
514-848-2424 x. 2017
holly.recchia@concordia.ca

You and your child are being invited to participate in the research study mentioned above. This form provides information about what participating would mean. Please read it carefully before deciding if you and your child want to participate or not. If there is anything you do not understand, or if you want more information, please ask the researcher.

A. PURPOSE

The purpose of the research is to understand how children/adolescents think about and evaluate helping or not helping others. We know that children's characteristics may influence their decisions to help or not, but we don't know much about how different social situations and personal factors might influence how children evaluate helping. Moreover, we know very little about how parents encourage or discourage children from helping others in different situations. This study can help us to learn about these issues.

B. PROCEDURES

If you agree that your child participates, I will send you some questionnaires to complete online. Completing questionnaires will take up to 30 minutes. After you fill out the questionnaires, we will set up one Zoom meeting with your child. During the meeting, your child will be asked to tell us about a few times when they helped or didn't help someone and they were glad or not glad. Then, we will tell your child a few stories about helping and show them some pictures, and ask them some questions about those stories. After that, your child and I will do some activities

together, where I will ask them some questions and they can tell me their answer to each question is. The session will not take more than 1 hour.
After the child sessions, I will set up an online meeting with you via Zoom, where I will ask you about times when your child did or did not help someone and you feel glad or not glad afterwards. Then, I will tell you some stories and ask you some questions. The online session will last approximately 30 minutes.

C. RISKS AND BENEFITS

The risks of this study are minimal. You or your child may feel a little upset thinking about or talking about times when your child did not help others. These risks are similar to those you might normally experience when discussing these issues at home. If you or your child feels upset, you can tell the researcher, and he/she will tell you about resources available to help. We can stop the session at any time if you or your child don't want to continue. You or your child can also choose to skip any questions that you don't want to answer.
This research is not intended to benefit you personally. However, we hope the information we get from this study may help us develop a better understanding of how children think about and evaluate decisions about helping others or not and how parents socialize their children in contexts of helping.

D. CONFIDENTIALITY

We will gather the following information as part of this research: (a) you and your child's audio recordings of the session, and (b) your responses to the online questionnaires.
We will not allow anyone to access the information, except people directly involved in conducting the research. We will only use the information for the purposes of the research described in this form. Ensuring your family's privacy is extremely important to us. However, it is important to note that if you or your child discloses actual or suspected abuse or neglect, we are required to report this information to the Director of Youth Protection.
The information gathered will be coded. That means that the information will be identified by a code. The researcher will have a list that links the code to your name.
We will protect your information in various ways. Only the primary investigator at Concordia University will have access to the key linking family members' names to the numbers used on the recordings, data files, the interview transcripts. Data and records will be stored in a locked filing cabinet, an encrypted Canadian computer server, or on a password protected computer located in the researcher's work space. Only the researcher and members of her study team will have access to this information. Your child's date of birth (month and year only) will be collected solely for calculating the average age of participating children, and will not be used for identification purposes.
We intend to publish the results of the research. However, it will not be possible to identify you in the published results.

De-identified data from this study will be permanently archived. The code linking family members' names to their research records will be destroyed five years after completion of the study.

F. CONDITIONS OF PARTICIPATION

You and your child do not have to participate in this research. It is purely your decision. If you and your child do participate, you each decide to stop at any time. You can also ask that the information you provided not be used, and your choice will be respected. If you or your child decide that you don't want us to use your information in any of our research reports, you must tell the researcher within one month of your participation. You may also make a request at any time after this date, and your information will be omitted from any additional research reports.

In appreciation for your participation in this research, you will receive a $25 Amazon e-gift card. If your child begins the study and opts to discontinue, you will receive partial compensation. To make sure that research money is being spent properly, auditors from Concordia or outside will have access to a coded list of participants. It will not be possible to identify you from this list.

There are no negative consequences for not participating, stopping in the middle, or asking us not to use your information.

G. PARTICIPANT'S DECLARATION

I have read and understood this form. I have had the chance to ask questions and any questions have been answered. I agree to participate in this research under the conditions described and I give permission for my child to participate.

