

**THE ROLE OF GENDER STEREOTYPES IN MATERNAL
ATTITUDES AND REACTIONS TO CHILDREN'S PROSOCIAL,
NONSOCIAL, AND ANTISOCIAL BEHAVIOURS**

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Abstract

The current study investigated the role of mothers' gender role attitudes in their emotional and behavioural responses to their children's physical aggression, shyness, affiliative prosocial and agentic prosocial behaviours. The sample included 78 mothers of preschool- aged children (43 girls, 35 boys; 27-72 mo.; $M_{\text{age}} = 47.44$ mo., $SD = 11.00$ mo.). Mothers provided reports of their gender-role attitudes and rated their reactions to hypothetical vignettes depicting the four child behaviours. Results indicated that mothers with more traditional gender role attitudes responded with fewer positive emotions and more immediate intervention to shyness in boys than did egalitarian mothers. Mothers also anticipated more problems for aggressive boys than girls. Results are discussed in terms of the social acceptability and potential implications of these behaviours in boys and girls.

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*The Role of Gender Stereotypes in Maternal Attitudes and Reactions to
Children's Prosocial, Nonsocial, and Antisocial Behaviours*

Gender is undoubtedly an integral part of a person's self-concept. Whether one is born male or female has an impact on all aspects of life – it affects the opportunities one will be given and the roles one will be expected to fulfill in the home, the workplace, and the larger society. Though the specific nature of the roles assigned to men and women may vary according to culture, ethnicity, and social class, they are integral in determining the amount of power, status, and resources one is afforded within a society (Kimmel, 2000).

Historically, all differences between men and women were referred to as 'sex differences' (Brannon, 2008). Many researchers objected to this label, however, arguing that the term implies a biological basis for such differences. The term 'gender' was introduced (Unger, 1979) as an alternative, used to denote differences that may be socially, rather than biologically, prescribed. Generally, the term 'sex' is used to denote the biological differences between males and females, whereas 'gender' is a social label, referring to the traits and behaviours regarded by one's culture as appropriate to men and women. However, the distinction has become blurred by a lack of consistent usage in psychological literature, and many researchers now use the terms 'sex' and 'gender' interchangeably. This thesis will, as much as possible, refrain from conflating these two concepts.

There are several theories that account for the development of children's understanding of gender. Although these theories differ in their emphasis on social, cognitive, and biological factors, they all recognize the important role that parents play in

children's gender development. By modeling gender-specific behaviour and encouraging different behaviours for boys and girls, parents send important messages to their children about appropriate gender roles. Parents' own beliefs about appropriate roles for men and women in the home, workplace, and larger society may have an impact on the types of messages they send their children.

Little is known about the etiology of gender differences in the frequencies and outcomes of children's social behaviours. One possibility is that from an early age, children learn from their parents that certain types of social behaviours are more appropriate for boys and others for girls. Parents may convey this message to their children through their differential responses to behaviours depending on whether they are exhibited by boys or girls. The degree to which parents engage in such differential responding may, in turn, be dependent on their own gender attitudes.

To date, the links between parental attitudes towards gender and their beliefs and reactions towards the social behaviours of their young children remains under-explored. As such, the primary goal of this proposed research is to examine whether mothers' gender-role attitudes are related to their attitudes and hypothetical responses to the shy, aggressive, and prosocial behaviours of their sons and daughters.

The Role of Parents in Children's Gender Development

From an early age, children can reliably identify their own gender and can label others as male or female on the basis of clothing, hairstyle, and other external characteristics (Golombok & Hines, 2002). Young children are also aware that different toys, games, and activities are appropriate for boys and girls. Children's preference for toys stereotypically associated with their own gender is evident by 3 years, and can even

be detected in children as young as 1 year of age (Golombok & Hines, 2002; Snow, Jacklin, & Maccoby, 1983). These milestones mark important steps along the way to development of children's gender identity, and eventually the assumption of adult gender roles.

Most contemporary theories acknowledge the joint role of biological, cognitive, and social influences on children's gender development (Leaper & Friedman, 2007). Parents, teachers, and peers, as well as the media, have all been identified as important agents in the socialization of gender (Leaper & Friedman, 2007). Although researchers in the field are increasingly interested in the role of peers, and moving towards a view of children as active agents in their own socialization, they also continue to recognize parents as an important influence on the development of gender roles (Kane, 2006; Maccoby 1998).

Social learning theory. Social learning theory (Bandura, 1977; Mischel, 1966) holds that parents contribute to their children's gender role development in two important ways: first by acting as models of appropriate gender-typed behaviour; and second by actively reinforcing certain behaviours and discouraging others (Brannon, 2008; Golombok & Hines, 2002). This theory builds upon the principles of *operant conditioning* (Ferster & Skinner, 1957), which holds that behaviours that are rewarded will tend to be strengthened, whereas those that are punished will less likely be repeated. By rewarding and punishing boys and girls for different kinds of behaviours (e.g., praising a daughter for her interest in ballet; discouraging a boy from playing with dolls), parents therefore shape the kinds of activities their sons and daughters are likely to display in the future.

Scholars of gender role development recognize that parents do not always enforce conformity to traditional gender roles, nor do they consistently treat their sons and daughters differently. In fact, results from historical meta-analyses by Maccoby and Jacklin (1974) and then later by Lytton and Romney (1991) indicated little evidence for differential reinforcement of sons and daughters in many contexts. However, as a whole, there is strong evidence for the gendered treatment of children in several domains, beginning at birth. In an early study of parents' perceptions of male and female infants, mothers and fathers described their male newborns as 'strong,' 'hardy,' and 'alert,' and their female newborns as 'soft,' and 'delicate,' though there were few differences in the infants' actual characteristics (Rubin, Provenzano & Luria, 1974). More recent research suggests that although the difference in parents' perceptions of boys and girls seems less pronounced today, parents continue to hold gendered expectations of their children from a young age (Blakemore, Berenbaum, & Liben, 2009). For example, parents continue to see boys as stronger, bigger, more athletic, and less emotional than girls (Karraker, Vogel, & Lake, 1995; Teichner, Ames, & Kerig, 1997), and expect them to perform more competently on physical tasks, even in infancy (Mondschein, Adolph, & Tamis-LeMonda, 2000).

The most definitive evidence for differential reinforcement of boys and girls comes from studies of gender-typed play. Parents select different toys and encourage different play activities for their boys and girls (Lytton & Romney, 1991). For example, parents have been found to select gender-typed toys (e.g., tools, vehicles and sports equipment for boys; dolls and toy food for girls) within months of a child's birth, well before the child expresses toy preferences for him/herself. Fagot (1978) noted that

parents respond positively to their daughters' play with dolls, but give more negative responses and fewer positive ones when their sons engage in such behaviour. Conversely, parents encourage activities involving object manipulation (e.g., block play) with their sons, but not their daughters, and respond more negatively to their daughters' large motor activities (e.g., running, jumping, and climbing) than that of their sons (Fagot, 1978). Differences also emerge in parents' assignment of household chores to their children: boys tend to be assigned tasks related to maintenance, such as painting or mowing the lawn; whereas girls are given domestic chores such as cooking and doing the laundry (Basow, 1992).

The empirical evidence for the role of parental modeling in the development of gender-typed behaviours is less convincing. In their review, Maccoby and Jacklin (1974) reported that boys did not closely resemble their fathers, nor girls their mothers, as would be expected if children primarily imitated their same-sex parent as classical social learning theory predicts. In addition, research results have not consistently shown that children prefer to imitate or even spend more time with their same-sex parent (Maccoby, 1998). These results seem to indicate that parents are not the only role models for gender-typed behaviour. Rather, researchers now believe that children gather information about men and women *in general* by observing a wide variety of models, then choose which behaviours to imitate (Golombok & Hines, 2002).

Cognitive theories. Beginning in the 1960s, researchers became increasingly interested in children's role in their own socialization. Children, they realized, are not simply passive recipients of parental conditioning, but rather cognitive beings who actively seek out information about gender.

According to such cognitive theories (e.g., Kohlberg, 1966), gender development progresses through stages, much like other areas of cognitive development. Children first learn to label themselves and others as male or female. They then seek out information about these categories, expanding their ideas of what it is to be a boy or a girl by observing men and women in their environments. A second stage of gender development occurs when children master *gender stability*, the understanding that boys will grow up to be men and girls, women. In the third and final stage of gender development, children learn that gender is a stable characteristic that does not change over time, regardless of surface-level changes (e.g., a change in clothing or hairstyle). This *gender constancy* seems to coincide with children's ability to understand that other qualities also remain constant despite physical changes. Once children develop stable gender concepts, argued Kohlberg, they are motivated to act in ways consistent with these concepts.

There is evidence to suggest that the ability to label gender affects children's gender-typed behaviour. Although children demonstrate such behaviours (e.g., toy preference) before they are able to label gender accurately, higher levels of gender understanding seem to amplify the tendency to engage preferentially in gender-typed behaviours. For example, Frey and Ruble (1992) found that when presented with the choice between a highly attractive girl's toy and an unattractive boy's toy, boys who could accurately label gender chose to play with the unattractive-yet-gender-consistent toy.

In a more recent study, Warin (2000) reported that 4-6 year-old children with higher levels of gender understanding were more reluctant to dress up in opposite-sex clothing when asked to do so by a researcher. In a similar vein, boys who have achieved

higher levels of gender understanding pay considerably more attention to same-sex models (Slaby & Frey, 1975) and tend to watch more male characters and 'masculine' programs (e.g., sporting events) on television (Luecke-Aleksa, Anderson, Collins, & Schmitt, 1995). This is consistent with the idea that children expand their own gender self-concepts by actively seeking out information about their own gender. Though cognitive theories place greater emphasis on the child as an agent of self-socialization, they acknowledge that parents nonetheless play an important role as prominent sources of information about gender.

Biological theories. Proponents of *biological* theories of gender development argue that, in addition to the obvious physical differences between human males and females, biological factors contribute to *behavioural* differences between men and women. There is considerable evidence that at least some aspects of gender are biologically derived. Information from studies of individuals with unusual early exposure to sex-hormones provides some evidence that such hormones may play an important role in the development of gender identity (Lippa, 2002). For example, girls suffering from congenital adrenal hyperplasia (CAH), a genetic defect resulting in abnormally high production of androgens, seem to be more 'masculine' than typical girls. Although they typically develop a female gender-identity, CAH girls tend to engage in more male-typical play and clothing preferences, and may even show more male-typical levels of visual-spatial ability (Berenbaum & Hines, 1992). As adults, CAH individuals report higher levels of lesbian and bisexual attraction, and may show less contentment with being female and more interest in being male than non-CAH women (Dittmann, Kappes, & Kappes, 1992). These differences seem to be unrelated to the degree of genital

masculinization shown by CAH girls, which runs counter to the hypothesis that these girls' behavioural 'masculinity' may be a result of family reactions to a more masculine appearance (Lippa, 2002).

Evidence from animal studies also suggests that play preference may have a biological basis. Young male monkeys exhibit more aggressive, rough-and-tumble play styles than do females, and female monkeys choose to play with more doll-like toys (Meaney, Stewart, & Beatty, 1985). The early emergence of such play preferences in humans (i.e., by the second year of life), as well as the fact that these differences are present across many cultures, are often used as supporting evidence that biological factors may be at play (Lippa, 2002).

Thus, proponents of biological theories of gender development argue that differential treatment by parents may be a result, rather than a cause, of behavioural differences between boys and girls, as parents may be simply reacting to their children's innate preferences for certain types of activities (Golombok & Hines, 2002; Lippa, 2002). Sex-related differences in temperament, such as higher activity level and irritability among boys, may evoke different reactions from parents (Leaper, 2002). These different reactions may, in some cases, reinforce existing gender differences. Thus, although differential treatment may not be solely responsible for behaviour differences among boys and girls, it likely plays an important part in widening pre-existing gender differences as well as potentially creating new ones (Golombok & Hines, 2002).

