

PARENTAL MORAL SOCIALIZATION AND CHILD TEMPERAMENT IN THE
PREDICTION OF CHILD ANTISOCIAL BEHAVIOR

by

Jessica L. McKellar

Thesis submitted in partial fulfilment of the requirements
for the degree of Master of Arts in School Psychology

at

Mount Saint Vincent University
Halifax, Nova Scotia
August 2019

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ABSTRACT

Previous researchers studying children's moral development and parental moral socialization have documented the relation between parenting, children's internalization of parental values, and subsequent moral competence. Children's early moral competence has positive implications for children's psychosocial adjustment and prosocial behaviors. The present study examines the relationship between parent socialization of morality, child temperament, and child moral behavior. In the present study, parents and/or guardians of children between 3 and 8 years of age were asked to respond to questionnaires addressing child temperament, parent moral socialization practices, and child moral behavior. Results indicate that child temperament and parental moral socialization efforts differentially contribute to, and are of value in prediction of, children's subsequent moral behaviors. Results also provide promising evidence for children's internalization of moral values, or development of a 'moral sense of self', as children were found to demonstrate some aspects of moral affect and behavior, even in absence of parental input. These findings, along with possibilities for future research, and practical implications for teachers, educational policy makers, teacher education programs, and school psychologists are discussed.

ACKNOWLEDGEMENTS

First and foremost, I would like to thank my supervisor, Dr. Dan Seguin, for his support, insight, and suggestions with this project. Thank you for being so open-minded, in allowing me to pursue this topic, and set my own course in exploring it as a focus of research. It has been incredible, as a student, to take initiative, and direction in a research area of genuine interest, entirely of my own choosing. Thank you also for being flexible with timelines and deadlines, especially when these became fast approaching, and setbacks were experienced. I appreciate your dedication to this project, in providing timely feedback, and faith that I would succeed in completing it (we did it!).

Secondly, thank you to my second reader, and committee member, Dr. Krista Ritchie, for her feedback and support on this project and for her invaluable input on all matters ‘statistics’. It has also been particularly valuable to have feedback on this project from a person who has read this work as a parent, as well as a researcher.

I would also like to thank those that took the time out of their busy schedules to participate in this study- recruiting parents of small children, and requiring them to sit down, uninterrupted, long enough to complete a 1-hr survey is no small feat! Thank you, as well, to those that (after completing so many questions themselves) were willing to share this study, and encourage others to participate.

I would also like to express my gratitude to the Beth Manthorne Endowment, and Mount Saint Vincent University for their generous financial assistance over the last two years. I would also like to sincerely thank my grand-parents, in this respect, as well for their support through grad school. I sincerely am at loss to say how I could have accomplished what I have without you both.

Thank you to my family and friends for their love and support through grad school and through life. Thank you for offering encouragement, even as I attended family events tucked into a corner with my computer! I am incredibly touched that each of you had no doubt that I could accomplish anything I’d set my mind to doing, including writing tirelessly to finish this. Your faith has encouraged me to believe in myself, and keep pushing through, even when I wasn’t sure how I would do it. After these many years, I am looking forward to being closer to you all and having more opportunities to continue making memories.

Finally, thank you to my school psychology classmates for the support we have shown each other in navigating grad school together. It is bittersweet to know that we will go our separate ways, but know how proud and happy I am of each of you for having moved on to becoming the great clinicians I know you will be. I will miss our times together- our laughs, our overshares, the fear of getting caught in the middle of a ‘friendly game of catch’ with the brain stress ball. I cannot wait to start the next part of our journey together as colleagues and, more importantly, friends.

CHAPTER ONE: LITERATURE REVIEW

Childhood is a period of time in which children develop a cooperative moral orientation, and potentially, serious antisocial behaviors. Children's development of moral, and conversely, antisocial behavior, can have implications for both children's school adjustment and long-term outcomes. Given its influence in children's development, it is important to understand the mechanisms through which children's moral competence can be supported by parents and caregivers. The present study examines the relationship between parental socialization of morality, child temperament and child moral behavior. The present study extends upon previous research, by examining the predictive value of parental moral socialization on children's moral, and amoral, or antisocial behavior, as it is moderated by child temperament.

Moral Development

Moral development describes the process through which children acquire concepts of right and wrong, and the ability to regulate behavior in a socially-appropriate manner (Termini & Golden, 2007). Piaget proposed that moral behavior is developed gradually, coinciding with changes in cognition and intelligence (Lăzărescu, 2012). Piaget (1932) suggested that children move from a heteronomous stage to an autonomous stage of moral development. Infants in the sensorimotor stage of development are considered to be non-moral as they have not yet developed an awareness of rules or moral obligation (Hardman, 2014). Children become more aware of rules as they enter the egocentric stage, between 2 and 3 years of age. Children at this age have not yet developed an internalization of rules, and adhere to rules as it suits their purposes. Children's adherence to rules at this age is also predominantly governed by explicit

cues such as reward and punishment. Children's cooperation increases between ages 5 and 6 with developing perspective taking abilities. Children's moral development continues until children reach the codification stage, around age 12, during which time children establish a sense of moral autonomy. Kohlberg (1981), also proposed a theoretical model of moral development, in which he identified six moral orientations which were grouped into three levels- the preconventional level, the conventional level and the postconventional level (Hardman, 2014; Lăzărescu, 2012). The preconventional level, between 4 and 10 years of age, is characterized by egocentric behavior, which is motivated by reward, and punishment-obedience. The conventional level, between 10 and 13 years of age, is characterized by cooperation and the view of oneself as moral, or good. The postconventional level, after 13 years of age, is characterized by an understanding of ethical principles, and social contract (Hardman, 2014). Contemporary researchers examining moral development have suggested, however, that children do not solely engage in prosocial, or moral, behavior, out of obedience to authority, fear of punishment, or tangible rewards, as Kohlberg and Piaget would have proposed (Hardman, 2014). Children, rather, engage in prosocial or moral behavior out of concern for others and a desire to do what they consider to be right. Social domain theory posits that children's moral development emerges through children's interactions with others, including children's experiences of the consequences of their actions and their impact on others, as well as other's responses to the child's behavior (Smetana et al., 2012).

Contemporary researchers examining moral development in childhood have proposed that moral development is comprised of three separate, but related dimensions: moral cognition, moral affect, and moral behavior (Brugman, Keller and Sokol, 2013; Stifter, Cipriano, Conway,

& Kelleher, 2009; Termini & Golden, 2007). The emergence of a moral self-concept, or the view of oneself as moral, is seen as another component of moral development (Brugman et al., 2013; Kochanska, Koenig, Barry, Kim, & Yoon, 2010). Moral cognition refers to children's understanding of moral rules and standards, and the consequences of violating these rules (Augustine and Stifter, 2014; Termini & Golden, 2007). Moral cognition also includes reasoning about moral dilemmas (Termini & Golden, 2007). Moral affect includes the feelings and experiences of the child. Moral affect encompasses feelings of guilt, discomfort, concern or empathy following a transgression. Moral behavior can be seen as being comprised of two parts, the first of which is engagement in prosocial, or helping, behaviors, while the second is inhibition of engagement in antisocial behaviors (Termini & Golden, 2007).

Development of moral cognition typically coincides with the development of executive functions, and behavioral inhibition, around two years of age (Decety & Howard, 2013), though some researchers have demonstrated children's awareness of moral and social rules as early as between the first and second year (Smetana et al., 2012). Children often have a good understanding of rules, however, their reasoning about such rules differs (Termini & Golden, 2007). Young children typically employ an external loci of control in terms of blame and punishment, relying on external factors such as parents or authority figures to provide cues for behavior. Younger children also tend to view moral rules as unalterable or absolute (Smetana et al., 2012). Smetana et al. (2012) observed that between 2½ to 4 years old, children increasingly viewed moral transgressions as wrong, even in the absence of input from an authority figure (e.g. 'even if the teacher did not see the transgression'). Smetana et al. (2012), however, observed significant individual variation in children's moral understanding, which was not explained by

child age. Some researchers, however, have demonstrated young children's ability to differentiate between moral transgressions (e.g. hitting a child) and social, or conventional, transgressions (e.g. eating ice cream with fingers). Young children evaluated moral transgressions are more significant and deserving of punishment than conventional transgressions. Differentiation between moral and conventional transgressions appears early as 3 years of age, and more consistently by 4 years of age (Smetana et al., 2012). As children mature, they demonstrate increased internalization of moral rules, and increased ability to reason about moral dilemmas (Termini & Golden, 2007). Children's understanding of moral rules becomes more nuanced as they mature; a younger child is more likely to believe that lying is always wrong, while an older child is more likely to believe that lying is appropriate in certain social situation (Lăzărescu, 2012). Preschool-aged children lack understanding of the relationship between intention, actions, and outcomes, and do not use these to inform their moral evaluations (Smetana et al., 2012), whereas older children demonstrate increased theory of mind and perspective taking (Termini & Golden, 2007). Though children's moral development can be characterized according to their age and stage of development, individual children vary within stages in their moral understanding and subsequent moral behavior as a function of their temperament.

Contribution of Child Temperament

Temperament encompasses inborn child characteristics used to describe mood, behavioral response and approach (De Pauw & Mervielde, 2010). Although a lack of consensus exists in defining components of temperament, it is agreed that temperament is a multidimensional construct, which manifests early in infancy, influences behavior, and remains relatively consistent over time. Dimensions of temperament have been described as measures of a child's

surgency, or extraversion, and measures of a child's effortful control, or inhibition (Augustine & Stifter, 2014; Smetana et al., 2012; Stifter et al., 2009). Surgency includes a child's more active, positive, and impulsive behavior (Smetana et al., 2012; Stifter et al., 2009); children who are higher in surgency are often described as being more active, rambunctious, and more likely to get into trouble (Smetana et al., 2012; Stifter et al., 2009). Children who are rated higher in surgency may initiate more moral transgressions, and receive more rules and reprimands in response to moral misbehavior from parents and caregivers than children who are rated lower in surgency (Smetana et al., 2012). Conversely, effortful control, or inhibition, is viewed as the child's 'brakes' to behavior (Augustine & Stifter, 2014; Smetana et al., 2012; Stifter et al., 2009). Higher levels of effortful control are linked to more fearful, and less joyous behavior in infants, as well as increased social competence (Smetana et al., 2012; Stifter et al., 2009). Children higher in effortful control are characterized as being more punishment-sensitive, and more avoidant of threatening stimuli (Augustine & Stifter, 2014; Stifter et al., 2009). Effortful control is also associated with greater empathy, guilt and shame, and lower levels of externalizing behaviors in childhood (Augustine & Stifter, 2014; Smetana et al., 2012; Stifter et al., 2009), whereas surgency has been found to be negatively related to guilt and internalization, and has been positively linked to cheating and externalizing behaviors (Stifter et al., 2009).