□ Yes, I agree to participate in the study (please check this box)
□ No, I don't want to participate in the study.

If you have questions about the scientific or scholarly aspects of this research, please contact the researcher. Their contact information is on page 1. You may also contact their faculty supervisor.

If you have concerns about ethical issues in this research, please contact the Manager, Research Ethics, Concordia University, 514.848.2424 ex. 7481 or oor.ethics@concordia.ca.

Appendix G

Consent Form for Young Adults

INFORMATION AND CONSENT FORM

Study Title: The Prosocial Motivation Study: Interview
Researcher: Nasim Tavassoli
Researcher's Contact Information: Department of Education (FG.6.117), Concordia University, 1455 de Maisonneuve West, Montreal, QC H3G1M8
Nasim.tavassoli@gmail.com

Faculty Supervisor: Dr. Holly Recchia
Faculty Supervisor's Contact Information: Department of Education (FG.6.133), Concordia University, 1455 de Maisonneuve West, Montreal, QC H3G1M8
514-848-2424 x. 2017
holly.recchia@concordia.ca

Source of funding for the study: Concordia University Research Chair in Moral Development and Education

You are being invited to participate in the research study mentioned above. This form provides information about what participating would mean. Please read it carefully before deciding if you want to participate or not. If there is anything you do not understand, or if you want more information, please ask the researcher.

A. PURPOSE

The purpose of the research is to understand how people think about past experiences in which they did and did not help others.

B. PROCEDURES

If you participate, you will be asked to provide narrative accounts of your own past experiences when you did and did not help others. The interviewer will ask you a few follow-up questions about each experience. This interview will be audiotaped. In total, participating in the interview will take approximately one hour.

C. RISKS AND BENEFITS

There is minimal risk to your participation in this study. Some people feel a little upset when they tell stories about past experiences. These emotions are similar to those that you might experience in everyday life when recounting these types of events.

You will receive no direct benefits from participating in this research study. However, your responses may help us learn more about how individuals make sense of their own decisions to help others.

D. CONFIDENTIALITY

We will gather an audio recording of the interview as part of this research.
We will not allow anyone to access the information, except people directly involved in conducting the research. We will only use the information for the purposes of the research described in this form. Ensuring your privacy is extremely important to us. However, in certain situations, we might be legally required to disclose the information that you provide. For example, this includes situations involving actual or suspected child abuse or neglect. If this kind of situation arises, we will disclose the information as required by law, despite what is written in this form.
The information gathered will be coded. That means that the information will be identified by a code. The researcher will have a list that links the code to your name. All the data from this study will be stored on a secure research server, which is only accessible to the research team. We intend to publish the results of the research. However, it will not be possible to identify you in the published results. We will destroy the key linking your name to the research data five years after the end of the study. Data from this study will be permanently archived.

F. CONDITIONS OF PARTICIPATION

You do not have to participate in this research. It is purely your decision. If you do participate, you can stop at any time. You can also ask that the information you provided not be used, and your choice will be respected. If you decide that you don't want us to use your information in any research reports, you must tell the researcher within one month of your participation. You may also make a request at any time after this date, and your information will be omitted from any additional research reports.
There are no negative consequences for not participating, stopping in the middle, or asking us not to use your information.

G. PARTICIPANT'S DECLARATION

I have read and understood this form. I have had the chance to ask questions and any questions have been answered. I agree to participate in this research under the conditions described.

NAME (please print) _____

SIGNATURE _____

DATE _____

If you have questions about the scientific or scholarly aspects of this research, please contact the researcher. Their contact information is on page 1. You may also contact their faculty supervisor.

If you have concerns about ethical issues in this research, please contact the Manager, Research Ethics, Concordia University, 514.848.2424 ex. 7481 or oor.ethics@concordia.ca.

Appendix H

Information And Assent Form (13-15-Year-Olds) – Online

Who are we and what are we doing?
We are from Concordia University. We would like to ask if you would be in a research study. A research study is a way to find out new information about something. We are trying to learn more about how children and teenagers think and decide whether to help or not to help in certain situations.

Why are we asking you to be in this research study?
This study can help us learn about how teenagers think about their decisions to help others or not.