To summarize, these three theories all recognize, to differing extents, the influence that parents have on their children's gender role development. Social learning theory holds that gender identity is socialized largely through parents' differential

treatment of their sons and daughters. Cognitive theories emphasize the role children play in their own socialization, actively seeking out information about gender and integrating it into their existing representations. Such theories recognize that parents play an important role in this self-socialization process, as the first source of information about gender that children encounter in their social world. Even theories that suppose a biological basis to gender differences recognize that parents, by reacting differently to their sons' and daughters' distinctive behaviours, can serve to reinforce the behavioural differences between boys and girls.

Parental Attitudes Towards Gender

Gender and sex-role attitudes are the beliefs one holds about appropriate behaviour for males and females, including views about appropriate roles for men and women in the household, workplace, and broader social sphere (King & King, 1993). For example, someone with traditional gender attitudes might endorse the belief that a husband should be responsible for a family's finances, whereas the wife should be responsible for childrearing and household chores.

Parents' gender-role attitudes seem to be conveyed to children. Parents who hold traditional gender attitudes and strong gender stereotypes are more likely to have children who also endorse such stereotypes (Lippa, 2002). In a recent meta-analysis, Tenenbaum and Leaper (2002) reported that parents' gender schemas (including their gender self-concepts and gender-related attitudes towards others) were correlated with children's gender attitudes towards others, work-related attitudes, and gender self-concepts. In the same vein, children of working mothers have been found to show less gender-typing than their peers whose mothers do not work outside the home (Levy, 1989). Thus, it would

seem that parents who hold more egalitarian beliefs about the roles of men and women, and who themselves adopt non-traditional roles, may communicate different ideas to their children about their skills, opportunities, and duties in society (Tenenbaum & Leaper, 2002).

One way in which parents may communicate these ideas to their children is through their responses to children's gender congruent and incongruent behaviours. There is evidence to suggest that parent attitudes and stereotypes about gender affect both their expectations and responses to their children's gender-related behaviour. For example, Gervai, Turner, & Hinde (1995) reported that parents with more traditional gender-role attitudes held stronger expectations that their children behave in gender-congruent ways. Parents with traditional attitudes also seem to assign their children more gender-typed chores (McHale, Crouter, & Tucker, 1999). A study by Fagot, Leinbach, and O'Boyle (1992) revealed that mothers of children with more advanced gender-labeling skills held more traditional gender attitudes, initiated gender-typical toy play more often, and responded more positively to their children's gender-typical play than did other mothers. This would seem to suggest that parents with traditional attitudes tend to encourage gender-typed activities in their young children more so than do parents with more egalitarian attitudes (Fagot et al., 1992). This may explain why fathers tend to encourage gender conformity more strongly than mothers do, since men are more likely to hold traditional gender attitudes (Leaper & Friedman, 2007).

Increasingly, many parents report gender-egalitarian attitudes towards childrearing, and make efforts to raise their children in a gender-neutral way (Kane, 2006). In a meta-analysis of the relation between parents' and children's gender schemas,

studies published before 1984 were found to have significantly larger effect sizes than those published since that time (Tenenbaum & Leaper, 2002). However, gender stereotypes are still pervasive in society, and there is evidence to suggest that despite their egalitarian motives, parents may still be conveying gender stereotypes to their children. In Freeman's (2007) study of preschoolers' perceptions of gender appropriate play, most parents reported egalitarian attitudes about appropriate behaviour for boys and girls. However, children of these parents (particularly boys) still predicted that their parents would disapprove of their cross-gender toy choices. This apparent discrepancy may be due to the presence of gender stereotypes in the media and outside the home. However, another possibility is that parents may be sending mixed messages to their children and unknowingly transmitting their own innate gender stereotypes despite their intentions to provide equal opportunities to their sons and daughters.

It should be noted that this study used measures of parents' childrearing-specific gender attitudes (i.e., what behaviours, toys, and activities they consider appropriate for their sons and daughters) as an index of gender-role attitudes in general. Such childrearing-specific scales may tap into parents' intentions towards the gendering of their children, but leave out the innate stereotypes they hold due to their own socialization. In addition, the few measures of childrearing-specific gender attitudes in existence have yet to be sufficiently validated (Blakemore & Hill, 2008). Therefore, in the current study a measure of parents' more general gender-role attitudes (i.e., the roles, occupations, and behaviours they consider appropriate for adult men and women) was employed.

Fathers versus mothers. Although most research in the area of gender-role socialization has focused exclusively on mothers (Lytton & Romney, 1991), there is evidence to suggest that fathers may play a particularly important role in socialization (Kane, 2006; Cassano, Perry-Parrish, & Zeman, 2007). Mothers' and fathers' influences, it has been argued, are distinct, and their influences may be more than simply additive. The relationship between mothers' and fathers' parenting has been hypothesized to make a distinct contribution to children's development, above and beyond those of the individual parents (Winsler, Madigan, & Aquilino, 2005).

Despite the paucity of research conducted with fathers, there is evidence to suggest that they tend to enforce gender boundaries more strongly than do mothers (Cassano et al., 2007; Fabes & Martin, 1991; Kane, 2006), and tend to be more concerned about the "gender appropriateness" of their children's behaviour (Lippa, 2002). For example, fathers have been found to offer more stereotypically gender-congruent toys to their children than do mothers (Bradley & Gobbart, 1989). Fathers also give fewer positive responses to their children when they do engage in cross-gender toy play (Fagot & Hagan, 1991). Even children themselves seem aware of this disparity. For example, Freeman (2007) reported that five-year old boys predicted that their fathers, but not necessarily their mothers, would disapprove of their choices to play with 'feminine' toys.

However, despite recent shifts in gender roles towards a more egalitarian division of labour between partners, mothers are most often their children's primary caregivers (Moon & Hoffman, 2008). It has been well documented that, in general, fathers spend less time taking care of their children than do mothers (e.g., McKinney & Renk, 2008). Even in families where both parents are employed, mothers continue to be responsible for

a greater proportion of daily childcare tasks than are fathers (Moon & Hoffman, 2008). Mothers may therefore play a predominant role in their child's socialization simply due to the greater proportion of interactions they are likely to share with their child as primary caregiver. Moreover, obtaining information from a child's primary caregiver is common practice in developmental research. Since they are likely to spend more time with their children, especially at a young age, mothers may be better able to accurately anticipate their own emotions and reactions to child behaviours, as well as the frequencies of these behaviours, than would fathers. For this reason, this study focused exclusively on maternal parenting.

Sons versus daughters. Both mothers and fathers seem to discourage cross-gender behaviour more in boys than in girls (e.g., Golombok & Hines, 2002; Kane, 2006; Freeman, 2007). Increasingly, gender-atypical behaviour among girls (e.g., 'tomboyishness') is tolerated and even encouraged by parents (Kane, 2006; Langlois & Downs, 1980). In a qualitative study of parental responses to gender nonconformity in preschoolers, Kane (2006) noted that parents tended to encourage and celebrate what they perceived as masculine activities among their daughters. Parents also responded positively to traditionally feminine behaviour from daughters, but encouraged the addition of masculine behaviours to their repertoires. In contrast, the majority of parents in the study expressed at least some negative responses to gender nonconformity among sons, with fathers indicating more categorically negative responses. These findings are consistent with previous literature suggesting that girls are given more 'latitude' in their exploration of gender roles than are boys (Cahill & Adams, 1997; Lippa, 2002).

Based on the evidence presented, it seems clear that children face much pressure to conform to socially prescribed gender roles. Much of the research in the area of gender-role socialization has focused on children's gender typed play and activities (Lytton & Romney, 1991). However, most researchers agree that gender schemas are multidimensional, and that gender-role socialization is likely to be reflected in many areas of life, in one's cognitions and behaviours in multiple contexts (Tenenbaum & Leaper, 2002). Some areas which have been explored in the literature include the socialization of differences in academic motivation and emotional expression between boys and girls (Leaper & Friedman, 2007). One area that has rarely been studied is the relation between gender socialization and children's social behaviours. To this effect, the present study focused on forms of social behaviour among young children that may be considered more 'appropriate' for one gender than the other. More specifically, this study examined mothers' reactions to physical aggression, shyness, and prosocial behaviours expressed by their sons and daughters.

Gender Differences in Children's Social Behaviours: Frequencies, Implications and Parental Responses

Gender differences have been noted in both the *frequency* and *implications* of children's antisocial, asocial, and prosocial behaviours. These differences may be due in part to the different reactions such behaviours evoke from parents depending on whether they are expressed by boys or girls.

Aggression. Although many competing definitions of aggression exist, most current scholars agree on two characteristics of aggressive behaviour. First, the intention of the aggressor is to harm the victim, and second, the victim perceives that he or she has

been hurt (Underwood, 2002). Early research into aggression among children focused exclusively on behaviours causing physical harm. More recently, it has been argued that the definition should be widened to include behaviours which hurt others' social status or friendships (Crick & Grotpeter, 1995; Galen & Underwood, 1997). The constructs of indirect aggression (Lagerspetz, Bjorkqvist, & Peltonen, 1988), social aggression (Cairns, Cairns, Neckerman, Ferguson, & Garipey, 1989; Galen & Underwood 1997), and relational aggression (Crick & Grotpeter, 1995) have all been introduced to describe such behaviours. There remains little consensus among experts as to the distinctiveness and overlap between these constructs (and a detailed discussion of these issues is beyond the scope of this thesis). To ease presentation, the term "relational aggression" is employed to represent all of these constructs from this point forward.

Relational aggression has been widely assumed to be more typical of girls than of boys, and has often been dubbed "girls' aggression" (Underwood, 2002). However, the empirical evidence for gender differences in relational aggression has proven to be mixed. Some studies have reported that girls do exhibit higher levels of relational aggression than do boys (e.g., Crick & Grotpeter, 1995). However, many such studies have been criticized for their exclusive use of peer and teacher report data, which may be subject to bias (Tapper & Boulton, 2004). Recent studies using observational methods have failed to find gender differences in relational aggression (Tapper & Boulton, 2004). Moreover, in a recent meta-analysis, Card, Stucky, Sawlani, and Little (2008) concluded that gender differences in relational aggression were no more than 'trivial'.

Additionally, most research on relational aggression to date has been conducted with older children, and less is known about these forms of aggression among preschool-

aged children. In one study of relational aggression among preschoolers, correlations between different sources of information were very low, suggesting that these behaviours may be difficult to rate accurately among young children (McNeilly-Choque, Hart, Robinson, Nelson, & Olsen, 1996). For these reasons, this thesis focused only on overt, physical aggression among preschool children.

Physical aggression appears to be a fairly stable individual characteristic from the preschool years onward (Hay, Castle, & Davies, 2000; Cummings, Iannotti, & Zahn-Waxler, 1989). In childhood, aggression is related to problems such as peer rejection (e.g., Kerestes & Milanovic, 2006), feelings of depression, and academic failure (e.g., Capaldi, 1991). Aggressive behaviour in childhood has also been found to predict negative outcomes later in life, such as poor adjustment to high-school (Ladd, 2003), severe delinquency in adolescence (Raine, Moffit, Caspi, Stouthamer-Loeber, & Lyman, 2005), early sexual activity, and teenage pregnancy (Capaldi, Crosby, & Stoolmiller, 1996). In adulthood, individuals who were aggressive as children are more likely to experience both marital and occupational instability (Kokko & Pulkkinen, 2000; Caspi, Elder, & Bem, 1987).

By the preschool years, boys engage in notably more physical aggression than girls (Maccoby & Jacklin, 1980). Before this time, levels of aggression between boys and girls are relatively equal, but by the time children learn to reliably label gender, girls' physical aggression with peers drops dramatically, whereas boys' remains unchanged (Cummings et al., 1989; Underwood, 2002).