Researchers have proposed differential relationships on how temperamental traits are linked to antisocial behavior (De Pauw & Mervielde, 2010). Effortful control, or inhibition, is particularly thought to relate to moral development, as it is hypothesized that behaviorally inhibited children internalize rules and standards more easily than uninhibited, or surgent, children (Stifter et al., 2009). Behaviorally inhibited children, are more likely to inhibit a desire

toward a prohibited act to avoid punishment or affective discomfort (Augustine & Stifter, 2014; Stifter et al., 2009), while children who experience less affective discomfort and punishment sensitivity may experience delays in rule internalization. In a longitudinal study, Stifter et al. (2009) examined whether effortful control moderated the relation between temperament and conscience development in childhood. Stifter et al. (2009) found that inhibited children were more likely to behave in morally acceptable ways. Contrary to expectations, however, behavioral control was found to be inversely related to moral behavior. Preschoolers in the study conducted by Stifter et al. (2009) who were able to delay gratification were more likely to cheat on tasks, and less likely to perform a prosocial task. Effortful control also was not found to contribute to the conscience development of exuberant or low reactive children. Stifter et al. (2009) speculated, however, that the nature of the tasks used to measure behavioral control and prosocial behavior may have influenced the results, as children who were able to delay gratification, or cheated, were able to maximize their rewards.

The role of temperament has gained increasing attention from researchers hoping to clarify the means through which children internalize moral values (Augustine & Stifter, 2014). Temperament is influential in shaping a child's moral development through interpersonal processes (Brugman et al., 2013; Smetana et al., 2012) such as parenting, moral discussion and dialogue, imitation, identification, and peer relations (Brugman et al., 2013). Temperamental differences may also shape how much, and when, children attend to parental messages concerning moral behavior (Smetana et al., 2012). Individual differences in child temperament may elicit different parental reactions, which, in turn, affect the quality of parent-child relationships and child outcomes (Bryan & Dix, 2009). Bryan and Dix (2009) examined the

extent to which parents supported the interests of children who were characterized as being active, anger prone, or fearful. Children's compliance to parental requests was found to be one of the most direct factors which influenced parental emotionality. Children who were more likely to comply with parental requests elicited more positive parental emotions, and supportive behavior, whereas, children who were resistant to comply with parental requests elicited more negative parental emotions, and less supportive behavior. Temperamentally, child activity and anger proneness were associated with tendencies to resist parents, while child fearfulness was associated with tendency to comply with parents.

A study conducted by Augustine and Stifter (2014) examined parenting behaviors in a 'do'/'don't' task and their relation to children's moral development across differing types of child temperament. 'Do' tasks (e.g., do play with the toys, do help clean up) are thought to pose a greater regulatory challenge for both surgent and inhibited children, as inhibited children are thought to have an advantage over more surgent children in inhibiting inappropriate behavior in a 'don't' task (e.g., don't play with the toys, don't eat the snack). Inhibited children may require less gentle discipline in 'don't' tasks, but may rely more on parental guidance in 'do' tasks, in comparison to their more surgent peers. As Augustine and Stifter (2014) hypothesized, the types of maternal gentle discipline which were effective for inhibited children differed from those which were effective for surgent children, as did the contexts in which they occurred. Maternal reasoning and ignoring were both predictive of later moral behavior, only, for the inhibited group in the 'do' context (playing with boring toys). Maternal redirection and commands, conversely, were only predictive of later moral behavior for the surgent group in the 'don't' context (prohibition episode).

In another study, Smetana et al. (2012) hypothesized that children who were rated as being higher in effortful control may be better able to focus their attention on messages from both parents and victims in moral transgression situations, which would help children's understanding of why moral transgressions are wrong. Smetana et al. (2012) also hypothesized that children who were rated higher in effortful control may acquire moral concepts earlier than other children. In the study by Smetana et al. (2012), children who were rated higher in surgency rated moral transgressions as more deserving of punishment, however, both children high in surgency, and children high in effortful control, had acquired an understanding that moral transgressions are generalizably wrong, when they were first interviewed. Children higher in surgency grew more slowly than did children higher in effortful control, however, in their understanding of these concepts over time. Smetana et al. (2012) speculated that both surgency and effortful control may, therefore, facilitate children's understanding of moral generalizability, but through different means. Children higher in surgency may obtain more experiential learning about consequences of moral transgressions, whereas children higher in effortful control may engage in fewer transgressions but be more prepared to attend to parental messages or may learn indirectly from observing others. For children who are rated higher in surgency, socialization efforts may play a more prominent role than effortful control in moral development (Stifter et al., 2009).

Contribution of Parental Socialization

Socialization refers to the process by which children acquire the social, emotional and cognitive skills necessary to function within the social community (Grusec & Davidov, 2010). Initial research on socialization was conducted by theorists who were interested in children's

internalization of values (Grusec & Davidov, 2010; Kochanska et al., 2010a). Parental use of discipline, reasoning, and teaching strategies, and their role in influencing child behavior was a focus of such early research (Grusec & Davidov, 2010). According to Vygotsky (1978) teachers must work within the child's zone of proximal development to present more abstract, or challenging problems, which are just outside of the child's current level of understanding. As a result of such teacher-child dialogues, the child is able to internalize the language of the teacher, and develop a better understanding of the problem. Current researchers have generated a great deal of interest in how parents talk to their children about social and emotional problems, with the assumption that such discussions facilitate an advancement of child knowledge and ability in these areas (Garner, 2012; Grusec & Davidov, 2010). Such researchers have focused specifically on what parents do to facilitate, or detract from, children's understanding of right and wrong, and prosocial behavior (Garner, 2012). Researchers have further suggested that parents talk differently to their children about moral and conventional rules (Smith, Noh, Rizzo, & Harris, 2016). A study by Smith et al. (2016) examined adults' use of apology prompts following children's transgressions to highlight social rules and teach social skills. Parents were asked to child about their child committing an intentional moral transgression (i.e., hurting or upsetting another person on purpose), an accidental moral transgression (i.e., hurting or upsetting another person by mistake), or a conventional transgression (i.e., breaking a rule during a game). Parents uniformly endorsed the importance of their child learning to apologize, and very few parents dismissed apologies as being 'empty words' (Smith et al., 2016). Parents viewed apologies as more important following intentional and accidental moral transgressions, and less important following conventional transgressions. Parents also provided different justifications for the

importance of an apology across transgression conditions. Parents viewed apology prompts following intentional moral transgressions important in helping children take responsibility for their actions, promoting perspective taking, teaching about harm, and helping children make reparations. Smith et al. (2016) found a similar pattern of endorsement for accidental transgressions. Following conventional transgressions, parents emphasized helping children take responsibility, and admit wrongdoing, and promoting learning of social values (i.e. fairness in cheating at a game).

Socialization is a bidirectional process, in which children impose their own framework on parental attempts to exert influence (Grusec, 2011). Children do not simply accept parental rules and discipline, but interpret them based on their own, developing, social understanding (Grusec, 2011; Kochanska, et al., 2010b; Smetana et al., 2012). Children may, however, play a positive role in their own socialization by demonstrating willingness, or enthusiasm, toward their own socialization and parent goals (Kochanska, et al., 2010b). When a child engages in a transgression, the parent must convey to the child the inappropriateness and consequences of the act. The child must then have the ability to understand the parent's reasoning, be willing to accept it, and apply this reasoning to other moral dilemmas as his or her own (Grusec, 2011; Kochanska, et al., 2010b; Termini & Golden, 2007). Internalization is defined as a vehicle for intergenerational transmission of family and societal values, culture and social order (Termini & Golden, 2007). Internalization can also be defined as the similarity of a parent and child's values. The development of internalization is fostered by both parental behaviors, such as explanation of rules, and indirect discipline, and child behaviors.

Parental discipline techniques can foster or hinder child moral development. Factors such as maternal warmth, responsiveness, and use of inductive discipline are associated with increased child prosocial behavior, while harsh or punitive parenting practices are associated with lower levels of child prosocial behavior (Augustine & Stifter, 2014; Farrant, Devine, Maybery, & Fletcher, 2011). Use of harsh disciplinary strategies discourages internalization of values and norms, while reciprocal language between mother and child has been shown to foster socio-emotional competence and the internalization process (Termini & Golden, 2007). Parents who use high levels of power assertion to respond to child misbehavior or elicit child compliance tend to have children who have difficulty developing an empathetic, or prosocial moral orientation (Augustine & Stifter, 2014; Termini & Golden, 2007). Children who employ an external locus of control, and comply with parental requests out of fear of consequences, do not internalize moral values as efficiently (Garner, 2012) whereas, children who consistently interact with others in a sympathetic manner may have greater opportunities to internalize parental moral values. Parental power assertion can also elicit child frustration and anger, which may contribute to delayed or impaired development of the social-information-processing skills necessary in developing a prosocial moral orientation. Similarly, parental love withdrawal discipline techniques (i.e., expressions of parental disapproval, ignoring, and threatening to take away love or attention) are associated with negative child outcomes.

A 'mutually responsive orientation' parent-child relationship is characterized by parent and child demonstration of sensitive, supportive, and developmentally appropriate responses to each other's distress, unhappiness, or needs (Augustine & Stifter, 2014; Kochanska, et al., 2010b; Termini & Golden, 2007). This type of relationship has been shown to support all three

dimensions of moral development: moral cognition, moral affect, and moral behavior (Termini & Golden, 2007). In this relationship, children begin to internalize parental morals and values (Augustine & Stifter, 2014; Kochanska, et al., 2010b; Termini & Golden, 2007). Mutually-responsive parent-child orientation impacts moral development by reinforcing early positive mood, and internalization of parental rules (Termini & Golden, 2007). In a study conducted by Smetana et al. (2012), children who perceived their parents as being more supportive reported fewer negative interactions with parents, were more other-oriented, and were better able to articulate their motives for moral behavior. In another study, Farrant et al. (2011) found that higher levels of maternal cognitive empathy were associated with increased engagement in parenting practices which encouraged child perspective-taking, and development of cognitive empathy skills.