What happens in the research study?

If you decide to be in this research study, this is what will happen. We will set up a Zoom meeting. In the meeting, I will ask you to think of a few times when you helped or didn't help someone. Then, I will tell you stories about other teenagers and I will ask you some questions about those stories. After that, we will go over some activities where you will answer some questions. Your answers will be audiotaped, so that we can listen to them later on.
If you get tired, you can take a break, skip a question, or you can stop at any time you want to.

Will the research study help you or anyone else?

Being in this study won't help you directly, but it will help us to understand how teenagers think about specific helping situations.

Who will see the information about you?

Everything that you fill out in the questionnaire is confidential. This means that the only people who see the responses are the people working on this project at the university. We will not tell anyone else that you are in the study. All your answers to our questions will be kept locked up at the University's lab or protected by a password on the computer, so no one else can see them.
I want you to know, though, that if we find out that you or someone else is in danger or could be hurt really badly, then we will have to let someone know so that they can help.

What if you have any questions about the research study?

It is okay to ask questions. If you don't understand something, you can ask us. We want you to ask questions now and any time you think of them. If you or your parents have questions later that you didn't think of now, you can call or text Nasim Tavassoli (the researcher doing this study) at 514-886-4872.

Do you have to be in the research study?

You do not have to be in this study if you don't want to. Being in this study is up to you. Even if you say yes now, you can change your mind later and tell us if you want to stop.

Agreeing to be in the study
I was able to ask questions about this study. Signing my name at the bottom means that I agree to be in this study. I will be given a copy of this form after I have signed it.

Agreeing to be in the study

□ Yes, I agree to participate in the study (please check this box)
□ No, I don't want to participate in the study.

Appendix I

Assent Script 8-10-Year-Olds

Hi! My name is Nasim Tavassoli. I am from Concordia University. I'm here to ask you if you want to take part in a research study. A research study is a way to find out new information about something – like a school project.

We are trying to learn more about how kids think about helping other people and how they decide whether to help or not to help.

If you decide to help me with the study today, this is what will happen. We will set up a Zoom meeting. In the meeting, I will ask you to think of a few times when you helped or didn't help someone. Then, I will tell you stories about other children and I will ask you some questions about those stories. After that, we will go over some activities where you will answer some questions. Your answers will be audiotaped, so that we can listen to them later on.

The stuff that you tell me will only be used for our project.

Being in this study is up to you! If you get tired or you're not having fun, we can take a break or you can stop at any time you want to. We can also skip any questions that you don't want to answer.

Do you have any questions?

Do you want to work with me on the things I told you about?

Appendix J

University Ethics Certificate for Children's and Adolescents' Data Collection

CERTIFICATION OF ETHICAL ACCEPTABILITY
FOR RESEARCH INVOLVING HUMAN SUBJECTS

Name of Applicant:	Nasim Tavassoli
Department:	Faculty of Arts and Science\Education
Agency:	Concordia University
Title of Project:	How kids/teens and their parents think about helping others in different social situations
Certification Number:	30012997

Valid From: July 12, 2021 To: July 11, 2022

The members of the University Human Research Ethics Committee have examined the application for a grant to support the above-named project, and consider the experimental procedures, as outlined by the applicant, to be acceptable on ethical grounds for research involving human subjects.

Richard DeMont

Dr. Richard DeMont, Chair, University Human Research Ethics Committee

Appendix K

University Ethics Certificate for Young Adults' Data Collection

CERTIFICATION OF ETHICAL ACCEPTABILITY
FOR RESEARCH INVOLVING HUMAN SUBJECTS

Name of Applicant:	Nasim Tavassoli
Department:	Faculty of Arts and Science\Education
Agency:	N/A
Title of Project:	The Prosocial Motivation Study
Certification Number:	30009930

Valid From: September 09, 2021 To: September 08, 2022

The members of the University Human Research Ethics Committee have examined the application for a grant to support the above-named project, and consider the experimental procedures, as outlined by the applicant, to be acceptable on ethical grounds for research involving human subjects.

Dr. Richard DeMont, Chair, University Human Research Ethics Committee