Gender differences have also been found in the outcomes of physically aggressive behaviour. As previously discussed, aggression in childhood has been associated with a

host of later adjustment problems for both boys and girls. However, newer research indicates that these outcomes may differ in severity depending on gender. For example, aggression has been found to be more strongly related to peer rejection in girls than in boys (Kerestes & Milanovic, 2006). In a groundbreaking study of gender congruent and incongruent forms of aggression, Crick (1997) found that overtly aggressive girls were rated as significantly more maladjusted than overtly aggressive boys. Similarly, boys who were relationally aggressive were more maladjusted than relationally aggressive girls. The author hypothesized that these differences may be due to the stereotype-incongruent nature of the behaviours relative to the children's gender. Gender atypical forms of aggression (e.g., overt aggression among girls), it is argued, may meet with more negative reactions from parents, teachers, and peers than more gender-normative, albeit equally severe, forms of aggression.

In general, parents' most common emotional reaction to children's displays of physical aggression is one of concern, with secondary responses including anger and disappointment (Mills & Rubin, 1990). Studies have also indicated that parents respond to aggression with more anger than other types of child transgressions, and tend to use more force in their disciplining of such acts (Grusec, Dix, & Mills, 1982). However, there is evidence to suggest that parents tend to discourage overt aggression more among girls than boys (Blakemore et al., 2009). For example, when Birnbaum and Croll (1984) used vignettes to assess adults' hypothetical responses to several child emotions, they found that both parents and non-parents showed greater acceptance of anger among boys than among girls. In an observational study of sibling aggression, Martin & Ross (2005) reported that whereas mothers prohibited severe physical aggression equally among boys

and girls, they showed more tolerance of mild physical aggression from boys. In their study of aggression in the classroom, Fagot and Hagan (1985) found that as compared to boys, girls' assertive and aggressive acts were more likely to be ignored by peers and teachers. Moreover, aggressive acts that provoked a negative reaction tended to be sustained over time, whereas those that were ignored were not. The differential pattern of responses to the assertive acts of boys and girls, suggest the authors, sends the message to boys that such acts will produce an effect in the world, while suggesting the opposite to girls. Thus, over time, boys' aggression is reinforced, whereas girls' is discouraged.

Shyness. *Shyness* refers to wariness and anxiety in social situations, and is thought to be characterized by an approach-avoidance conflict in such contexts (Coplan, Arbeau, & Armer, 2008). Although they may want to interact with peers, shy children are too anxious or fearful to initiate social interaction (Coplan, Prakash, O'Neil, & Armer, 2004). Consequently, shy children tend to exhibit *reticent* behaviour (i.e., watching others play but making no attempt to join in) (Coplan, Gavinski-Molina, Lagacé-Séguin, & Wichmann, 2001).

Shyness in childhood is associated with a host of later adjustment difficulties, especially along the internalizing dimension (Rubin, Burgess, & Coplan, 2002). For example, beginning in middle childhood, shyness becomes increasingly related to loneliness, depression, low self-esteem and decreased social competence (e.g., Crozier, 1995; Fordham & Stevenson-Hinde, 1999). Even in early childhood, shyness is associated with peer rejection and victimization (e.g., Coplan et al., 2004; Hart et al., 2000), lower academic competence, and decreased liking for school (Coplan et al., 2008). Shy children are also at increased risk for the development of anxiety disorders (e.g.,

Schwartz, Snidman, & Kagan, 1999). Shyness in early childhood is associated with both parent and teacher ratings of anxiety, and with the display of anxious behaviour during play (e.g., Coplan et al., 2004). Alarming, Rapee and colleagues (Rapee, Kennedy, Ingram, Edwards, & Sweeney, 2005) recently reported that 90% of a group of preschoolers characterized as 'extremely shy' also met criteria for an existing anxiety disorder.

Although reliable gender differences have not been found in the frequency of shyness, the correlates and outcomes of shyness appear to be more deleterious for boys than for girls (Rubin et al., 2002; Rubin, Coplan, & Bowker, 2009). Shy-withdrawn boys are more likely to be excluded by peers, and more likely to describe themselves as lonely than are shy girls (e.g. Coplan et al., 2004; Gazelle & Ladd, 2003; Nelson, Rubin, & Fox, 2005). Shy boys have also been found to marry and start families later in life than their nonshy peers, whereas no such difference has been found for girls (Rubin et al., 2008).

These differences may be related to the way shyness is perceived by society. It appears that shyness is less socially acceptable for boys than for girls (Rubin et al., 2002). This may be because shyness is associated with emotions such as fear and anxiety, which are often considered more 'feminine' emotions (Kimmel, 2004). In general, parents respond to their child's shyness with feelings of concern and puzzlement (Mills & Rubin, 1990). However, there is considerable evidence to suggest that parents may respond more negatively to shyness and its associated emotions when expressed by boys. In Birnbaum and Croll's (1984) vignette study, parents showed a greater acceptance of fear in girls than in boys. Garside and Klimes-Dougan (2002) used retrospective reports to gain insight into parental emotion socialization practices. Such reports indicated that fathers

tended to reward girls for expressing sadness and fear, but punished boys for expressing these emotions.

Parents of shy girls have also been found to be warm, responsive, and sensitive, whereas the same is not true for boys (Burgess, Rubin, Cheah, & Nelson, 2005). Stevenson-Hinde and Glover (1996) observed more positive interactions between mothers and their moderately shy daughters than between mother-son dyads. However, for extremely shy children the opposite was true, with mothers interacting more positively with boys than with girls. Several explanations exist for this apparent inconsistency. The index of 'positive interaction' used in this study may in fact represent aspects of *oversolicitous* parenting (e.g. inappropriate, intrusive displays of warmth) which is known to have exacerbating effects on social withdrawal (Burgess et al. 2005). Alternately, it has been argued that gender effects may emerge only for moderately shy children, as extreme shyness may be perceived as similarly problematic for children of both genders (Coplan, Girardi, Findlay, & Frohlick, 2007; Coplan et al., 2001). In sum, while there is considerable evidence that the long-term consequences of shyness may differ for boys and girls, further exploration is needed to gain insight into the reasons behind these differences.

Prosocial behaviours. The term 'prosocial' is used to refer to a variety of behaviours. Broadly, these are positive actions that benefit others. Grusec, Davidov and Lundell (2002) described a prosocial act as "any voluntary, intentional action that produces a positive or beneficial outcome for the recipient" (p. 458), regardless of motive. In this way, prosocial acts are distinguished from *altruistic* ones, which by definition require that the benefit to the recipient comes at some cost to the donor. In

contrast, children may engage in prosocial behaviours for a variety of reasons, including: empathy; adherence to social norms; or even because they hope to be rewarded for such acts (Grusec et al., 2002). Many previous studies have used narrow operational definitions of the construct, measuring behaviours such as helping, sharing, comforting, and altruistic acts (Tisak, Holub, & Tisak, 2007).

Prosocial behaviour in childhood has many documented benefits. Children who help others tend to have more positive relationships with peers (Eisenberg & Fabes, 1998), and are less likely to be antisocial as adults (Hämäläinen & Pulkkinen, 1995). Although prosocial behaviour can be observed in children from as early as 18 months, the preschool years represent a particularly important time for the development and promotion of positive social interaction (Hay, Castle, Davies, Demetriou, & Stimson, 1999; Tisak et al. 2007).

Many studies have indicated that young girls engage in prosocial behaviour more frequently than do boys (Hastings, Utendale, & Sullivan, 2007; Russell, Hart, Robinson & Olsen, 2003). In early childhood, girls' prosocial behaviour has also been found to increase over time, while boys' tends to decrease (Hay et al., 1999). However, recent research suggests that this apparent gender gap may be illusory. In Western cultures, affiliative tendencies are commonly attributed to femininity. Since adult reporters are not immune to gender stereotypes, they may be more likely to attend to and remember incidences of prosocial behaviour by girls, since it conforms to their preexisting expectations (Hastings, McShane, Parker, & Ladha, 2007). Perhaps for this reason, studies using parent- or teacher-report measures of prosocial behaviour tend to find greater gender differences in the frequency of prosocial behaviour than do studies using

direct observation (Grusec, Davidov, & Lundell, 2002; Hastings, Utendale, et al., 2007). Moreover, it has been suggested that the measures most commonly used to assess prosocial behaviour may be biased in favour of more ‘feminine’ forms of prosocial behaviour. Such measures, it has been argued, tend to ignore forms of prosocial behaviour such as social initiation and inclusion, which may be more common among boys (Hastings, McShane, et al., 2007).

Recent research suggests that children themselves view social inclusion as an important component of prosocial behaviour, in addition to the more commonly studied behaviours such as sharing and comforting (Tisak et al., 2007). Behaviours such as social initiation and inclusion may require more autonomy and initiative, characteristics commonly associated with the cultural conception of masculinity (Leaper & Friedman, 2007). Thus, in leaving out such behaviours, the current definition of prosocial behaviour may be too narrow to capture more ‘masculine’ ways of expressing other-oriented concerns. In sum, there is evidence to suggest that while boys and girls may actually engage in prosocial behaviour with similar *frequency*, the *ways* in which they express their prosocial tendencies are likely to differ.

Parents perceive prosocial behaviours as important for both boys and girls (Sy, DeMeis, & Scheinfeld, 2003). Despite this fact, parents rarely report rewarding their children for prosocial acts (Hay et al., 1999). In fact, parents’ most common “response” to children’s prosocial acts is *no* response (Grusec, 1991). When parents *do* respond to prosocial behaviour, they often do so simply by acknowledging that the act has taken place, or by providing social reinforcement in the form of verbal praise, smiling, or hugging (Grusec, 1991).

Recent research suggests that parents may view different types of prosocial behaviour as more appropriate for boys or girls (Hastings, Utendale, et al., 2007). For example, parents seem to view acts of self-sacrifice as more important for girls than for boys. They report praising girls for such acts, while criticizing or discouraging boys for the same behaviour (Grusec, Davidov, & Lundell, 2002). In one study by Hay and colleagues (1999), boys who showed stably high levels of sharing at age 3 were rated more negatively by their mothers than were high-sharing girls. The observed differences in prosocial tendencies may therefore be a result of parents altering their behaviour in accordance with their goals for gender-typed socialization (Hastings, Utendale et al., 2007).

It has also been suggested that the same parenting practices may foster different trajectories of prosocial behaviour for boys and girls. For example, Spinrad and colleagues (1999) reported that mothers did not differ in levels of expressed positive affect towards daughters and sons. However, these expressions of positive affect were associated with girls', but not boys', expressions of sympathy, and boys', but not girls', resistance to cheating during a difficult task. The authors speculated that emotional aspects of morality may be more feminine, while behavioural aspects are more masculine. Boys and girls may be biologically predisposed towards different types of prosocial behaviour, such that mothers' positive socialization may foster development along both of these trajectories (Hastings, Utendale, et al., 2007).

Since research to date has tended to examine more feminine forms of prosocial behaviour, and focused mostly on mothers, details about the relationship between parental socialization and masculine prosocial behaviour are speculative at best. More

research is clearly needed in order to answer the question of how and why gender may play a role in the socialization of prosocial behaviour (Hastings, Utendale, et al., 2007).

The Present Study

The goal of the present study was to examine the relations between mothers' own gender stereotypes and their reactions to their children's hypothetical aggressive, shy, and prosocial behaviours. The preschool age range was emphasized, as this is the period during which children develop notions of gender constancy and begin to form their own gender identities (e.g., Golombok & Hines, 2002).

To accomplish these goals, mothers completed a self-report assessment of their own gender attitudes, and then responded to a series of vignettes depicting their children exhibiting aggressive, shy, and prosocial behaviours (both affiliative and agentic). They were asked to rate their likely emotional and behavioural responses to these behaviours, as well as their attitudes towards the implications of these behaviours.

There are several methods of assessing parents' responses and attitudes towards children's social behaviours. Although direct observation of parents' responses to such behaviours offers the most face validity, the low frequency of occurrence of the behaviours of interest to the present study makes this technique unfeasible. The use of vignettes depicting hypothetical child behaviours has been used successfully to assess parental attitudes and responses towards social behaviours such as shyness, behavioural withdrawal, aggression (Coplan, Hastings, Lagace-Seguin, & Moulton, 2002; Rubin & Mills, 1990), and prosocial behaviour (Hastings, McShane, et al., 2007) and towards children's emotional expressions (e.g., Birnbaum & Croll, 1984). Many researchers have argued that such 'behaviouroid' measures provide close approximations of actual

observation, and are the method of choice when direct observation is not possible or feasible (Ajzen & Fishbein, 1977; Birnbaum & Croll, 1984).