Parental contributions to moral conversations with children may facilitate and reinforce children's prosocial self-evaluations and sense of moral agency (Recchia, Wainryb, Bourne, & Pasupathi, 2014). Guided learning discussions refer to parent-child conversations wherein a parent uses scaffolding, or gentle direction techniques to encourage a child toward correct behavior (Augustine & Stifter, 2014). Guided learning discussions become more common by the time a child reaches 2 years of age, and coincide with children's language development and ability to understand and internalize parent explanations. Effective parenting, within a guided learning framework, involves the provision of age-appropriate structure, information, strategies, and feedback that children need to learn and improve on skills (Grusec & Davidov, 2010). Similarly, inductive reasoning techniques (i.e. reasoning with children about why they should comply), encourage child internalization of moral values, by providing explanations which

enable children to understand concepts of right and wrong and apply these to other situations. Inductive reasoning techniques include positive parental communication, encouragement of limit-setting, appropriate reminders of expectations for child behavior and rules, and explanations about how a child's behavior affects others (Garner, 2012). Inductive reasoning often involves discussions between parent and child, where children are made aware of other's feelings, and their role in producing such feelings in others (Termini & Golden, 2007). When emotions and morals were not discussed in parent-child conversations, children elicited more antisocial themes. Children who are higher in effortful control may benefit more than other children from parental use of inductive discipline as they are more equipped to attend to parental conversations of right and wrong (Smetana et al., 2012).

Parents may use several types of inductions to promote children's moral understanding and internalization of moral values (Garner, 2012). Victim-oriented inductions emphasize how a child's behavior has harmed the victim, but do not necessarily provide instruction about how to repair the situation. Victim-oriented inductions are, nonetheless, associated with increased understanding of others, empathy-based guilt, and appropriate emotional and prosocial responses to other's distress. Inductions which encourage reparation (e.g., telling a child to apologize for wrongdoings or hurtful behavior) are negatively associated with antisocial behavior in male children, and positively associated with moral regulation. In a study conducted by Garner (2012), mothers reported more victim-oriented inductions, while fathers made more inductions which encouraged reparation. Surprisingly, Garner (2012) found that maternal love withdrawal was positively associated with preschoolers' empathetic responses and motives of concern. Maternal power assertion at the preschool period was negatively associated with children's long-term

sympathy. For fathers, teaching children to make reparations was positively associated with preschoolers' sympathy responses.

In another study, Recchia et al. (2014) examined the content of mother-child conversations about children's moral behavior. Mothers supported children's understanding of their own agency in helping situations by focusing on the positive consequences of helping others, particularly emotional and psychological consequences for children (e.g., feeling pride). These consequences were both discussed by mothers and children. Mothers frequently emphasized evaluations and insights which highlighted the child's positive moral characteristics (e.g., I'm so proud of you; you're such a compassionate person). Parent-child conversations about harm were typically longer and more complex than parent-child conversations about helping, and included more challenges and conflicting views between parent and child. Conversations about harm emphasized children's wrongdoings, and the harmful emotional consequences for others which resulted from the child's behavior (i.e. other-oriented inductions). Mothers in harm conversations used a variety of strategies to help children reconcile their negative behaviors with an enduring sense of moral agency, iterating children's capacity for good as well as harm (Recchia et al., 2014). Mothers challenged children's interpretations of events by asking questions, and providing their own suggestions. Mothers referenced children's perspectives which justified children's actions, but encouraged children to replace behavior with more positive, or constructive, ways to achieve the same outcomes. Mothers also suggested strategies for repairing relationships, such as apologizing and making amends.

Quality of parents' explicit instruction about peer interactions are associated with social competence in early childhood (Werner, Eaton, Lyle, Tseng, & Holst, 2013). Children exposed to

higher levels of discourse about other's mental states (i.e., needs, intention, and desires) engage in more empathy-related behavior than do other children; more aggressive children are often considered to be low in empathy, and have more difficulty understanding other's mental states than do non-aggressive children (Garner, 2012). Mother-child discussions about aggression may enable children to learn adaptive ways of processing information about peer conflicts and develop appropriate strategies for managing peer conflicts. Werner et al. (2013) examined the relationship between mother-child conversations about peer conflicts and developmental changes in children's relational aggression. Mother-child conversations were assessed in terms of maternal elaboration, references to emotion, and communication of rule violation. Mothers who framed conflicts in a positive manner, endorsed prosocial strategies and elaborated extensively had children who were less physically aggressive, more prosocial and rated as higher in peer acceptance by teachers. Mothers' discussion of rule violation was not found, however, to predict patterns of children's relational aggression over time.

CHAPTER TWO: PARENTAL MORAL SOCIALIZATION AND CHILD TEMPERAMENT IN THE PREDICTION OF CHILD ANTISOCIAL BEHAVIOR

Antisocial behavior is often present in early childhood, but may persist and intensify, or worsen, as a child enters into adolescence (Hardman, 2014). Children's moral behavior, and conversely, antisocial behavior, can have implications for children's school adjustment. High levels of moral reasoning have been associated with the quality of children's social relationships, problem-solving abilities, and prosocial behavior (Garner, 2012). Conversely, moral cognition characterized by aggression and denial are associated with negative social interactions and lack of prosocial behavior. Similarly, children's aggressive, and coercive behaviors are associated with increased peer rejection, whereas behaviors that promote reconciliation (i.e. apologizing, or making amends) are associated with peer acceptance (Smith et al., 2016). Kochanska et al. (2010a) found, in a previous study, that children's internalization of maternal rules at preschool age was associated with fewer antisocial behavior problems approximately a year later. Kochanska et al. (2010a) observed children's internalization of parental rules and empathetic concern toward parents at 25, 38, and 52 months, and examined these as predictors of children's adaptive and competent functioning at 80 months (i.e. early school age). Competent and adaptive future functioning was defined by Kochanska et al. (2010a) as describing the extent to which a child meets salient developmental tasks. Such tasks included engaged school functioning, positive peer relationships (e.g., having friends, being socially accepted, and being prosocial), and respecting and observing rules. Using multiple informants to obtain a broad measure of child functioning at home and in school, Kochanska et al. (2010a) determined that children who demonstrated stronger internalization and empathy from 25 to 52 months were seen as more competent, prosocial, and engaged with school and peers, and less callous, antisocial and disruptive, by parents and teachers at 80 months. Children who demonstrated stronger

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internalization of parental rules from 25 to 52 months also perceived themselves as more moral at 67 months.

Research Questions and Hypotheses

Given the important implications of children's moral competence to children's psychosocial functioning and school adjustment, it is important to understand the mechanisms through which children's moral competence develops and can be supported by parents and caregivers. Previous researchers examining parental moral socialization have documented its relation to children's internalization of parental values. The purpose of the present study is to examine the relationship between parental socialization of morality, child temperament and child moral behavior. The present study extends upon previous research by examining parental moral socialization, and its interaction with child temperament, in predicting child antisocial behavior. The present study also addresses a gap in the literature on the predictive value of parental moral socialization practices and child temperament in child antisocial behavior. It was hypothesized that:

1. Parental moral socialization would have a direct, positive influence on child moral behavior.
2. The relationship between child temperament and child moral behavior will be moderated by, or differ depending on, parental moral socialization.
3. The relationship between parental moral socialization and child moral behavior will be moderated by, or differ depending on, child temperament.

PARENTAL MORAL SOCIALIZATION AND CHILD TEMPERAMENT IN CHILD ANTISOCIAL BEHAVIOUR

Method

Participants

Participants were 39 parents or guardians of children between 3 and 8 years of age. Sample size for the present study was calculated using Cohen's (1992) sample size estimation tables. Assuming a large effect ($R^2 / 1 - R^2 = 0.35$) and two predictors on one continuous outcome variable (or partial correlations across three continuous variables) with $\alpha = 0.05$ and $1 - \beta = 0.80$, 30 participants were estimated to constitute an appropriate sample size. All participants in the sample were Caucasian. Of the participants, 17 (44%) were between 24 and 35 years of age, 21 (54%) were between 35 and 54 years of age, and 1 (3%) was more than 54 years of age. Most parent participants were female ($n=34$), however, 5 male parents also participated. Most participants were biological parents ($n=32$, 82%), however, the study sample also included adoptive parents ($n=2$, 5%), grand-parents ($n=3$, 8%) and a step-parent ($n=1$, 3%). One participant indicated being an 'other guardian' of a child between 3 and 8 years of age. Children in the sample were divided approximately evenly by gender (22 female children (56%), and 17 male children (44%)). Questionnaires were completed for a total of 2 3-year old children (8%), 10 4-year old children (26%), 5 5-year old children (13%), 9 6-year old children (23%), 6 7-year old children (15%), and 7 8-year old children (18%). Three children within the sample (8%) had received a diagnosis; child diagnoses included osteogenesis and dentinogenesis imperfecta ($n=1$), autism ($n=1$), and multiple diagnoses (i.e. autism, anxiety, and a phonological disorder) ($n=1$). Additional demographic information collected is described in **Table 2.1**.

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Table 2. 1. *Demographic questionnaire items*

Demographic Item	Number of Participants (n=)	Percentage of Participants (%=)
Education Level		
High-School/Secondary	4	10
Some College/University	14	36
Diploma	4	10
Bachelor’s Degree	11	28
Graduate Degree	5	13
Doctoral Degree	1	3
Annual Household Income		
Between \$10,000 and \$25,000	4	10
Between \$25,000 and \$50,000	12	31
Between \$50,000 and \$80,000	7	18
Between \$80,000 and \$100,000	2	5
Between \$100,000 and \$150,000	10	26
Prefer Not To Say	4	10
Marital Status		
Single	8	21
Married	27	69
Common-Law	1	3
Divorced/Separated	2	5
Other Relationship Status	1	3

Measures

Demographics. Participants completed a demographics questionnaire, which asked participants to report their gender, age, ethnicity, marital status, annual household income, education level, relationship to child, child’s age, gender and diagnoses (see Appendix A).

Child temperament. Questionnaire data examining child temperament was drawn from the Children's Behavior Questionnaire-Very Short Form (CBQ-VSF) (Putnam & Rothbart, 2006; Rothbart, Ahadi, Hershey & Fisher, 2001), and the Temperament in Middle Childhood Questionnaire (TMCQ) (Simonds & Rothbart, 2004). The CBQ is used to assess temperament in children between 3 and 7 years of age. The CBQ comprises three factors, negative affectivity, surgency extraversion and effortful control. The CBQ, including the *CBQ Very Short Form (CBQ-VSF)*, was developed from data obtained by parents (n=468), taking into account internal

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consistency, breadth of item content, within-scale factor analysis, and patterns of missing data.

Rothbart and Putnam (2006). The CBQ-VSF forms were subsequently evaluated with data from 1,189 participants, demonstrating both satisfactory internal consistency, criterion validity, longitudinal stability and cross-informant agreement comparable to that of the standard CBQ.

The *Temperament in Middle Childhood Questionnaire* (TMCQ) is, similarly, developed from the CBQ to assess temperament in children between 7 and 13 years of age. Respondents in both the CBQ and TMCQ are presented with a series of statements which describe children's responses to different situations, which map onto dimensions of children's temperament. In the study conducted by Simonds and Rothbart (2004) which examined the internal validity of the TMQ, 11 of 16 self-report scales reached alphas $>.60$, indicating a fairly reliable self-report. With the exception of the activity scale, parent scale alphas ranged from .69 to .90.

Parental moral socialization. Questionnaire data examining parental socialization of moral affect was drawn from the Socialization of Moral Affect Questionnaire (SOMA) (Rosenberg, Tangney, Denham, Leonard & Widmaier, 1994a; Rosenberg, Tangney, Denham, Leonard & Widmaier, 1994b), The Socialization of Moral Affect Inventories (SOMAS) were designed to address specific and subtle parental behaviors thought to be relevant to the socialization of shame, guilt, and empathy. These include love withdrawal, power assertion (including corporal punishment), victim-focused induction, parent-focused induction, teaching reparation, positive and negative behavior focused responses, person-focused responses, positive or negative evaluations, neglect or ignoring, public humiliation, conditional approval, and disgust, teasing or contempt (Rosenberg et. al., 1994). Respondents are presented with specific, frequently encountered childrearing situations involving children's failure, transgression and success experiences. Each scenario is followed by a number of parental responses, theorized to

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be relevant to the induction of shame, guilt and empathy. The *SOMA for Parents of Children (SOMA-PC)* and the *SOMA for Parents of Preschoolers (SOMA-PP)* questions and scoring for the SOMA-PP and SOMA-PC are identical. The SOMA-PC is designed for use with children between 7 and 13 years of age, while the SOMA-PP asks parents to think back to their child's behavior between 3 and 5 years. Rosenberg (1998) conducted extensive pilot-testing, as well as an extensive phase of psychometric analysis and refinement, to derive final versions of the SOMA-PP/PC. Results from a sample of children (n= 130) and their parents indicated that the SOMAS had good internal consistency, item distribution, and minimal correlation with social desirability.

Child moral behavior. Questionnaire data examining children's moral behavior and internalization of moral values was drawn from the My Child Questionnaire (MCQ) (Kochanska, Devet, Goldman, Murray & Putnam, 1994). The My Child Questionnaire (MCQ) assesses children's conscience development, through the calculation of eight subscales. These include guilt, concern over good feelings with parent after wrongdoing, confession, reparation/amends, concern/corrections occasioned by others' transgressions, internalized conduct, empathic, and prosocial response to another's distress. These subscales are combined into two larger indicators of conscience: affective discomfort and active moral regulation/rule-compatible conduct. Respondents in the MCQ are presented with statements which describe children's responses to common child moral transgressions, which are theorized to map onto dimensions of children's moral development. The study conducted by Kochanska et. al. (1994), which examined the psychometric qualities of the MCQ, demonstrated satisfactory scale test-retest correlations, ranging from .29-.79; two scales, however, were excluded from the study due to poor internal

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consistency. Scales in the MCQ were also found to demonstrate good internal consistency, with scales of the MCQ correlating at over .60.

Procedure

Data collection. A survey method was used to answer the intended research questions. Participants were primarily residents of New Brunswick, and were recruited by poster, internet advertisement, and word of mouth. Participants recruited by word of mouth also included residents of other Atlantic Canadian provinces (i.e. Nova Scotia). Prospective participants were provided with contact information for the researcher and asked to indicate their willingness to participate by message or email. Participants were then provided with an information sheet detailing the study, and an internet link to the research questionnaire. Within the survey, participants were provided with a consent form, and asked to indicate consent to participate, prior to proceeding to the questionnaire items. Questionnaires include a series of Likert-scale and open-ended questions related to parent and child demographics (Appendix A.), child temperament (i.e. CBQ or TMCQ), parental moral socialization practices (i.e. SOMA-PP/PC), and child moral behavior (i.e. MCQ). Participants were entered into a draw to win one of four, \$25 gift cards to Tim Horton's, as an incentive to participate. To maintain confidentiality, participants were assigned a unique identifier which was used in coding and analyzing participant data.

Scoring. All questionnaires were scored by the author, according to guidelines established by the respective authors of each measure (i.e. CBQ, TMCQ, SOMA, and MCQ). Scores measuring aspects of child temperament (i.e. surgency, effortful control, and negative affect), moral behavior (e.g. guilt/shame, empathy, fear, concern over other's moral transgressions), and parental moral socialization (e.g. teaching reparation, behavior-focused

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scenarios, victim—focused inductions), were computed from questionnaire items measuring each construct, using the statistical software SPSS. Further analyses were conducted to assess normality of the data, and interpret sample demographics. Scores examining aspects of primary study variables (i.e. temperament, parental moral socialization, and moral behavior) were then analyzed using a hierarchical multiple regression, to determine the predictive value of child temperament and parental moral socialization in determining children’s subsequent moral behavior.

Results

Child Temperament

Data from the CBQ and TMCQ was analyzed to explore child temperament, as reported by parents. Individual items on the CBQ were rated by parents on a scale of 1 to 7, where 1 represented ‘*extremely untrue*’, 2 represented ‘*quite untrue*’, 3 represented ‘*slightly untrue*’, 4 represented ‘*neither true nor untrue*’, 5 represented ‘*slightly true*’, 6 represented ‘*quite true*’ and 7 represented ‘*extremely true*’. Items on the TMCQ were rated by parents on a 5-point Likert scale, and were transformed to a 7-point Likert scale, to facilitate comparison between CBQ and TMCQ scores. Items on the CBQ and TMCQ were computed to provide an overall score for child surgency, negative affectivity, and effortful control. Data from both measures were included in analyses to provide estimates of children’s temperament within the sample, independent of child age (see **Table 2. 2.** below for detailed statistics).

Table 2. 2. Mean scores child temperament

Dimension	Mean Score (M=)	Standard Deviation (SD=)	Minimum	Maximum
Surgency	4.20	0.76	2.50	5.92
Negative Affectivity	4.21	0.99	2.42	6.25
Effortful Control	4.84	0.90	2.50	6.42

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Parental Moral Socialization

Data from the SOMA was analyzed to explore different approaches that parents use in teaching and reinforcing child moral behavior. Items on the SOMA were rated by parents on a scale of 1 to 5, where 1 represented ‘*very unlikely*’, 2 represented ‘*somewhat unlikely*’, 3 represented ‘*neither likely nor unlikely*’, 4 represented ‘*somewhat likely*’, and 5 represented ‘*very likely*’. Item scores from the SOMA were used to compute overall scores for various parental responses to moral situations. Parental responses to moral situations assessed by the SOMA included Behavior-Focused Positive, and Negative Scenarios (i.e. scenarios in which children’s positive or negative behaviors are emphasized by parents), Conditional Approval, Disgust/Teasing, Love Withdrawal, Neglect/Ignoring, Power Assertion, Victim-Focused Inductions (i.e. parental responses which emphasize the effect of the child’s actions on the victim), Teaching Reparation, Person-Focused Positive, and Negative Scenarios (i.e. scenarios in which children’s positive or negative personal qualities are emphasized by parents), Parent-

Table 2. 3. *Mean scores parental moral socialization*

Dimension	Mean Score (M=)	Standard Deviation (SD=)	Minimum	Maximum
Behavior-Focused Positive Scenario	4.70	0.37	3.63	5.00
Behavior-Focused Negative Scenario	3.93	0.56	2.25	5.00
Conditional Approval	3.29	0.98	1.25	4.88
Disgust/Teasing	1.44	0.51	1.00	3.00
Love Withdrawal	1.61	0.58	1.00	3.13
Neglect/Ignoring	1.47	0.36	1.00	2.75
Power Assertion	1.68	0.69	1.00	3.50
Victim-Focused Induction	4.21	0.56	2.80	5.00
Teaching Reparation	3.79	0.72	2.00	4.88
Person-Focused Positive Scenario	4.29	0.68	2.38	5.00
Person-Focused Negative Scenario	1.39	0.55	1.00	3.29
Parent-Focused Induction	2.29	0.75	1.00	3.88
Public Humiliation	1.46	0.49	1.00	2.75

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Focused Inductions (i.e. parental responses which emphasize the effect of the child's actions on the parent), and Public Humiliation (see **Table 2. 3.** for detailed statistics). Independent-samples t-tests were run to determine whether parental responses to moral situations varied by parent gender, and age. Overall, male and female parents' reported approaches to moral situations were similar, however, reported approaches differed significantly for parental use of conditional approval strategies ($t(37) = 2.90, p < 0.01$), person-focused negative scenarios ($t(37) = 2.46, p < 0.05$), and parent-focused inductions ($t(37) = 2.85, p < 0.01$). These approaches were endorsed more frequently by male parents, within the sample. Responses were not found to significantly differ by parental age. A one-way ANOVA was conducted to determine if parental responses to moral situations differed according to child temperament. Significant effects were found for child surgency, but not negative affectivity, or effortful control. There were significant effects of child surgency on parental use of victim-focused inductions, $F(10, 28) = 4.13, p = .011, \eta^2 = .92$, and person-focused negative scenarios, $F(10, 28) = 2.81, p = .045, \eta^2 = .85$.

Child Moral Behavior

Data from the MCQ was analyzed to examine children's moral behavior, and internalization of moral values. Items on the MCQ were rated by parents on a scale of 1 to 7, where 1 represented '*extremely untrue of your child*', 2 represented '*quite untrue of your child*', 3 represented '*slightly untrue of your child*', 4 represented '*neither true nor false of your child*', 5 represented '*slightly true of your child*', 6 represented '*quite true of your child*' and 7 represented '*extremely true of your child*'. Item scores from the MCQ were used to compute overall scores for aspects of children's moral behavior. Aspects of child moral behavior assessed by the MCQ included Guilt/Remorse, Concern over Good Feelings with Parent, Confession, Apology/Promise, Reparation/Amends, Concern over Others' Transgressions, Internalized

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Conduct, Empathy for Others’ Distress, Symbolic Representation of Wrongdoing, and Sensitivity Toward Flawed Objects (see **Table 2. 4.** below for detailed statistics).