In terms of parental *emotional* responses, in line with previous research, mothers were expected to report greater feelings of concern, anger, and embarrassment towards their children's displays of aggression, and greater concern and confusion towards shyness. In contrast, both forms of prosocial behaviour were expected to be met with feelings of pride and pleasure.

In terms of *behavioural* responses, two broad categories were presented to mothers: responses likely to reinforce a particular child behaviour; and those likely to discourage it. For example, scolding or punishing a child's aggressive behaviour would be seen as a discouraging response, whereas ignoring a prosocial act may be seen as implicit encouragement of such behaviour.

It was hypothesized that mothers would respond to aggressive acts by discouraging such behaviours (through punishment, scolding, or direct intervention). When faced with child shyness, mothers were expected to respond with less discouragement and greater acceptance as compared to aggression. Prosocial behaviour, on the other hand, was expected to elicit positive responses such as verbal praise and encouragement.

To assess *attitudes* about these behaviours, mothers were asked about how problematic and beneficial they would consider each type of behaviour for their child across a variety of contexts. It was expected that aggression and shyness would be viewed as more problematic than prosocial behaviour, and that prosocial behaviours would be rated as more beneficial to children.

A number of main effects of child gender were also anticipated. For example, mothers were expected to respond with more anger and to anticipate employing more physical punishment with boys than with girls. Parents have generally been found to respond more harshly and with more punitive strategies to boys than to girls (Russell et al., 2003; Lytton & Romney, 1991). No main effect of gender was expected for mothers' anticipation of the problems and benefits of child behaviours overall (although an interaction between gender and behaviour type was expected here – see below).

Several “child gender by behaviour” interactions were also expected. For example, mothers were expected to view as more problematic and respond more negatively (e.g., with more negative emotions and discouraging behaviours) to the expression of shyness in boys and aggression in girls (since these behaviours may be seen as gender-atypical). Due to the paucity of research into masculine and feminine forms of prosocial behaviour, hypotheses regarding reactions to these behaviours were more exploratory in nature. However, it was postulated that mothers would react more positively (e.g., with more positive emotions and reinforcing behaviours) to gender-congruent forms of prosocial behaviour than gender-incongruent ones. They were also expected to view gender-congruent forms of prosocial behaviour as more beneficial to their child than gender-incongruent ones.

It was also speculated that some three-way interaction effects would emerge between strength of mothers' gender stereotype, child gender, and child behaviours. In this regard, the two-way interactions between child gender and type of behaviour were expected to be stronger for those mothers who expressed more traditional gender-role attitudes. For example, in response to both girls' aggression and boys' shyness, parents

were expected to be increasingly likely to respond with negative emotions and discouraging behaviours, and to view such behaviours as problematic, if they held traditional gender stereotypes. In contrast, in response to children's prosocial acts, gender-congruent forms of such behaviour were expected to be met with greater pride and happiness, elicit more praise and encouragement, and be viewed as more beneficial by parents with traditional gender stereotypes.

The role of parenting style. Parenting style, broadly defined, is a stable pattern of childrearing practices regularly employed by a parent. One of the most well-known and commonly used frameworks for understanding parenting style is Baumrind's (1989) typology, which classifies parenting style along two dimensions: warmth and supportiveness versus demandingness and control. An *authoritative* parenting style is characterised by high levels of parental support and warmth combined with firm (but not restrictive) control of child behaviours. In contrast, *authoritarian* parenting is marked by restrictive control combined with little emotional availability and warmth. Finally, *permissive* parents exercise little control over their children but are high in warmth and nurturance (Baumrind, 1989).

Parenting style has previously been linked to parents' gender-role attitudes. For example, some authors have reported that parents who endorse traditional gender-role attitudes are more likely to engage in more authoritarian parenting, whereas parents with egalitarian attitudes tend to be more authoritative (e.g., Fisher & Fagot, 1993; Neitelblatt, Uddenbero, & Enoleson, 1981; Sabattini & Leaper, 2004). To control for the potential influence of parenting style on mothers' reactions to child behaviours, a measure of maternal parenting style was therefore included as a control variable.

Methods

Participants

Mothers were recruited from daycares and preschools in the Ottawa area (via letters sent home with children). Out of the 102 mothers who gave their consent to participate, 78 completed the study. The final sample consisted of 43 mothers of girls, and 35 mothers of boys (ages 27-72 mo., $M = 47.44$, $SD = 11.00$). Mothers' ages ranged from 24 to 57 years ($M = 38.69$, $SD = 4.79$). The sample was primarily Caucasian (80% of respondents), with other ethnicities represented as follows: 7.7% Asian, 5.1% Black, 2.6% Hispanic, 3.8% other ethnicities. Forty-seven percent of mothers indicated that they had completed a graduate degree at the time of the study; 31% had completed university, 20% held a college degree, and 3.8% had completed high-school.

Procedure

Parents first received a package containing an information letter, consent form, and short demographic information questionnaire (see Appendix A). Based on this initial information, consenting mothers then received a "gender-specific" (i.e., matching the gender of their preschool child) version of the questionnaire package. Gender role attitudes and hypothetical reactions to child behaviours were both assessed by maternal self-report.

Measures

Gender role attitudes. Parents' gender role attitudes were assessed using the *Sex Role Egalitarianism Scale* (SRES; King & King 1993 – see Appendix B). The SRES was developed as a measure of attitudes towards the equality of men and women. Unlike other measures of gender role attitudes, the SRES contains items addressing beliefs about

both women and men assuming non-traditional roles. This was particularly desirable for the current study, as mothers' attitudes and reactions to gender-incongruent behaviour by both boys and girls were of interest.

In the present study, the short form BB of the SRES was used. The short form contains 25 items, with an equal representation of 5 items from each of 5 domains: marital roles, parental roles, employment roles, social-interpersonal-heterosexual roles, and educational roles. Participants indicate their responses to the items on a 5-point Likert-type scale, with answers ranging from "strongly agree" to "strongly disagree". Item scores are assigned such that a score of 5 represents the most egalitarian position. Scores on all items are summed and divided by 25 to create a total score with a possible range of 1-5. Short form BB has shown good internal consistency ($\alpha = .94$) and stability ($r = .88$), as well as a high correlation with the long form B of the SRES ($r = .95$). In this study, one item of the SRES was inadvertently omitted from the questionnaire. Scores on this measure were therefore computed out of 24 instead of 25. The measure demonstrated good reliability in the current sample, with Cronbach's $\alpha = .871$.

Both convergent and discriminant validity have been demonstrated for the SRES. For example, scores on the SRES are correlated with scores on the Attitudes Toward Women Scale (AWS; Spence & Helmreich, 1972) another widely used measure of gender-role attitudes. Interestingly, discriminant validity for the SRES has also been demonstrated by comparison to the AWS. Whereas the AWS assesses only attitudes towards women in non-traditional roles, the SRES assesses attitudes towards men in non-traditional roles as well. Thus, one might expect the linear relation between the two scales to "flatten out" at the highest extreme, where scores on the SRES reflect endorsement of

non-traditional roles for both men and women (King & King, 1993). Indeed, when King & King (1986) tested this relation using power polynomial multiple regression, they documented both a linear and a quadratic component, with the regression line becoming more curvilinear at higher scores on the SRES.

Form BB of the SRES has been demonstrated to be unrelated to measures of social desirability (King & King, 1993). In a study of police officers, a non-significant correlation of $r = -.14$ was found between scores on form BB and scores on the Marlowe-Crowne Social Desirability Scale (Crowne & Marlowe, 1960). In a later study of male substance abusers and batterers, a non-significant correlation of $r = -.02$ was found between the two scales (King & King, 1993). Both of these findings indicate that scores on this form of the SRES are not attributable to a social desirability response style.

Since its conception, the SRES has often been used to measure gender-role attitudes in studies of marital adjustment (e.g., Bernard, 1999; Li & Caldwell, 1987), intimate partner violence (e.g., Fitzpatrick, Salgado, Suvak, King, & King, 2004; Stith, Crossman, & Bischof, 1991), and perceptions of abuse (Ben-David & Schneider, 2005; Kern, Libkuman, & Temple, 2007; Tam & Tang, 2005). The scale has also been used in studies of diverse topics such as adolescents' parenting attitudes (Groom, 1999), girls' expectancies regarding menarche (Yeung, Tang, & Lee, 2005), and perceptions of campus climate (Fischer & Good, 1994)

Participants were classified into two groups based on their scores on the SRES. Mothers with scores falling in the top three quartiles (i.e., scores from 3.71 - 5.00) were classified as egalitarian, whereas those with scores in the lowest quartile (3.11 - 3.71) were labelled as traditional.

Parenting Style. Levels of authoritative, authoritarian, and permissive parenting styles were measured using the *Parenting Styles and Dimensions Questionnaire* (PSDQ, Robinson, Mandleco, Olsen, & Hart, 2001), a frequently used measure of authoritative, authoritarian, and permissive parenting. The three subscales of the PSDQ demonstrated acceptable reliability (Chronbach's alphas = 0.731, 0.681, and 0.669 for the authoritative, authoritarian, and permissive subscales, respectively).

Hypothetical vignettes. To assess mothers' hypothetical responses to their children's shy, aggressive, and prosocial behaviours, participants completed an adapted version of the *Child Behaviour Vignettes* (CBV), which has been employed in various forms in previous studies with parents and teachers (e.g. Arbeau & Coplan, 2007; Coplan et al., 2002; Hastings, McShane, et al., 2007). Each mother was asked to read a series of vignettes, instructing her to imagine her son or daughter behaving in a shy, aggressive, affiliative, or agentic prosocial manner (see Appendix C). The texts for the vignettes depicting shy, aggressive, and affiliative prosocial behaviour were adapted from previous use (Arbeau & Coplan, 2007; Coplan et al., 2002). However, since agentic prosocial behaviour has rarely been studied, this vignette was constructed for the current study based on previous theoretical and empirical writings on the nature of such behaviour (Hastings, McShane, et al., 2007).

Following each vignette, participants responded to a series of questions about their hypothetical *emotional reactions* to the behaviour depicted. They first rated the likelihood (from 1 "not at all likely" to 5 "very likely") of each of 6 emotional responses, falling into the three broad categories of positive (i.e., proud, happy), hostile (i.e., angry, embarrassed), and concerned (i.e., worried, anxious). Answer choices were adapted from

previous studies of parents' emotional responses to such behaviours (e.g., ; Coplan et al., 2002; Rubin & Mills, 1990)

Participants then rated the likelihood of engaging in a variety of specific behaviours in response to each vignette. Ten different behaviours were assessed, selected to fall into the two broad categories of encouraging (e.g., praise, reward) and discouraging (e.g., scold, punish) responses. It is important to note that some parental responses may be interpreted differently (i.e., encouraging vs. discouraging) depending upon the context of the presented child behaviour. For example, "doing nothing" in response to a child's behaviour is typically considered as an implicit encouragement of such behaviour. However, previous research has indicated that ignoring children's aggressive behaviour may actually serve as *discouragement* of such behaviour (Fagot & Hagan, 1985). The list of behaviours to be rated is based on previous research related to parental reactions to children's social behaviours and misbehaviours (e.g., Rubin & Mills, 1990; Hastings, McShane, et al., 2007), as well as to children's cross-gendered toy and activity choices (e.g., Fagot & Hagan, 1991; Kane, 2006).

Mothers also specifically rated their *tolerance* and *encouragement* of each behaviour depicted in the vignettes on a 5 point scale. These questions were adapted from the Teacher Tolerance Scale (Cunningham & Sugawara, 1988), which has been used previously to assess teachers' tolerances of shy, aggressive, socially defiant, and prosocial behaviours (Arbeau & Coplan, 2007).

Finally, mothers were also asked to indicate how *problematic* and *beneficial* they would consider each behaviour for their child across a number of different social contexts (e.g., at home, at school, with friends, with teachers).