Table 2. 4. *Mean scores child moral behavior*

Dimension	Mean Score (M=)	Standard Deviation (SD=)	Minimum	Maximum
Guilt/Remorse	4.49	0.88	2.76	6.24
Concern Over Good Feelings with Parent	4.67	0.96	2.38	6.25
Confession	4.44	1.19	1.86	6.57
Apology/Promise	5.08	1.11	2.67	6.83
Reparation/Amends	4.82	0.93	2.89	6.78
Concern Over Others’ Transgressions	4.88	1.07	2.43	7.00
Internalized Conduct	4.29	0.94	2.55	6.15
Empathy for Others’ Distress	5.34	0.69	3.69	6.85
Symbolic Representation of Wrongdoing	3.73	1.60	1.00	6.60
Sensitivity Toward Flawed Objects	4.56	0.92	2.57	6.43

Pearson correlations were conducted to examine relationships between child temperament, parental moral socialization, and child moral behavior. Significant correlations were found for all aspects of children’s moral affect and behavior, with the exception of child sensitivity toward flawed objects. As such, this aspect of child moral behavior was not explored further in analyses. See **Table 2.5** for a detailed summary of significant correlations between temperamental, moral socialization, and behavior variables.

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Table 2. 5. *Correlations between temperament, moral socialization and moral behavior*

	<i>r</i>	<i>p</i> <
Guilt/Remorse		
Behavior-Focused Negative Scenario	.28	.05
Negative Affectivity	.49	.001
Empathy Toward Other’s Distress	.54	.001
Concern Over Good Feelings with Parent	.52	.001
Concern Over Good Feelings with Parent		
Behavior-Focused Negative Scenario	.28	.05
Conditional Approval	.34	.05
Surgency	.30	.05
Effortful Control	.39	.01
Confession		
Person-Focused Negative Scenario	.44	.01
Apology/Promise		
Surgency	.32	.05
Person-Focused Negative Scenario	-.44	.01
Reparation/Amends		
Person-Focused Positive Scenario	.41	.01
Person-Focused Negative Scenario	-.36	.05
Concern Over Other’s Transgressions		
Person-Focused Positive Scenario	.37	.01
Internalized Conduct	.70	.001
Internalized Conduct		
Person-Focused Positive Scenario	.43	.01
Empathy Toward Other’s Distress		
Internalized Conduct	.43	.01
Guilt/Remorse	.54	.001
Negative Affectivity	.37	.05
Reparation/Amends	.50	.05
Person-Focused Positive Scenario	.28	.05
Symbolic Representation of Wrongdoing		
Behavior-Focused Positive Scenario	-.32	.05
Behavior-Focused Negative Scenario	.42	.01

Influence of Child Temperament and Parental Moral Socialization on Child Moral Behavior

Multiple regression analyses were conducted to determine which parental moral socialization practices best predicted children’s subsequent moral behavior (see **Tables 2.6 to 2. 14.** for more detailed information on regression models). In the prediction of child guilt/remorse, Models 1, 2 and 3 were found to be significant, $F(5, 33) = 3.195, p < .05, R^2 = .326, F(1, 32) = 6.395,$

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Table 2. 6. Linear model of predictors of guilt/remorse

	<i>b</i>	<i>SE B</i>	β	<i>P</i>
Step 1				
Constant	1.69	1.01		<i>p</i> = .104
Behavior-Focused Negative Scenario	0.23	0.24	.15	<i>p</i> = .345
Conditional Approval	0.05	0.17	.06	<i>p</i> = .754
Disgust/Teasing	0.20	0.29	.11	<i>p</i> = .501
Parent-Focused Induction	-0.30	0.24	-.25	<i>p</i> = .223
Concern Over Good Feelings with Parent	0.45	0.15	.49	<i>p</i> = .004
Step 2				
Constant	0.35	0.91		<i>p</i> = .706
Behavior-Focused Negative Scenario	0.04	0.21	.03	<i>p</i> = .840
Conditional Approval	-0.00	0.14	-.00	<i>p</i> = .982
Disgust/Teasing	0.28	0.24	.16	<i>p</i> = .261
Parent-Focused Induction	-0.24	0.20	-.21	<i>p</i> = .234
Concern Over Good Feelings with Parent	0.50	0.12	.54	<i>p</i> = .001
Negative Affectivity	0.43	0.11	.49	<i>p</i> = .001
Step 3				
Constant	-0.27	1.34		<i>p</i> = .844
Behavior-Focused Negative Scenario	0.09	0.34	.06	<i>p</i> = .787
Conditional Approval	0.00	0.15	-.01	<i>p</i> = .978
Disgust/Teasing	0.17	0.34	.10	<i>p</i> = .626
Parent-Focused Induction	-0.15	0.21	-.13	<i>p</i> = .471
Concern Over Good Feelings with Parent	0.43	0.15	.47	<i>p</i> = .006
Negative Affectivity	0.35	0.12	.40	<i>p</i> = .008
Victim-Focused Induction	-0.16	0.28	-.10	<i>p</i> = .580
Person-Focused Negative Scenario	0.16	0.29	.10	<i>p</i> = .588
Empathy Toward Others' Distress	0.28	0.21	.22	<i>p</i> = .192
Teach Reparation	-0.01	0.29	-.01	<i>p</i> = .961

Note. $R^2 = .33$ for Step 1; $\Delta R^2 = .22$ for Step 2 ($ps < .001$), change $\Delta R^2 = .05$ for Step 3 ($ps = .56$).

$p < .001$, $R^2 = .545$, and $F(4, 28) = 4.026$, $p < .01$, $R^2 = .590$, respectively. Only child concern over good feelings with their parent (Model 1, $p < .01$, Model 2, $p < .001$, Model 3, $p < .01$) and negative affectivity (Model 2, $p < 0.001$, Model 3, $p < .01$) added significantly to the prediction of child guilt/remorse (see **Table 2. 6.** for more detailed statistics). In the prediction of children's concern over good feelings Models 2 and 3 were found to be statistically significant, $F(2, 34) = 3.685$, $p < .05$, $R^2 = .302$ and $F(4, 30) = 2.868$, $p < .05$, $R^2 = .433$, respectively. No variables in Model 1 added significantly to the prediction of child concern over good feelings with their parent. In Models 2 and 3, child surgency (Model 2, $p < .05$) effortful control (Model 2 and 3, p

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< .05) and parental use of conditional approval strategies (Model 3, $p < .05$) added significantly to the prediction (see **Table 2. 7.** below for more detailed statistics). In the prediction of child

Table 2. 7. Linear model of predictors of child concern over good feelings with parent

	<i>b</i>	<i>SE B</i>	<i>B</i>	<i>P</i>
Step 1				
Constant	3.81	2.03		$p = .069$
Behavior-Focused Positive Scenario	-0.25	0.43	-.10	$p = .560$
Behavior-Focused Negative Scenario	0.52	0.28	.30	$p = .074$
Step 2				
Constant	-0.79	2.33		$p = .738$
Behavior-Focused Positive Scenario	0.08	0.40	.03	$p = .837$
Behavior-Focused Negative Scenario	0.34	0.27	.20	$p = .213$
Surgency	0.44	0.19	.35	$p = .024$
Effortful Control	0.40	0.16	.38	$p = .018$
Step 3				
Constant	3.53	3.10		$p = .265$
Behavior-Focused Positive Scenario	-0.48	0.48	-.19	$p = .327$
Behavior-Focused Negative Scenario	0.08	0.31	.05	$p = .795$
Surgency	0.25	0.20	.20	$p = .207$
Effortful Control	0.41	0.17	.38	$p = .021$
Conditional Approval	0.46	0.20	.47	$p = .030$
Love Withdrawal	0.06	0.28	.03	$p = .845$
Neglect/Ignoring	-0.89	0.53	-.33	$p = .106$
Parent-Focused Induction	-0.10	0.28	-.08	$p = .712$

Note. $R^2 = .09$ for Step 1; $\Delta R^2 = .22$ for Step 2 ($ps < .01$), change $\Delta R^2 = .13$ for Step 3 ($ps = .169$).

Table 2. 8. Linear model of predictors of child confession

	<i>b</i>	<i>SE B</i>	β	<i>P</i>
Step 1				
Constant	5.02	1.10		$p = .001$
Negative Affectivity	-0.11	0.23	-.09	$p = .641$
Guilt/Remorse	-0.03	0.26	-.02	$p = .917$
Step 2				
Constant	4.85	1.51		$p = .003$
Negative Affectivity	-0.07	0.21	-0.06	$p = .742$
Guilt/Remorse	-0.05	0.24	-.03	$p = .854$
Teaching Reparation	-0.09	0.28	-.06	$p = .741$
Person-Focused Positive Scenario	0.38	0.29	.22	$p = .197$
Person-Focused Negative Scenario	-0.85	0.35	-.39	$p = .022$

Note. $R^2 = .01$ for Step 1; $\Delta R^2 = .24$ for Step 2 ($ps < .05$).

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confession neither Model 1 nor 2 were found to be statistically significant, however, Model 2 did result in a significant change of the F-value, $p < 0.05$. In these models, only parental use of person-focused negative scenarios added significantly to the prediction, $p < 0.05$ (see **Table 2. 8.** above for more detailed statistics). In the prediction of child apology/promise, only Models 2 and 3 were found to be statistically significant, $F(3, 33) = 3.063$, $p < .05$, $R^2 = .317$ and $F(1, 32) = 3.493$, $p < .01$, $R^2 = .396$, respectively. Model 1 did not significantly predict child apology/promise. In these models, child guilt/remorse (Model 2), $p < .05$, parental use of person-focused negative scenarios (Models 2 and 3), $p < .01$, and child surgency (Model 3), $p < .05$, were found to contribute significantly to the prediction (see **Table 2. 9.** for more detailed statistics). In the prediction of child reparation/amends, only Model 2 was statistically significant, $F(3, 33) = 3.450$, $p < .05$, $R^2 = .343$. Model 1 did not significantly predict child reparation/amends. In this model, only parental use of person-focused negative scenarios added significantly to the prediction, $p < .05$ (see **Table 2. 10.** for more detailed statistics).

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Table 2. 9. *Linear model of predictors of child apology/promise*

	<i>b</i>	<i>SE B</i>	<i>B</i>	<i>P</i>
Step 1				
Constant	4.47	0.97		<i>p</i> = .001
Negative Affectivity	-0.33	0.20	-.30	<i>p</i> = .107
Guilt/Remorse	0.45	0.23	.36	<i>p</i> = .054
Step 2				
Constant	4.68	1.32		<i>p</i> = .001
Negative Affectivity	-0.30	0.19	-0.27	<i>p</i> = .117
Guilt/Remorse	0.44	0.21	.35	<i>p</i> = .044
Teaching Reparation	0.07	0.25	.05	<i>p</i> = .777
Person-Focused Positive Scenario	0.15	0.25	.09	<i>p</i> = .556
Person-Focused Negative Scenario	-0.89	0.31	-.44	<i>p</i> = .007
Step 3				
Constant	2.52	1.65		<i>p</i> = .135
Negative Affectivity	-0.07	0.21	-0.06	<i>p</i> = .738
Guilt/Remorse	0.37	0.21	.29	<i>p</i> = .083
Teaching Reparation	-0.18	0.24	-.01	<i>p</i> = .942
Person-Focused Positive Scenario	0.12	0.24	.08	<i>p</i> = .611
Person-Focused Negative Scenario	-0.94	0.30	-.46	<i>p</i> = .003
Surgency	.49	0.24	.34	<i>p</i> = .049

Note. $R^2 = .11$ for Step 1; $\Delta R^2 = .20$ for Step 2 ($ps < .05$); $\Delta R^2 = .08$ for Step 3 ($ps < .05$)

Table 2. 10. *Linear model of predictors of child reparation/amends*

	<i>b</i>	<i>SE B</i>	<i>B</i>	<i>P</i>
Step 1				
Constant	3.85	0.84		<i>p</i> = .001
Negative Affectivity	-0.41	0.18	-.04	<i>p</i> = .818
Guilt/Remorse	0.26	0.20	.24	<i>p</i> = .204
Step 2				
Constant	2.51	1.09		<i>p</i> = .028
Negative Affectivity	-0.06	0.16	-0.06	<i>p</i> = .721
Guilt/Remorse	0.17	0.18	.16	<i>p</i> = .335
Teaching Reparation	0.30	0.20	.23	<i>p</i> = .148
Person-Focused Positive Scenario	0.37	0.21	.27	<i>p</i> = .086
Person-Focused Negative Scenario	-0.68	0.26	-.40	<i>p</i> = .012

Note. $R^2 = .50$ for Step 1; $\Delta R^2 = .29$ for Step 2 ($ps < .01$)

In the prediction of child concern over other's transgressions, both Models 1 and 2 were significant, $F(3, 35) = 12.034, p < .001, R^2 = .508$ and $F(3, 32) = 8.792, p < .001, R^2 = .622$, respectively. In these models, child internalized conduct (Model 1, $p < .001$, Model 2, $p < .05$)

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and surgency (Model 2, $p < .05$) contributed significantly to the prediction (see **Table 2. 11.** for more detailed statistics). In the prediction of child internalized conduct, both Model 1 and 2 were

Table 2. 11. *Linear model of predictors of child concern over other’s transgressions*

	<i>b</i>	<i>SE B</i>	β	<i>P</i>
Step 1				
Constant	2.23	1.64		$p = .182$
Person-Focused Positive Scenario	0.21	0.22	.14	$p = .341$
Behavior-Focused Positive Scenario	-0.33	0.38	-.11	$p = .390$
Internalized Conduct	0.76	0.15	.67	$p = .001$
Step 2				
Constant	5.97	2.07		$p = .007$
Person-Focused Positive Scenario	0.17	0.21	0.11	$p = .426$
Behavior-Focused Positive Scenario	-0.64	0.37	-.22	$p = .094$
Internalized Conduct	0.90	0.15	.79	$p = .001$
Negative Affectivity	0.40	0.14	.04	$p = .784$
Surgency	-0.46	0.18	-.32	$p = .018$
Effortful Control	-0.19	0.13	-0.16	$p = .169$

Note. $R^2 = .51$ for Step 1; $\Delta R^2 = .12$ for Step 2 ($ps < .05$)

statistically significant, $F(1, 37) = 8.218, p < .01, R^2 = .182$ and $F(3, 34) = 2.788, p < .05, R^2 = .247$, respectively. In these models, only the inclusion of person-focused positive scenarios contributed significantly to the prediction, $p < .01$. (see **Table 2. 12.** for more detailed statistics). In the prediction of child empathy toward other’s distress, both Models 1 and 2 were shown to significantly predict child empathy toward other’s distress, $F(3, 35) = 3.931, p < .05, R^2 = .252$ and $F(4, 31) = 4.035, p < .01, R^2 = .477$, respectively. In these models, only the addition of guilt/remorse (Model 2) added significantly to the prediction, $p < .05$ (see **Table 2.13.** for more detailed statistics). In the prediction of child symbolic representation of other’s wrongdoing, both Models 1 and 2 were statistically significant, $F(5, 33) = 3.972, p < .01, R^2 = .376$ and $F(3, 30) = 2.454, p < .05, R^2 = .396$, respectively. In these models, only parental use of behavior-focused positive and negative scenarios were found to significantly contribute to the prediction, $p < .05$ and $p < .01$, respectively (see **Table 2. 14.** for detailed statistics).

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Table 2. 12. *Linear model of predictors of child internalized conduct*

	<i>b</i>	<i>SE B</i>	β	<i>P</i>
Step 1				
Constant	1.78	0.89		<i>p</i> = .053
Person-Focused Positive Scenario	0.59	0.21	.43	<i>p</i> = .007
Step 2				
Constant	0.25	1.88		<i>p</i> = .897
Person-Focused Positive Scenario	0.60	0.21	0.44	<i>p</i> = .007
Surgency	0.29	0.21	.24	<i>p</i> = .179
Negative Affectivity	-0.03	0.17	-0.03	<i>p</i> = .872
Effortful Control	0.08	0.16	.07	<i>p</i> = .640

Note. $R^2 = .18$ for Step 1; $\Delta R^2 = .07$ for Step 2 (*ps* = .413)

Table 2. 13. *Linear model of predictors of child empathy toward other's distress*

	<i>b</i>	<i>SE B</i>	<i>B</i>	<i>P</i>
Step 1				
Constant	3.33	0.70		<i>p</i> = .001
Person-Focused Positive Scenario	0.08	0.17	.08	<i>p</i> = .634
Reparation/Amends	0.31	0.19	.42	<i>p</i> = .104
Internalized Conduct	0.04	0.19	.05	<i>p</i> = .844
Step 2				
Constant	2.28	0.88		<i>p</i> = .015
Person-Focused Positive Scenario	-0.04	0.16	-.04	<i>p</i> = .778
Reparation/Amends	0.19	0.18	.25	<i>p</i> = .315
Internalized Conduct	0.17	0.19	.23	<i>p</i> = .387
Negative Affectivity	0.13	0.11	.18	<i>p</i> = .249
Guilt/Remorse	0.27	0.13	.34	<i>p</i> = .045
Victim-Focused Induction	-0.14	0.24	-.11	<i>p</i> = .560
Teaching Reparation	0.12	0.19	.13	<i>p</i> = .518

Note. $R^2 = .25$ for Step 1; $\Delta R^2 = .23$ for Step 2 (*ps* < .05)

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Table 2. 14. *Linear model of predictors of child symbolic representation of wrongdoing*

	<i>b</i>	<i>SE B</i>	β	<i>P</i>
Step 1				
Constant	6.26	4.09		<i>p</i> = .135
Behavior-Focused Positive Scenario	-1.78	0.71	-.41	<i>p</i> = .017
Behavior-Focused Negative Scenario	1.57	0.47	.55	<i>p</i> = .002
Conditional Approval	-0.19	0.26	-.12	<i>p</i> = .467
Love Withdrawal	0.07	0.45	.03	<i>p</i> = .878
Neglect/Ignoring	0.12	0.82	.03	<i>p</i> = .885
Step 2				
Constant	5.66	4.43		<i>p</i> = .212
Behavior-Focused Positive Scenario	-1.75	0.82	-.40	<i>p</i> = .043
Behavior-Focused Negative Scenario	1.54	0.52	.54	<i>p</i> = .006
Conditional Approval	-0.21	0.28	-.13	<i>p</i> = .447
Love Withdrawal	0.27	0.52	.10	<i>p</i> = .610
Neglect/Ignoring	0.18	0.89	.04	<i>p</i> = .842
Negative Affectivity	-0.10	0.30	-.06	<i>p</i> = .745
Guilt/Remorse	0.24	0.31	.13	<i>p</i> = .444
Person-Focused Negative Scenario	-0.33	0.53	-.11	<i>p</i> = .538
Step 3				
Constant	7.43	4.71		<i>p</i> = .126
Behavior-Focused Positive Scenario	-1.88	0.86	-.44	<i>p</i> = .037
Behavior-Focused Negative Scenario	1.67	0.53	.58	<i>p</i> = .004
Conditional Approval	-0.21	0.29	-.13	<i>p</i> = .468
Love Withdrawal	0.13	0.53	.05	<i>p</i> = .803
Neglect/Ignoring	0.22	0.90	.05	<i>p</i> = .806
Negative Affectivity	-0.11	0.31	-.07	<i>p</i> = .731
Guilt/Remorse	0.39	0.34	.22	<i>p</i> = .258
Person-Focused Negative Scenario	-0.63	0.59	-.22	<i>p</i> = .294
Concern Over Other's Transgressions	-0.30	0.37	-.20	<i>p</i> = .417
Internalized Conduct	-0.05	0.38	-.03	<i>p</i> = .892

Note. $R^2 = .38$ for Step 1; $\Delta R^2 = .02$ for Step 2 ($ps = .805$); $\Delta R^2 = .03$ for Step 3 ($ps = .494$)

Discussion

Contribution of Temperament

Researchers have documented the relation of child temperament to parenting and child moral behaviors (Augustine & Stifter, 2014), and proposed that child temperament affects the child's ability to attend to parental messages about moral situations (Brugman et al., 2013; Smetana et al., 2012). As such, children of different temperaments may respond differently to parental efforts to socialize moral values, and parents may adjust their approach to better appeal

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to their child's temperament. Although a lack of consensus exists in defining components of temperament, surgency, effortful control, and negative affectivity have been dimensions commonly discussed in research (Augustine & Stifter, 2014; Smetana et al., 2012; Stifter et al., 2009). Interestingly, parents in the present study only reported differing responses to children higher in surgency, and not negative affectivity or effortful control. Parents of surgent children reported increased use of victim-focused inductions, and person-focused negative scenarios, in comparison to child of other temperaments. Though this is relatively consistent with findings by Augustine and Stifter (2014), that effective types of gentle discipline differed for surgent, and inhibited children, these results differ in that parents of surgent children reported increased use of inductions, whereas parental reasoning was found to be effective for inhibited, and not surgent children in the study conducted by Augustine and Stifter (2014).