Results

Preliminary Analyses

Data screening. The data were first screened and examined for the presence of outliers. Where appropriate, missing values from individual scale items were pro-rated using mean scale values for the remaining items. Examination of box plots did not indicate the presence of any severe outliers. Cases with Z scores greater than $|3|$ were adjusted to 3 standard deviation from the mean. However, this adjustment did not significantly alter the results. Therefore, results are presented with original values for all cases. General assumptions of repeated-measures ANOVA were also tested, including normality, homogeneity of variance, and sphericity. Mauchly's test of sphericity was significant for all models, indicating violations of homogeneity of variance and sphericity. Huynh-Feldt epsilon corrections were therefore applied for all analyses. Table 1 presents ranges, means, and standard deviations of selected variables.

Creation of aggregate variables. A number of aggregate variables were created based on a-priori, theoretically-based predictions which were supported by correlational analyses. As expected, mothers' reports of feeling angry and embarrassed were significantly and positively correlated within the two relevant vignettes (aggressive $r = .539, \alpha < .001$; shy $r = .653, \alpha < .001$). An aggregate measure of *negative emotions* was therefore created using the average of mothers' ratings of anger and embarrassment. No mothers in the sample indicated that they would feel angry or embarrassed following either of the prosocial vignettes, therefore these were not included in further analyses involving this outcome measure.

Table 1

Descriptive Statistics for Selected Variables

	Mean	Standard Deviation	Range
SRES	4.02	0.35	3.11 – 5.00
PSDQ			
Authoritative	4.02	0.34	2.93 – 4.73
Authoritarian	1.51	0.27	1.00 – 2.67
Permissive	2.00	0.52	1.20 – 3.8

- all items measured on a 5-point scale

SRES – Sex Role Egalitarianism Scale (REF)

PSDQ – Parenting Styles and Dimensions Questionnaire (REF)

Mothers' reports of happiness and pride were significantly and positively correlated within all three of the relevant vignettes (shy $r = .530$, $\alpha < .001$; affiliative $r = .331$, $\alpha < .001$; agentic $r = .458$, $\alpha < .001$). Therefore, an aggregate measure of *positive emotions* was created using the average of mothers' ratings of these emotions. A floor effect was observed for mothers' anticipated positive feelings following an aggressive act (i.e., $M = 1.08$, $SD = 0.47$ on 5-point scale). The aggression vignette was therefore omitted from further analyses using this outcome measure.

Mothers' reports of feeling worried and confused were significantly and positively correlated within all four vignettes (aggressive $r = .526$, $\alpha < .001$; shy $r = .556$, $\alpha < .001$; affiliative $r = .562$, $\alpha < .001$; agentic $r = .702$, $\alpha < .001$). An aggregate measure of *anxious emotions* was therefore created using the average of mothers' ratings of worry and confusion.

Mothers' reports of the anticipated problems for their children in each of four situations (home, school, with friends, with teachers) were significantly and positively intercorrelated within each vignette (see Table 2 for correlation coefficients). These ratings were therefore combined into an aggregate measure of *anticipated problems*. Only four mothers anticipated any degree of problems for their child following the prosocial vignettes, therefore these vignettes were omitted from further analyses using this outcome variable. Benefits across different situations were likewise correlated within each vignette, and an aggregate measure of *anticipated benefits* was therefore created (see Table 3).

Within both the aggressive and shy vignettes, mothers' ratings of intervening and directing their child to a new activity were significantly and positively correlated

Table 2

Correlations between anticipated problems across domains for aggression and shyness vignettes.

	Home	School	Friends	Teachers
Aggression				
Home	-	.513**	.560**	.636**
School		-	.761**	.676**
Friends			-	.722**
Shyness				
Home	-	.250*	.239*	.369**
School		-	.793**	.637**
Friends			-	.649**

* - $\alpha < .05$ (two-tailed)

** - $\alpha < .01$ (two-tailed)

Table 3

Correlations between anticipated benefits across domains for each vignette.

	Home	School	Friends	Teachers
Aggression				
Home	-	.786**	.650**	.777**
School		-	.833**	.440**
Friends			-	.499**
Shyness				
Home	-	.741**	.580**	.821**
School		-	.835**	.817**
Friends			-	.831**
Affiliative Prosocial				
Home	-	.944**	.878**	.937**
School		-	.964**	.948**
Friends			-	.904**
Agentic Prosocial				
Home	-	.904**	.904**	.943**
School		-	1.00**	.912**
Friends			-	.912**

** - $\alpha < .01$ (two-tailed)

(aggressive $r = .227$, $\alpha < .05$; shy $r = .264$, $\alpha < .05$). Therefore, an aggregate measure of *discouraging interventions* was created using the mean of these two items. Only one participant out of 78 indicated that she would intervene at all following an affiliative act and only two participants indicated that they may direct their child to a new activity. As well, no mothers reported using these strategies following an agentic act. Therefore, these vignettes were omitted from analyses using this outcome measure.

Within the aggressive vignette, ratings of scolding and administering a timeout were significantly and positively correlated ($r = .411$, $\alpha < .001$). An aggregate measure of *punitive* responses was created using the mean of these two items. Following the shyness vignette, only two parents indicated that they might scold their child and none reported that they would administer a timeout. Only one mother indicated that she would administer a timeout following the affiliative vignette, and none reported that they would scold their child. No mothers reported scolding or administering a timeout following the agentic prosocial vignette. Therefore, these vignettes were not included in further analyses of this outcome variable.

Mothers were initially asked to rate how likely they would be to physically punish their child following each behaviour. However, out of 78 participants, only three indicated that they might use this strategy following the aggressive vignette ($M = 1.04$; $SD = .19$), one following the affiliative vignette ($M = 1.05$; $SD = .45$), and none following the shy and agentic vignettes. Therefore, no further analyses were performed using this measure.

Main Analyses

The central goal of the present study was to examine the impact of mothers' gender-role attitudes on their reactions to their preschool-aged children's asocial, antisocial, and prosocial behaviours. Accordingly, a series of mixed randomized-repeated ANOVAs was conducted, with Vignette as the within-subjects factor, and child Sex and maternal Gender-Role attitude (2 levels) as between-subjects factors. The number of levels of the within-subjects variable varied depending on the outcome measure assessed. For example, in the analysis of mothers' positive feelings towards their child's behaviour, only the shyness, affiliative, and agentic vignettes were used as levels of the within-subjects IV, due to floor effects in the aggression condition. Relevant means and standard deviations of the outcome variables for all main effects of Vignette are presented in Table 4.

Positive emotions. Results indicated a significant main effect of Vignette ($F(1.57, 111.62) = 1004.03, \alpha < .001, \text{partial } \eta^2 = .93$). Main effects of child Sex ($F(1,71) = 2.4, \text{partial } \eta^2 = .03$) and maternal Gender Role ($F(1,71) = 0.02, \text{partial } \eta^2 = 0.00$) were non-significant, as were interactions between Vignette and child Sex ($F(1.57, 111.62) = 0.938, \text{partial } \eta^2 = .01$), Vignette and Gender Role ($F(1.57, 111.62) = 0.949, \text{partial } \eta^2 = .01$), and child Sex and Gender Role ($F(1,71) = 3.50, \text{partial } \eta^2 = .05$). For the main effect of Vignette, results from follow-up analyses (two-tailed, unplanned comparisons using Tukey's HSD test) indicated that mothers anticipated feeling the most positive in response to child agentic behaviour, followed by affiliative behaviour, and least positive towards shyness (see Table 4).

Table 4

Means (Standard Deviations) for Mothers' Emotions and Responses to Child Behaviours

	Vignette			
	<i>Aggressive</i>	<i>Shy</i>	<i>Affiliative</i>	<i>Agentic</i>
Emotions				
Positive	N/A	1.51 _a (.65)	4.73 _b (.49)	4.86 _c (.31)
Negative	3.02 _a (1.02)	1.20 _b (.45)	N/A	N/A
Anxious	2.28 _a (1.02)	2.84 _b (.91)	1.05 _c (.19)	1.02 _c (.13)
Praise	N/A	2.04 _a (1.24)	4.73 _b (.84)	4.73 _b (.66)
Comfort	1.69 _a (.94)	4.00 _b (1.01)	1.86 _a (1.24)	1.26 _c (.78)
Discouraging Interventions	4.36 _a (.68)	2.71 _b (.95)	N/A	N/A
Punitive Responses	3.06 (1.13)	N/A	N/A	N/A
Talk Immediately	4.38 _a (.77)	3.91 _b (1.17)	1.62 _c (1.14)	1.35 _c (.98)
Talk Later	3.31 _a (1.46)	3.97 _b (1.17)	4.46 _b (.94)	4.43 _b (.98)
Do Nothing	1.03 _a (.17)	1.76 _b (.98)	2.03 _b (1.38)	2.11 _b (1.42)
Tolerance	1.30 _a (.61)	3.25 _b (.80)	N/A	N/A
Encouragement	N/A	1.86 _a (.88)	4.89 _b (.46)	4.99 _b (.11)
Anticipated Problems	4.36 _a (.73)	2.97 _b (.79)	N/A	N/A
Anticipated Benefits	1.07 _a (.24)	1.51 _b (.66)	4.60 _c (.86)	4.68 _c (.85)
Typicality	1.81 _a (.89)	1.99 _a (1.01)	3.55 _b (1.00)	1.04 _c (.34)

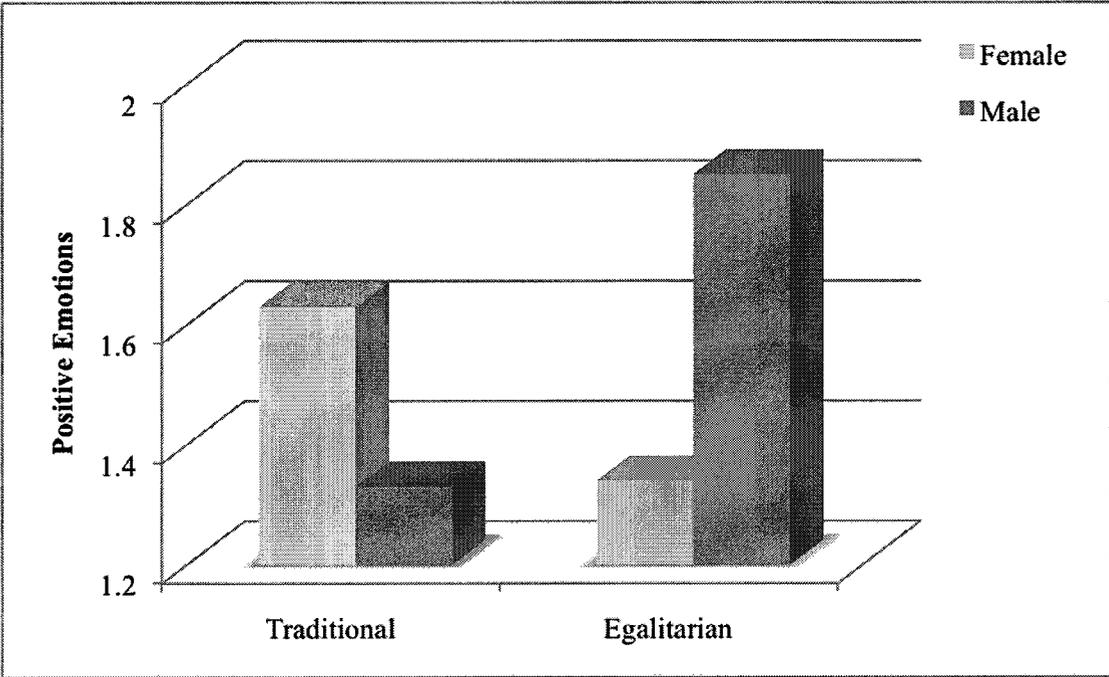
- all responses measured on a 5-point scale

- means with different subscripts differ significantly at the .05 level on Tukey's HSD test

However, this main effect was superseded by a significant 3-way interaction between child Sex, maternal Gender Role and Vignette ($F(1,57,71) = 3.28, \alpha = .05$, partial $\eta^2 = .04$). In order to interpret this effect, a follow-up analysis of the simple 2-way interaction between child Sex and Gender Role attitude at each level of Vignette was conducted. Results indicated that this interaction was not significant within the affiliative ($F(1,74) = .05$, partial $\eta^2 = .00$) or agentic vignettes ($F(1,74) = 2.38$, partial $\eta^2 = .03$). Within the affiliative vignette condition, a simple main effect of Sex was found, with mothers of boys anticipating more positive emotions ($M = 4.87, SD = 0.25$) than mothers of girls ($M = 4.61, SD = 0.59; F(1,74) = 4.40, \alpha < .05$, partial $\eta^2 = .06$). The main effect of Gender Role was not significant within the affiliative condition ($F(1,74) = 0.10, NS$, partial $\eta^2 = .01$). No main effects of Sex ($F(1,74) = 0.25, NS$, partial $\eta^2 = .00$) or Gender Role ($F(1,74) = 1.73, NS$, partial $\eta^2 = .02$) were found within the agentic vignette condition.