The present study also found a relationship between child temperament and subsequent moral behaviors. A significant effect was found for child surgency and display of reparation/amends. A linear relationship was also found between child surgency and child apology/promise, indicating that as child surgency increased, child display of apology/promise also increased. As suggested by Smetana et al. (2012) children rated higher in surgency may engage in more moral transgressions, receive more reprimands, and be prompted to apologize more frequently, than peers of other temperaments. A linear relationship was found between child negative affectivity and child display of guilt/remorse. Children who experience more affective discomfort and negative emotion may be more likely to experience increased guilt or remorse following moral transgressions than peers. Effects of child effortful control were found for child display of confession, apology/promise, reparation/amends, and concern over good feelings with their parent. A linear relationship was also found for child effortful control, and

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child display of concern over good feelings with their parent. Taken together, these results indicate that children higher in effortful control may experience more concern over relationship to parents, following moral transgressions, and be more motivated to take actions (i.e. apologize, confess, or make reparations) to repair the relationship. This has also been posited by other researchers (Smetana et al., 2012; Stifter et al., 2009) who have suggested effortful control has been linked to a child's more fearful, and less joyous behavior, but also increased social competence. Such children have also been characterized as being more punishment-sensitive, and avoidant of threatening stimuli (Augustine & Stifter, 2014; Stifter et al., 2009), and may, therefore, experience affective discomfort related to conflicts with parents and attempt to alleviate this distress by repairing the relationship. Children higher in effortful control may also be better equipped to attend to parental messages related to appropriate moral behavior (Smetana et al., 2012; Stifter et al., 2009), and may, consequently, have better ability to make amends or reparations with parents. These findings support the differential effect of temperament on children's subsequent behavior, as has been attested by many researchers.

Temperament and Parental Moral Socialization in the Prediction of Child Moral Behavior.

Moral development describes the process through which children acquire concepts of right and wrong, and learn to regulate their behavior in a socially-appropriate manner (Termini and Golden, 2007). Children's moral development emerges through children's social exchanges with others, and children's experience of the consequences of their actions, and other's responses to the child's behavior (Smetana et al., 2012). Contemporary researchers have suggested that moral development is comprised of moral cognition, moral affect and moral behavior (Brugman, Keller and Sokol, 2013; Stifter, Cipriano, Conway, & Kelleher, 2009; Termini & Golden, 2007). The emergence of a moral self-concept is also seen as another important component of children's

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moral development (Brugman et al., 2013; Kochanska, Koenig, Barry, Kim, & Yoon, 2010).

Components of child moral behavior examined in the present study included guilt/remorse, concern over good feelings with their parent, apology/promise, reparation/amends, concern over other's transgression, internalized conduct, empathy toward other's distress, and symbolic representation of wrongdoing.

The present study found significant relationships between child temperament, parental moral socialization practices, and all components of children's moral behavior considered. Child concern over good feelings with their parent was correlated with parental use of behavior-focused negative scenarios, child negative affectivity, empathy toward other's distress and concern over good feelings with their parent. Only child concern over good feelings with their parent and negative affectivity, however, were predictive of child display of guilt/remorse. Children higher in negative affectivity may be more likely to experience affective discomfort following a moral transgression, particularly when parents emphasize children's negative behaviors in responding to transgressions. It is also likely that children who experience greater concern for the effect of their actions on others, or concern over good feelings with their parent following a moral transgression, would experience guilt or shame related to their behavior. Interestingly, child guilt/remorse was found to be predictive of child empathy toward other's distress. This may indicate that children with better developed perspective-taking abilities, who are cognizant of the effect of their negative actions on others, may experience greater guilt or remorse following moral transgressions. This is consistent with Hoffman's emotion-attribution theory, which postulates that children experience guilt because they feel the other person's pain and feel responsible for causing the pain (Kochanska et al., 2010; Termini and Golden, 2007). These findings, taken together, indicate that it is more likely that children within the sample

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experienced increased levels of guilt or shame following moral transgressions as a result of concern over the effect of their actions on others, or damage to the relationship, rather than parental shaming. These results may also provide some evidence for children's internalization of moral values, given that children experienced guilt or shame, even in absence of direct shame-inducing parental behaviors (Kochanska et. al., 2010). Other factors considered, such as parental use of conditional approval, disgust/teasing, and parent-focused inductions, did not add significantly to the models. Kochanska et. al. (2010) have posited, children who comply with rules even without supervision, who feel empathic concern toward others' distress, and who feel discomfort when they commit transgressions typically show 'broadly ranging aspects of positive developmental adaptation'. This result is also of importance, given that researchers have shown that children exposed to higher levels of discourse about other's mental states (i.e., needs, intention, and desires) engage in more empathy-related behavior than do other children (Garner, 2012). Conversely, when emotions and morals are not discussed in parent-child conversations, children elicited more antisocial themes (Termini and Golden, 2007). Children who exhibit increased aggressiveness may experience less empathy toward other's and have difficulty making connections between their actions and their effect on others (Garner, 2012).

Child concern over good feelings with their parent was predicted by child effortful control and parental use of conditional-approval strategies. Child surgency was also found to be predictive of child concern over good feelings with their parent (Model 2) but ceased to be of significance when further variables were considered in the prediction. Both groups of children may be likely to experience concern over good feelings with their parents following moral transgressions, particularly when parents communicate negative reactions to their child following such transgressions (i.e. frustration, disappointment, disgust, displeasure). The present study

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found that parental emphasis of children's negative personal qualities (i.e. person-focused negative scenario) was predictive of child confession, reparation/amends and apology/promise. Apology/promise was also predicted by child guilt/remorse in Model 2 only, and child surgency. Given what has been described by previous researchers (Smetana et. al., 2012), that children higher in surgency tend to engage in more moral transgressions, and receive more rules and reprimands from parents, it is also likely that surgent children are prompted more frequently by parents to apologize. Particularly when parental responses emphasize children's negative personal qualities, children may experience more guilt or remorse and be encouraged to apologize, or make reparations for transgressions.

Parental use of person-focused positive scenarios and child internalized conduct were both significantly correlated with child concern over other's transgressions. Only child surgency and internalized conduct, however, were predictive of child concern over other's transgressions, in the present study. These results are interesting, as they may represent different means by which children internalize sense of values, and experience concern, or are motivated to correct other's transgressions (Stifter et. al., 2009). Given that children higher in surgency engage in more experiential learning about moral transgressions, and receive more reprimands from parents, children higher in surgency may have explicit knowledge of parental language used to respond to moral transgressions (Bryan and Dix, 2009; Smetana et al., 2012). Having this knowledge, children higher in surgency may perhaps mimic the language and actions of a parent in these situations and display more agency in correcting other's transgressions. This explanation is likely, given that the present study also found that parental emphasis of children's positive and negative behaviors (i.e. behavior-focused positive and negative scenarios) was predictive of child symbolic representation of wrongdoing. This would be consistent with Bandura's (1977) social

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learning theory, which posits that people learn from each other by observation, imitation, and modeling. Surgent children may also experience concern over other's transgressions due to having received corrections for similar actions or transgressions, or perhaps even frustration if they perceive that they have been reprimanded for a transgression and peers have not. This is consistent with findings by Smetana et. al. (2012), that children higher in surgency rated transgressions as generalizably wrong, and more deserving of punishment, reflecting greater experiences with, and parental responses to, moral transgressions. Children who have internalized parental messages about appropriate behavior, and have perhaps developed a sense of moral self (Kochanska et. al., 2010), may similarly attempt to communicate appropriate behaviors to other children. Such children may perhaps perceive this correction as a prosocial behavior, with the intention of preventing reprimand, and, thereby, distress to other children (Garner, 2012). In a study conducted by Garner (2012), maternal love withdrawal was a positive predictor of preschoolers' empathy responses and motives of concern. As such, children may also experience concern for other's transgressions if they experience greater empathy for others, or affective discomfort from reprimand or punishment to others. This would assume that surgent children do not also internalize these message, and engage in moral behaviors in the absence of parental input due to internalized moral conduct, as has been posited by previous researchers (Smetana et. al., 2012). This explanation is consistent previous research that has shown that children higher in moral competence may be more accepting of their own emotions and are effective in responding to others, whereas children with externalizing problems are more likely to misinterpret the moral transgressions of a friend and intervene on behalf of a friend (Garner, 2012).

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Internalization of Moral Values

Parental use of person-focused positive scenarios was found, in the present study, to be predictive of child internalized conduct. This suggests that children internalize expectations for appropriate, or desirable, behavior through parental emphasis of children's positive personal qualities. Parental emphasis of children's positive qualities may promote the development of a moral sense of self, as children may derive a sense of pride or pleasure in receiving positive attention from parents. As suggested by Smetana et. al. (2012), children may be motivated to adhere to moral rules and expectations, even in the absence of parental input, due to having internalized a view of moral transgressions as 'wrong'. These results are contrary to what Kohlberg (1981) proposed, as Kohlberg suggested that children between 4 and 10 years of age continue to be motivated by reward, and punishment-obedience, rather than cooperation and the view of oneself as moral, or good. Kohlberg (1981) proposed that these characteristics developed later in childhood, between ages 10 and 13. Children in the present study sample, however, demonstrated consideration of other's in their response to moral transgressions, particularly when children had established a view of themselves as moral or 'good'. Children in the present study sample appeared to experience more affective discomfort when their actions were not compatible with this 'moral sense of self', suggesting that children may form a view of themselves as moral much earlier than what Kohlberg (1981) would have initially suggested. This finding is consistent with what contemporary researchers have proposed, that children engage in prosocial or moral behavior out of concern for others and a desire to do what they consider to be right, rather than out of obedience to authority or fear of punishment. This finding is of particular importance, as research has also suggested that parental contributions to moral

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conversations with children may facilitate and reinforce children's prosocial self-evaluations and sense of moral agency (Recchia, Wainryb, Bourne, & Pasupathi, 2014).

Limitations and Future Directions

Limitations of the present study included a relatively small sample size ($N = 39$), and homogeneity of study participants. Participants were all Caucasian, and were recruited from Atlantic Canadian provinces. Most participants in the present study, furthermore, were female caregivers. As such, the present study is limited in its ability to generalize the findings to a broader, and more diverse population. A future study would include a more diverse sample of caregivers and children. This study also included relatively few children with diagnoses and exceptionalities. These children, in the present study, were included in whole-sample analyses, and no additional analyses were conducted, given the small number of children, to examine whether parental responses differed for these children. As such, results of the present study may not generalize to children, and caregivers of children, with exceptionalities. A future study would examine this population specifically to explore differences in parental responses.

Another limitation of the present study is that all data was collected through parental-report, and did not collect responses from children. This decision was largely made due to the age of children considered in the study (i.e. 3 to 8 years of age). Responses were also only collected from one caregiver for each child. It is possible that parental responses may have differed depending on respondent gender, and relationship to the child. Responses may also have reflected potential caregiver bias, as responses were based on parental perceptions of their disciplinary and teaching strategies. It is possible that caregivers may have described their reactions to children's moral transgressions more positively than they would have reacted in a real situation. The caregiver sample may have also been homogenous in that caregivers who

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perceived their parenting methods as being more positive may have been more likely to participate in this study. Similarly, caregivers who perceived their parenting methods as being non-optimal may have been motivated to rate their responses to their child's behavior more positively. Future studies may wish to explore different methodologies (i.e. observation, experimental situation) to provide a more comprehensive understanding of the relationship between child temperament, parental moral socialization, and child moral behavior.

Participation in the present study occurred online, which may have limited the sample to individuals of potentially higher socio-economic status, who would have readily had access to a computer. Future research should attempt to recruit participants using a method which encourages individuals of diverse backgrounds to participate. The present study also used a cross-sectional design, and did not consider whether parental responses to children's moral transgressions changed over time. The present study also did not explore whether parental responses could be used to predict children's later moral behavior (i.e. in later grades). It is possible that parental responses to children's moral transgressions changes in relation to child age, and stage of development (e.g. parents may respond differently to transgressions initiated by a toddler or an adolescent). Future studies may wish to examine longitudinal validity of parental responses in predicting children's moral behavior.

Implications

Childhood can be viewed as a critical period for the development of a cooperative moral orientation, and prosocial behavior. It is also, conversely, a period of time in which children may develop, potentially serious, antisocial behaviors. Persistence of these behaviors can have important implications for children's development, and long-term outcomes.

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Parents/caregivers. The current study has several implications for parents and caregivers. First, the current study provided evidence that parental use of moral socialization strategies had positive implications for areas of children's moral behavior, and moral affect. These findings indicate that parents and caregivers should be particularly cognizant of the way they interact with children, and approach moral situations or transgressions. The current study has practical applications for parents and caregivers, who may inform their disciplinary and teaching practices to better promote a cooperative, and prosocial moral orientation in their children. Informing caregivers of parenting approaches which are supported by research also has the potential to reduce variability in how adults respond to children, and ensure that children receive consistent messages related to appropriate, or desirable, behaviors. The current study also provides indications which may help parents to better understand the influence of their child's temperament on their moral development. This understanding may better enable parents to interpret, and respond accordingly to their child's moral behaviors.

Teachers/child-care service providers. Children's prosocial, and conversely, antisocial behaviors have increasingly become a topic of interest within educational systems. The applicability of the study results, arguably, extend toward all individuals who interact with children (i.e. day-care service providers, and teachers), particularly when confronted with a moral situation, or transgression. Teachers and child-care providers are often tasked with encouraging children's cooperative, and prosocial behaviors and equipping children with social knowledge and awareness. Teachers of younger children often confer messages to children about appropriate, and desirable behaviors through social curriculum, and through daily interactions with students. Like parents and primary caregivers, teachers and child-care service providers are also likely to benefit from knowledge of research-supported approaches to foster a cooperative,

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and prosocial moral orientation. Teachers may also be better able to respond to child behavior when equipped with an understanding of how child temperament can impact the effectiveness of different moral socialization strategies. This knowledge may allow teachers to better adapt their responses to meet the specific emotional, and behavioral needs of each student in their classroom.

Educational policy makers. The current study also has implications for educational policy makers. Policy makers must look to the scientific literature to inform school, and early childhood curriculums. Particularly in pre-school and early school years, children's social curriculum is often emphasized to provide children with an understanding of the world, others, and themselves. Early teaching and encouragement of children's prosocial, or moral, behavior has potential to provide a lasting impact on children's social development, and long-term outcomes. Previous research has demonstrated that the emergence of children's moral understanding emerges in early years (i.e. around 2.5 years old) even in the absence of input from an authority figure (Smetana et al., 2012). Contributions of adult attachment figures are essential to moral conversations with children, as these may serve to facilitate and reinforce the development of a child's moral sense of self, and sense of moral agency (Recchia, Wainryb, Bourne, & Pasupathi, 2014). Particularly when faced with increasing challenges and behavioral-needs within school, it is essential to provide sound guidance and direction within jurisdictional curriculums.

Child development research. The current study provided preliminary evidence that child temperament and parental moral socialization strategies can be used to predict child moral behavior. At present, however, little research has been conducted to examine this relationship more thoroughly. Future research needs to explore the predictive value of these factors in

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determining children's long-term outcomes, and to explore the practical applications of this prediction in other caregiver, and child populations (i.e. ethnic minorities, low socio-economic families, children with exceptionalities).

School psychologists. The current study has several implications for school psychologists. Though school psychologists primarily interact with students, they frequently provide consultation to parents and caregivers to support them in meeting their child's unique psychological, emotional, and behavioral needs. In some jurisdictions, school psychologists take on a more active role in providing parenting support and education. In New Brunswick, parents often seek out child and youth services to obtain parenting support, however, it is not uncommon, also, that parental involvement and support becomes a necessary component in providing effective treatment of children's complex issues. Providing parents with education about how to respond effectively to children's moral transgressions, and promote moral behavior, may be helpful in encouraging child behaviors which will have lasting social benefit and preventing children from developing more serious antisocial behaviors. School psychologists should also be educated about effective parenting approaches and should ask parents, with behavioral concerns for their child, how they respond to their child's behaviors.

Conclusion

Socialization has long been a focus of research, as theorists interested in children's internalization of values (Grusec & Davidov, 2010; Kochanska et al., 2010a) examined parental use of discipline, reasoning, and teaching strategies, and their role in influencing child behavior (Grusec & Davidov, 2010). Current research has generated interest in identifying how parents talk to their children about social and emotional problems, with the assumption that such discussions support children's development in these areas (Garner, 2012; Grusec & Davidov,

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2010). The present study sought to examine parental socialization and child temperament influences in the prediction of children's subsequent moral behaviors. Given that childhood can be seen as a sensitive period for the development of a prosocial moral orientation, it is important to understand the mechanisms through which children's sense of moral values emerges. The current study provides support for the consideration of child temperament and parental moral socialization in predicting young children's subsequent moral affect and behavior. Results indicated that child temperament and parental moral socialization efforts differentially contribute, and are of value in prediction of children's subsequent moral behaviors. Results also provide promising evidence for children's internalization of moral values, or development of a 'moral sense of self', as children were found to demonstrate some aspects of moral affect and behavior, even in absence of parental input. The findings of this study are of particular importance as they indicate that moral transgressions may provide teaching opportunities, by which parents and caregivers can instill in children sense of moral values, and the view of oneself as moral. Ultimately, parental responses to children's transgressions and behaviors may be used to foster children's moral development. Given that children's temperament, as indicated by results, can have an important role in the moral socialization process, parents and caregivers should be encouraged to consider this in responding to their child's behavior. The findings of the current study may have practical applications for parents/caregivers, and other adults who interact with children, and may be used to inform parental/caregiver practices in responding to children's behavior in moral situations. These findings may also have practical utility for school psychologists to educate parents about effective strategies to foster children's development of a prosocial moral orientation, and support parents in responding to their child's behavior in moral situations.

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Appendix A.

Demographic Questionnaire

Demographics

Please respond to the following demographics items. These will be used to describe the group of people who participate in this study. In no way will you be personally identifiable in communication of study findings.

Age:

- Below 24 years of age 24 to 35 years of age
 35 to 54 years of age Above 54 years of age

Gender: Please use your own words and/or select all that apply from list below:

- Male Female Other (please specify above)
 Transgender Non-binary Prefer not to say

Ethnicity: Please use your own words and/or select all that apply from list below:

- African-American Caucasian Hispanic
 Native-American/Aboriginal Asian Indian
 Other (please specify above) Middle-Eastern

Marital Status: Please use your own words and/or select all that apply from list below:

- Single Married/Common-law Other (please specify above)
 Prefer not to say Divorced/Separated

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Education Level: Please use your own words and/or select all that apply from list below:

- | | | |
|--|---|--|
| <input type="checkbox"/> Secondary School
(High School) | <input type="checkbox"/> College/University | <input type="checkbox"/> Graduate Degree |
| <input type="checkbox"/> Doctoral Degree
(Ph.D.) | <input type="checkbox"/> Prefer not to say | <input type="checkbox"/> Other (please
specify above) |

Household Income: Please select the option that best describes your household annual income:

- | | | |
|---|---|---|
| <input type="checkbox"/> Below \$10,000 | <input type="checkbox"/> \$50,000 to \$80,000 | <input type="checkbox"/> More than
\$150,000 |
| <input type="checkbox"/> \$10,000 to \$25,000 | <input type="checkbox"/> \$80,000 to \$100,000 | |
| <input type="checkbox"/> \$25,000 to \$50,000 | <input type="checkbox"/> \$100,000 to \$150,000 | |

Relationship to Child: Please use your own words and/or select all that apply from list below:

- | | | |
|---|--|---|
| <input type="checkbox"/> Biological parent | <input type="checkbox"/> Adoptive parent | <input type="checkbox"/> Step-parent |
| <input type="checkbox"/> Grand-parent
(guardian) | <input type="checkbox"/> Foster-parent | <input type="checkbox"/> Guardian (other) |

Child Age: Please specify in years: _____

Child Gender: Please use your own words and/or select all that apply from list below:

- | | | |
|--------------------------------------|-------------------------------------|---|
| <input type="checkbox"/> Male | <input type="checkbox"/> Female | <input type="checkbox"/> Prefer not to say |
| <input type="checkbox"/> Transgender | <input type="checkbox"/> Non-binary | <input type="checkbox"/> Other (please specify above) |

Does your child have any previous diagnoses (i.e., ADHD, oppositional defiant disorder)? If yes, please detail.

Thank you for your participation.