For the shyness vignette, results indicated a significant child Sex by Gender Role interaction ($F(1,71) = 5.64, \alpha < .05$, partial $\eta^2 = .07$). The interaction was then further broken down, and the simple simple effect of Gender Role within each level of sex was analyzed. In response to the vignette depicting a shy girl, egalitarian and traditional mothers did not differ significantly in terms of their ratings of positive emotions ($F(1,41) = 1.81, NS$, partial $\eta^2 = .04$). However, in response to the vignette depicting a shy boy, there was a trend level simple effect of Gender Role, with egalitarian mothers reporting a higher level of positive emotions than more traditional mothers ($F(1,30) = 3.70, \alpha = .06$, partial $\eta^2 = .11$; see Figure 1).

Figure 1. Mothers' anticipated positive emotions following shyness vignette.



Negative emotions. The analysis of mothers' negative emotions was conducted using only the aggression and shyness vignette conditions. Results indicated a significant main effect of Vignette ($F(1,69) = 156.62$, $\alpha < .001$, partial $\eta^2 = .70$), with mothers anticipating more negative emotions towards aggression than towards shyness (see Table 4). The main effects of child Sex ($F(1,69) = 1.33$, *NS*, partial $\eta^2 = .02$), Gender Role ($F(1,69) = 0.04$, *NS*, partial $\eta^2 = .00$) were non-significant, as were the two-way interactions between Vignette and Sex ($F(1,69) = 2.43$, *NS*, partial $\eta^2 = .03$), Vignette and Gender Role ($F(1,69) = 0.19$, *NS*, partial $\eta^2 = .00$), child Sex and Gender Role ($F(1,69) = 0.78$, *NS*, partial $\eta^2 = .01$), and the three-way interaction between Vignette, child Sex and Gender Role ($F(1,69) = 2.00$, *NS*, partial $\eta^2 = .03$).

Anxious emotions. The analysis of mothers' anxious emotions was conducted using all vignette conditions. Results indicated a significant main effect of Vignette ($F(1,69) = 9.962$, $\alpha < .01$, partial $\eta^2 = .13$), with mothers anticipating feeling most anxious towards shyness, followed by aggression, and least anxious towards the prosocial behaviours, whose means did not differ significantly from one another (see Table 4). There were no significant main effects of child Sex ($F(1,69) = 0.05$, *NS*, partial $\eta^2 = .00$) or maternal Gender Role ($F(1,69) = 0.86$, *NS*, partial $\eta^2 = .01$). Two-way interaction effects between Vignette and child Sex ($F(1,69) = 0.13$, *NS*, partial $\eta^2 = .00$), Vignette and Gender Role ($F(1,69) = 0.05$, *NS*, partial $\eta^2 = .00$), and child Sex and Gender Role ($F(1,69) = 0.62$, *NS*, partial $\eta^2 = .01$) were non-significant, as was the three way interaction between child Sex, maternal Gender Role and Vignette ($F(1,69) = 0.01$, *NS*, partial $\eta^2 = .00$).

Praise. The analysis of mothers' anticipated praise was conducted on the shy, affiliative, and agentic vignette conditions. Results indicated a significant main effect of Vignette ($F(1.46, 103.52) = 211.04, \alpha < .001, \text{partial } \eta^2 = .75$). Mothers anticipated praising their children most after prosocial acts, and least following a display of shyness. Mothers' praise did not differ significantly between the two prosocial conditions (see Table 4). No significant main effects of child Sex ($F(1,71) = 0.66, NS, \text{partial } \eta^2 = .01$) or Gender Role ($F(1,71) = 0.31, NS, \text{partial } \eta^2 = .00$) were observed. The interaction effects between Sex and Vignette ($F(1.46, 103.52) = 0.29, NS, \text{partial } \eta^2 = .00$), Gender Role and Vignette ($F(1.46, 103.52) = 2.54, NS, \text{partial } \eta^2 = .04$), and Sex and Gender Role ($F(1,71) = 1.02, NS, \text{partial } \eta^2 = .01$) were likewise non-significant, as was the three-way interaction between child Sex, maternal Gender Role and Vignette ($F(1.46, 103.52) = 0.18, NS, \text{partial } \eta^2 = .00$).

Comfort. The analysis of mothers' comfort was performed using all four vignette conditions. Results indicated a significant main effect of Vignette ($F(2.85, 207.78) = 89.32, \alpha < .001, \text{partial } \eta^2 = .55$). Mothers were most likely to comfort their child after a display of shyness, followed by aggression and affiliative behaviour (which did not differ significantly from each other), followed by agentic behaviour (see Table 4). No main effects of child Sex ($F(1,73) = 0.06, NS, \text{partial } \eta^2 = .00$) or Gender Role ($F(1,73) = 3.47, NS, \text{partial } \eta^2 = .05$) were observed. The interaction effects between Sex and Vignette ($F(2.85, 207.78) = 0.92, NS, \text{partial } \eta^2 = .01$), Gender Role and Vignette ($F(2.85, 207.78) = 0.38, NS, \text{partial } \eta^2 = .01$), and Sex and Gender Role ($F(1,73) = 0.51, NS, \text{partial } \eta^2 = .01$) were likewise non-significant, as was the three-way interaction between child Sex, maternal Gender Role and Vignette ($F(2.85, 207.78) = 1.55, NS, \text{partial } \eta^2 = .02$).

Discouraging interventions. The analysis of mothers' use of discouraging interventions was conducted using only the aggressive and shy vignette conditions. Results indicated a significant main effect of Vignette ($F(1,72) = 131.19$, *NS*, $\alpha < .001$, partial $\eta^2 = .65$), with mothers more likely to intervene following an aggressive act than a shy one (see Table 4). No significant main effects of child Sex ($F(1,72) = 0.87$, *NS*, partial $\eta^2 = .01$) or Gender Role ($F(1,72) = 0.02$, *NS*, partial $\eta^2 = .00$) were observed. The interaction effects between Sex and Vignette ($F(1,72) = 0.03$, *NS*, partial $\eta^2 = .00$), Gender Role and Vignette ($F(1,72) = 0.16$, *NS*, partial $\eta^2 = .00$), and Sex and Gender Role ($F(1,72) = 0.47$, *NS*, partial $\eta^2 = .01$) were likewise non-significant, as was the three-way interaction between child Sex, maternal Gender Role and Vignette ($F(1,72) = 0.45$, *NS*, partial $\eta^2 = .01$).

Punitive responses. A 2(sex) x 2(gender role) ANOVA was performed on mothers' anticipated (non-physically) punitive responses following the aggressive vignette. No significant main effects of child Sex ($F(1,73) = 0.22$, *NS*, partial $\eta^2 = .00$) or Gender Role ($F(1,73) = 2.09$, *NS*, partial $\eta^2 = .03$) were observed. The interaction effect between Sex and Gender Role was likewise non-significant ($F(1,73) = 0.13$, *NS*, partial $\eta^2 = .00$).

Talk immediately. The analysis was conducted using all four vignette conditions. Results indicated a significant main effect of Vignette ($F(2.76, 204.70) = 170.10$, $\alpha < .001$, partial $\eta^2 = .70$). No main effects of child Sex ($F(1,74) = 0.84$, *NS*, partial $\eta^2 = .01$) or Gender Role ($F(1,74) = 1.98$, *NS*, partial $\eta^2 = .03$) were significant. The interactions between Vignette and child Sex ($F(2.76, 204.70) = 1.46$, *NS*, partial $\eta^2 = .02$), Vignette

and Gender Role ($F(2.76, 204.70) = 0.45$, *NS*, partial $\eta^2 = .01$), and child Sex and Gender Role ($F(1,74) = 1.19$, *NS*, partial $\eta^2 = .02$) were also non-significant.

For the main effect of Vignette, mothers were most likely to pull their child aside to talk following an incident of aggression, followed by shyness, and least likely to respond in this way following prosocial behaviour. Responses to the two prosocial vignettes did not differ significantly (see Table 4). However, this main effect was superseded by a trend-level three-way interaction between child Sex, maternal Gender Role, and Vignette ($F(2.76, 204.70) = 2.27$, $\alpha = .09$, partial $\eta^2 = .03$). In order to interpret this effect, a follow-up analysis of the simple 2-way interaction between child Sex and maternal Gender Role attitude within each vignette was analyzed.

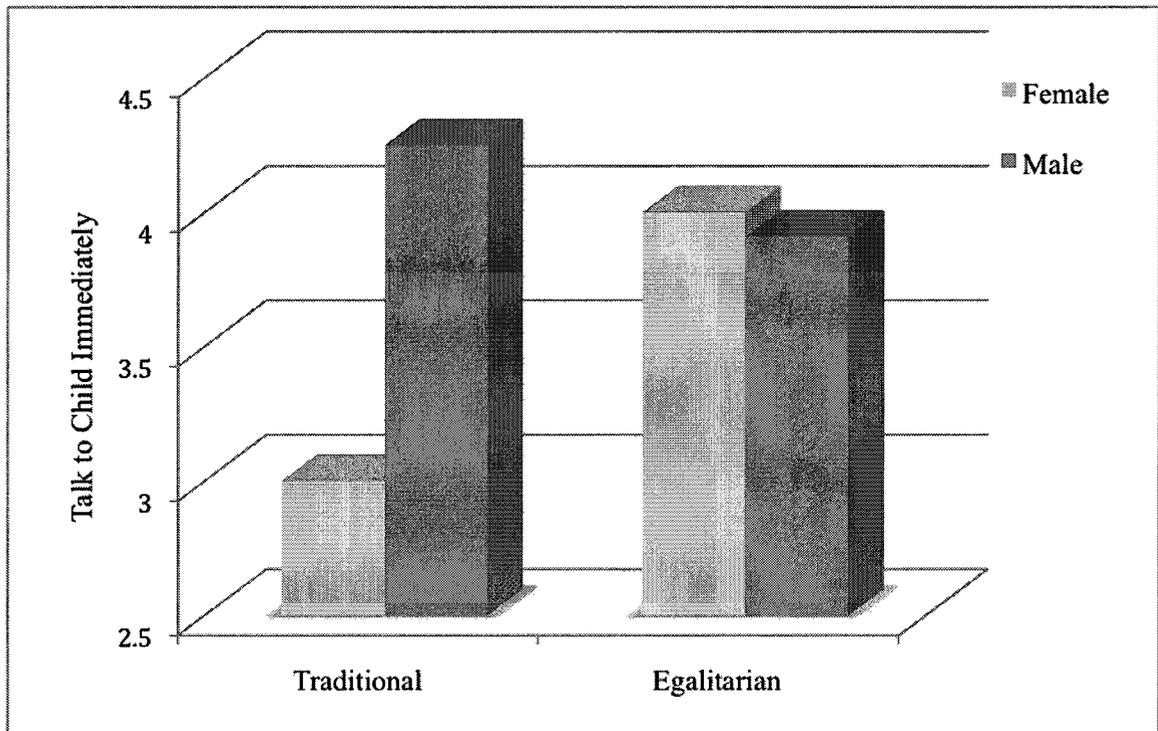
Within the shyness condition, the simple interaction between child Sex and Gender Role attitude was significant ($F(1,74) = 4.81$, $\alpha < .05$, partial $\eta^2 = .06$). To further analyze this interaction, the “simple simple” effects of child Sex at each level of maternal Gender Role attitude were computed. For egalitarian mothers, the effect of child Sex was not significant ($F(1,75) = 0.16$, $\alpha = .69$, partial $\eta^2 = .00$). Traditional mothers, however, were significantly more likely to pull aside and talk to a male child than a female one ($F(1,75) = 4.94$, $\alpha < .05$, partial $\eta^2 = .06$). This interaction is shown in Figure 2. Within the aggressive vignette, the simple main effects of Sex ($F(1,74) = 0.01$, *NS*, partial $\eta^2 = .00$) and Gender Role ($F(1,74) = 0.02$, *NS*, partial $\eta^2 = .00$) were non-significant, as was the simple two-way interaction between them ($F(1,74) = 0.76$, *NS*, partial $\eta^2 = .01$). Within the affiliative condition, the simple main effects of Sex ($F(1,74) = 0.16$, *NS*, partial $\eta^2 = .00$) and Gender Role ($F(1,74) = 0.66$, *NS*, partial $\eta^2 = .01$) were also non-significant, as was the simple two-way interaction between them ($F(1,74) = 0.45$, *NS*,

partial $\eta^2 = .01$). Finally, within the agentic condition, the simple main effects of Sex ($F(1,74) = 0.03$, *NS*, partial $\eta^2 = .00$) and Gender Role ($F(1,74) = 2.26$, *NS*, partial $\eta^2 = .03$) were non-significant, as was the simple two-way interaction between them ($F(1,74) = .23$, *NS*, partial $\eta^2 = .00$).

Talk later. The analysis of mothers' use of the 'talk later' strategy was conducted using all four vignette conditions. Results indicated a significant main effect of Vignette ($F(2.34, 163.92) = 16.21$, $\alpha < .001$, partial $\eta^2 = .19$). Mothers indicated that they would be more likely to talk to their child later about shy, affiliative, and agentic behaviours than about aggressive ones (see Table 4). No significant main effects of child Sex ($F(1,70) = 1.14$, partial $\eta^2 = .02$) or Gender Role ($F(1,70) = 2.10$, partial $\eta^2 = .03$) were observed. The interaction effects between Sex and Vignette ($F(2.34, 163.92) = 0.50$, partial $\eta^2 = .01$), Gender Role and Vignette ($F(2.34, 163.92) = 0.12$, partial $\eta^2 = .00$), and Sex and Gender Role ($F(1,70) = .77$, partial $\eta^2 = .01$) were likewise non-significant, as was the three-way interaction between child Sex, maternal Gender Role and Vignette ($F(2.34, 163.92) = 0.55$, partial $\eta^2 = .01$).

Do nothing. The analysis was conducted using all four vignette conditions. Results indicated a significant main effect of Vignette ($F(2.87, 192.05) = 10.34$, $\alpha < .001$, partial $\eta^2 = .13$), with mothers indicating that they were more likely to do nothing following shy, affiliative, and agentic behaviours than following aggressive ones (see Table 4). No main effects of child Sex ($F(1,67) = 0.23$, partial $\eta^2 = .00$) or maternal Gender Role ($F(1,67) = 2.36$, partial $\eta^2 = .03$) were observed. The interaction effects between Sex and Vignette ($F(2.87, 192.05) = 0.19$, partial $\eta^2 = .00$), Gender Role and Vignette ($F(2.87, 192.05) = 1.82$, partial $\eta^2 = .03$), and Sex and Gender Role ($F(1,67) =$

Figure 2. Mothers' reported likelihood of immediately pulling child aside to talk following shyness vignette.



0.00, partial $\eta^2 = 0.00$) were likewise non-significant, as was the three-way interaction between child Sex, maternal Gender Role and Vignette ($F(2.87, 192.05) = 0.48$, partial $\eta^2 = .01$).

Tolerance. The analysis of mothers' tolerance of child behaviours was conducted using only the shy and aggressive vignette conditions. Results indicated a significant main effect of Vignette ($F(1,73) = 182.07$, $\alpha < .001$, partial $\eta^2 = .71$). Mothers indicated more tolerance towards shyness than towards aggression (see Table 4). No significant main effects of child Sex ($F(1,73) = 0.41$, partial $\eta^2 = .01$) or Gender Role ($F(1,73) = 0.03$, partial $\eta^2 = .00$) were observed. The interaction effects between Sex and Vignette ($F(1,73) = 2.01$, partial $\eta^2 = .03$), Gender Role and Vignette ($F(1,73) = 0.97$, partial $\eta^2 = .01$), and Sex and Gender Role ($F(1,73) = 0.65$, partial $\eta^2 = .01$) were likewise non-significant, as was the three-way interaction between child Sex, maternal Gender Role and Vignette ($F(1,73) = 0.15$, partial $\eta^2 = .00$).

Encouragement. The analysis of mothers' encouragement of child behaviour was conducted using the shy, affiliative, and agentic vignette conditions. Results indicated a significant main effect of Vignette ($F(1.44, 100.98) = 466.78$, $\alpha < .001$, partial $\eta^2 = .87$). Mothers were more likely to encourage both forms of prosocial behaviour than they were shyness (see Table 4). Mean encouragement did not differ significantly between affiliative and agentic behaviour. No main effects of child Sex ($F(1,70) = 0.14$, partial $\eta^2 = .00$) or Gender Role ($F(1,70) = 0.14$, partial $\eta^2 = .00$) were observed. The interaction effects between Sex and Vignette ($F(1.44, 100.98) = 0.05$, partial $\eta^2 = .00$), Gender Role and Vignette ($F(1.44, 100.98) = 0.24$, partial $\eta^2 = .00$), and Sex and Gender Role ($F(1,70) = 1.54$, partial $\eta^2 = .02$) were likewise non-significant, as was the three-way

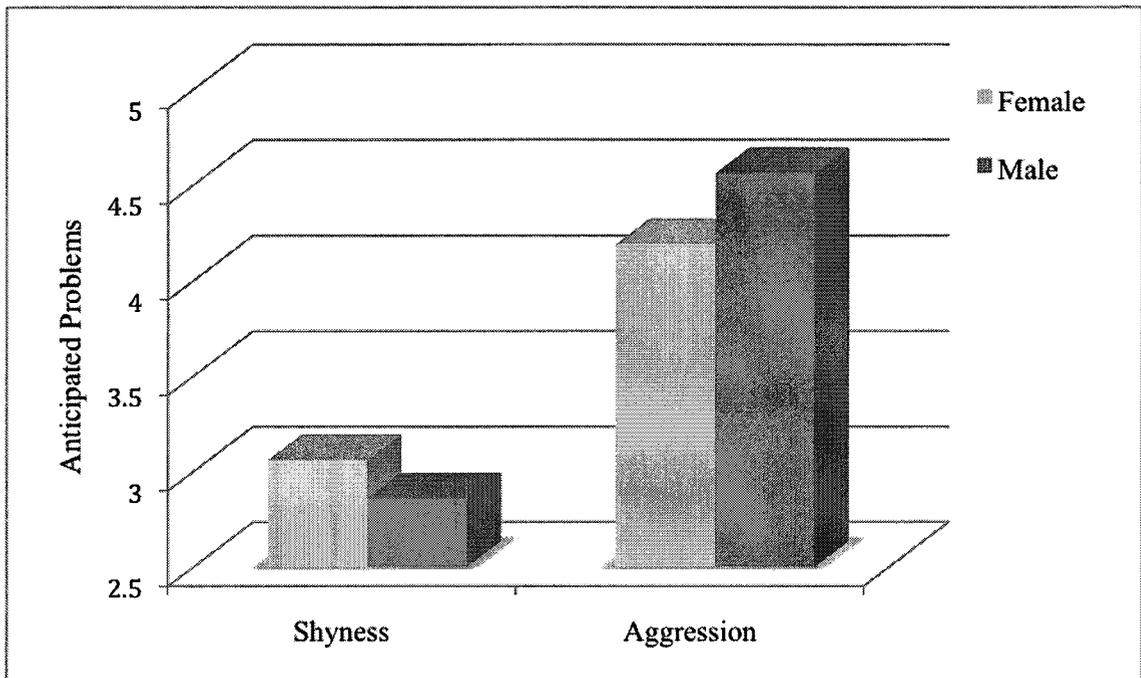
interaction between child Sex, maternal Gender Role and Vignette ($F(1.44, 100.98) = 0.63$, partial $\eta^2 = .01$).

Anticipated problems. The analysis was conducted using the aggressive and shy vignette conditions. Results indicated a significant main effect of Vignette on mothers' anticipation of problems for their child ($F(1,74) = 123.76$, $\alpha < .001$, partial $\eta^2 = .63$). No significant main effects of Sex ($F(1,74) = 1.08$, partial $\eta^2 = .02$) or Gender Role ($F(1,74) = 0.07$, partial $\eta^2 = .00$) were observed. The two-way interactions between Gender Role and Vignette ($F(1,74) = 0.02$, partial $\eta^2 = .00$) and child Sex and Gender Role ($F(1,74) = 0.91$, partial $\eta^2 = .01$) were non-significant, as was the three-way interaction between Vignette, child Sex, and maternal Gender Role ($F(1,74) = 0.16$, partial $\eta^2 = .00$).

For the main effect of Vignette, mothers anticipated more problems for their child following a display of aggression than of shyness (see Table 4). However, this main effect was superseded by a significant two way Vignette x child Sex interaction ($F(1,74) = 4.15$, $\alpha < .05$, partial $\eta^2 = .05$). In order to interpret this interaction, the simple effect of sex was computed at each level of vignette.

Within the aggressive vignette condition, results indicated a significant simple effect of Sex ($F(1,74) = 4.88$, $\alpha < .05$, partial $\eta^2 = .06$), with mothers anticipating more problems for boys ($M = 4.56$, $SD = 0.45$) than for girls ($M = 4.19$, $SD = 0.81$) following an aggressive act. The simple effect of Sex was not significant within the shyness Vignette ($F(1,74) = 0.20$, *NS*, partial $\eta^2 = .00$). This interaction is illustrated in Figure 3. The simple effect of Gender Role was non-significant within both the shyness vignette ($F(1,74) = 0.01$, *NS*, partial $\eta^2 = .00$) and the aggression vignette ($F(1,74) = 0.10$, *NS*,

Figure 3. Mothers' anticipated problems for their child following each vignette.



partial $\eta^2 = .00$, as was the interaction between Sex and Gender Role (shyness $F(1,74) = 0.89$, *NS*, partial $\eta^2 = .01$; aggression $F(1,74) = 0.27$, *NS*, partial $\eta^2 = .00$).

Anticipated benefits. The analysis of mothers' anticipated benefits to their child was conducted using all four vignette conditions. Results indicated a significant main effect of Vignette ($F(1,74) = 419.49$, $\alpha < .001$, partial $\eta^2 = .27$). Mothers anticipated that prosocial acts would bring the most benefits (the means for affiliative and agentic acts did not differ), fewer benefits to shyness, and that the least benefit would come from aggressive acts (see Table1). No main effects of child Sex ($F(1,74) = 0.02$, partial $\eta^2 = .00$) or Gender Role ($F(1,74) = 0.04$, partial $\eta^2 = .00$) were observed. The interaction effects between Sex and Vignette ($F(1,74) = 0.16$, partial $\eta^2 = .00$), Gender Role and Vignette ($F(1,74) = 0.38$, partial $\eta^2 = .01$), and Sex and Gender Role ($F(1,74) = 2.07$, partial $\eta^2 = .03$) were likewise non-significant, as was the three-way interaction between child Sex, maternal Gender Role and Vignette ($F(1,74) = 1.72$, partial $\eta^2 = .02$).

Typicality. The analysis of mothers' judgments of typicality was conducted using all four vignette conditions. Results indicated a significant main effect of Vignette ($F(2.46, 182.10) = 88.24$, $\alpha < .001$, partial $\eta^2 = .54$). Affiliative prosocial acts were judged to be the most typical, followed by aggression and shyness, whose means did not differ, and agentic prosocial behaviour was judged to be the least typical behaviour (see Table 4). No main effects of child Sex ($F(1,74) = 0.03$, *NS*, partial $\eta^2 = .00$) or Gender Role ($F(1,74) = 2.64$, *NS*, partial $\eta^2 = .03$) were observed. The interaction effects between Sex and Vignette ($F(2.46, 182.10) = 0.43$, *NS*, partial $\eta^2 = .01$), Gender Role and Vignette ($F(2.46, 182.10) = 0.98$, *NS*, partial $\eta^2 = .01$), and Sex and Gender Role ($F(1,74) = 1.85$, *NS*, partial $\eta^2 = .02$) were likewise non-significant, as was the three-way

interaction between child Sex, maternal Gender Role and Vignette ($F(2.46, 182.10) = 0.27, NS, \text{partial } \eta^2 = .00$).

Exploration of Potential Covariates

Demographic variables (maternal education, age, and ethnicity), child age, and three dimensions of parenting style (authoritative, authoritarian, and permissive subscales of the PSDQ) were all examined as potential covariates.

Overall, maternal education was largely unrelated to study variables, demonstrating only a handful of significant associations. Maternal education was significantly and positively correlated with scores on the SRES ($r = .29, \alpha < .05$), anxious emotions following shyness ($r = -.27, \alpha < .05$), and significantly and negatively with anticipated problems following shyness ($r = -.27, \alpha < .05$).

In contrast, both authoritative and authoritarian subscales of the PSDQ were significantly associated with a number of study variables, including scores on the SRES ($r = .34, \alpha < .01$; $r = -.24, \alpha < .05$, respectively). Authoritative parenting was also significantly and negatively correlated with negative emotions towards aggression ($r = -.255, \alpha < .05$) and negative emotions towards shyness ($r = -.229, \alpha < .05$), and positively with use of the talk immediately strategy following shyness ($r = .233, \alpha < .05$). Authoritarian parenting was also correlated with comforting following the affiliative ($r = .248, \alpha < .05$) and agentic vignettes ($r = .368, \alpha < .01$), and with punitive responses to aggression ($r = .300, \alpha < .01$).

Given their associations with both maternal gender roles and some responses to the vignettes, it was necessary to explore the possible confounding role of maternal education and authoritative parenting. As such, these variables were subsequently added

as covariates in analyses where a significant main or interaction effect of gender-role attitude was observed. These measures were also added as covariates for analyses of DVs with which they were correlated. Due to its association with some responses to the vignettes, score on the authoritarian subscale was added as a covariate in analyses of DVs with which it was correlated. Analyses were then re-run with the added covariates, where appropriate.

Overall, the pattern of the results remained unchanged. However, in a few cases, some significant main effects and interaction effects were reduced to “trends” or were no longer significant. For example, the previously observed three-way (Sex x Gender Role x Vignette) interaction for positive emotions was no longer significant at the .05 level ($F(1.63, 110.94) = 2.25, \alpha = .12, \text{partial } \eta^2 = .03$).

For the talk immediately strategy, when maternal education and authoritative parenting were added as covariates, the previously observed significant main effect of Vignette was now found to be non-significant ($F(2.86, 203.09) = 0.61, \alpha = .60, \text{partial } \eta^2 = .01$), as well as the three-way interaction between Sex, Gender Role attitude, and Vignette ($F(2.86, 203.09) = 1.30, \alpha = .28, \text{partial } \eta^2 = .02$).

When the analysis of mothers’ anticipated problems was rerun with maternal education and authoritative parenting as covariates, the previously observed main effect of Vignette was no longer significant ($F(1,71) = 2.62, \alpha = 0.11, \text{partial } \eta^2 = .04$). However, the two-way interaction between Vignette and child Sex remained significant ($F(1,71) = 4.96, \alpha < .05, \text{partial } \eta^2 = .07$).

Discussion

The central goal of the present study was to examine the impact of mothers' gender-role attitudes on their reactions to their preschool-aged children's asocial, antisocial, and prosocial behaviours. It was expected that mothers would respond more positively to children's gender-congruent social behaviours than to incongruent ones. Moreover, it was further hypothesized that this effect would be more pronounced among mothers who held more traditional gender role attitudes.

Overall, mothers reported a differential pattern of responses to children's different social behaviours that was theoretically consistent with the previous extant research literature. Notwithstanding, results provided only mixed support for hypotheses concerning the effects of child sex and maternal gender role attitudes. Traditional mothers expressed fewer positive emotions towards boys' shyness than did egalitarian mothers and were more likely to talk immediately to boys following a display of shyness. However, mothers in general anticipated more negative consequences to aggression for boys than for girls. In the following sections, the implications of these results are discussed in more detail.

Maternal Responses to Child Social Behaviours

One goal of the study was to assess general differences in mothers' responses to the different asocial, antisocial, and prosocial behaviours. The large number of observed main effects of vignette indicates that, as expected, mothers display markedly different reactions towards aggressive, shy, and the two forms of prosocial behaviours in their children.

Shyness versus aggression. Aggression and shyness are two potentially maladaptive social behaviours that constitute a source of concern for parents when expressed on a regular basis (Rubin & Mills, 1990). Indeed, in the present study mothers reported greater feelings of worry and confusion in response to these behaviours as compared to prosocial behaviours.

Parents, teachers, and scholars alike have long recognized the maladaptive nature of aggressive and externalizing behaviour for children (e.g., Rubin & Mills, 1990). Aggression is easily observable, and has salient deleterious outcomes (e.g., Cheah & Rubin, 2004; Vitaro, Gendreau, Tremblay, & Oligny, 1998). Shyness, on the other hand, may be less salient and observable, and may therefore be more likely to be overlooked by parents and teachers (Rubin & Coplan, 2004).

Overall, the results of the present study seem to indicate that aggressive behaviours are more negatively salient to mothers than are shy ones. For example, mothers reported more negative emotions towards aggression than shyness and were more likely to tolerate shyness than aggression. Mothers also anticipated more problems and fewer benefits for their child following an aggressive act than following a display of shyness. In the same vein, mothers were less likely to do nothing following an aggressive act, and more likely to intervene in a discouraging way, by stopping the behaviour or directing the child to a new activity. Mothers were also more likely to talk to their child immediately following aggressive behaviour, and less likely to anticipate speaking with their child at a later time, indicating that they view such behaviour as requiring immediate, rather than delayed, attention. These results are congruent with previous findings that parents tend to respond to aggression with more anger and disappointment,

and use more force in disciplining such acts than they do other transgressions (Grusec et al., 1982; Mills & Rubin, 1990).

Although aggression may represent more of a pressing concern for mothers, this is not to say that they did not also recognize the potential negative implications of shyness. Mothers anticipated more anxious emotions (worry and confusion) in response to shyness than aggression, indicating that such behaviour was also a cause for concern. Mothers' reported use of discouraging and immediate interventions in response to shyness (although comparatively lower than for aggression) nonetheless differed markedly from what was anticipated in response to the prosocial behaviours. Levels of encouragement and anticipated benefits to shyness were also lower than for the two prosocial behaviours examined.

Since shyness may not be always construed as a "misbehaviour", it follows that mothers would not anticipate responding to it in a punitive way. Rather, in the present study, mothers were more likely to report that they would comfort their child after a display of shyness as compared to aggression. Mothers of shy children may use comforting strategies to attempt to alleviate the psychological distress that they perceive their child to be experiencing. This approach may be potentially useful for alleviating shy children's overt display of anxiety in the short term. However, consistently interrupting a shy child's social interactions to comfort him/her may constitute a facet of *overprotective* parenting (Coplan, Reichel, & Rowan, 2009).

Overprotective parents display a pattern of overly anxious, intrusive behaviours that include inappropriate displays of warmth and premature intervention in children's social behaviour (Coplan et al., 2008). It has been suggested that such behaviour may be

particularly deleterious to shy children, as it denies them the opportunity to practice important skills for coping with their social fear and anxiety (Rubin & Burgess, 2002). Indeed, Coplan et al. (2008) recently reported that mothers who regularly employed an overprotective parenting style tended to exacerbate negative adjustment outcomes, such as internalizing problems and peer relationship difficulties, for shy children in early elementary school.

It should be noted that because of its focus on the broad categories of encouraging and discouraging responses, the present study did not include responses more typically appropriate of shyness. For example, in previous studies of responses to shyness, teachers have indicated that they might directly teach social skills or model social behaviours for shy children, or encourage a shy child to interact socially (Arbeau & Coplan, 2007). Thus, the full spectrum of strategies, or combination of strategies, likely used by mothers in response to shyness were not assessed in the current study. Comforting a child is not necessarily indicative of overprotective parenting, and, especially when combined with other parenting strategies not specifically assessed by this study, may be an appropriate response to shyness.

Affiliative versus agentic behaviours. A second goal of the study was to examine the previously unexplored question of whether mothers might distinguish between different 'genderized' forms of prosocial behaviours. Most research on prosocial behaviour in young children has tended to examine a narrow range of behaviours, such as empathy, caring, and sharing (Tisak et al., 2007). Hastings and colleagues (e.g., Hastings, McShane, et al., 2007) have posited that such affiliative behaviours represent only a subset of ways in which children can behave prosocially. Studies which assess only these

stereotypically feminine forms of prosocial behaviour, they argue, may be ‘missing out’ on ways in which boys may express their prosocial tendencies. Some more ‘masculine’, agentic forms of prosocial behaviour put forward include social initiation and inclusion (e.g., Tisak et al., 2007).

Hastings and colleagues (e.g., Hastings, Utendale et al., 2007) theorized that there may be two different ways in which differences in prosocial tendencies between boys and girls might emerge. The first possibility is that parents differentially reinforce different forms of prosocial behaviour in boys and girls, in accordance with their goals for gender-typed socialization. Another possibility is that the same parenting practices may foster development along different, perhaps biologically-based, trajectories of prosocial behaviour for boys and girls (Hastings, Utendale et al., 2007; Spinrad et al., 1999).

Results of the present study provided at least some evidence to suggest that mothers do distinguish between affiliative and agentic behaviours in their children. For example, mothers reported significantly more positive emotions towards their children’s agentic behaviour than towards their affiliative behaviour. They were also more likely to comfort their child following the affiliative vignette than the agentic vignette.

The vignette depicting an affiliative act describes the target child comforting another child who is upset. It is possible that mothers would feel fewer positive emotions following this vignette, either out of empathy for this other child, or out of concern that this emotional upset may ‘rub off’ on their own child. This would also explain mothers’ tendency to anticipate comforting their child following this vignette.

Another possibility is that mothers anticipated more positive emotions to agentic behaviour because it represents a desirable behaviour that their child does not already

routinely engage in. Agentic behaviour was rated as the least typical behaviour of the preschool-aged children of mothers in this sample. Since affiliative behaviour was rated as the most typical, mothers may see such behaviour as 'old hat', and experience fewer positive emotions than towards an equally praiseworthy, but novel, behaviour.

No other differences were found in mothers' reactions to the two prosocial behaviours. It is possible that the lack of differences found was due, at least in part, to floor and ceiling effects on the dependent variables. Ratings of encouragement, praise, and anticipated benefits to prosocial behaviour were all very high, and thus subtle differences in levels of these outcome variables may have been obscured. The imprecise nature of the 5-point psychometric rating scale used to measure mothers' emotional and behavioural reactions may also have contributed to the lack of significant findings. It is also possible the inclusion of additional response options for mothers may have revealed further differences. Because of its focus on comparing mothers' reactions to all four behaviours, the current study did not include response choices specifically geared towards distinguishing between affiliative and agentic prosocial behaviour. However, the differences that were observed indicate that mothers do, at least in some instances, make qualitative distinctions between these two forms of prosocial behaviours.

Responses to Boys versus Girls

Another main goal of the study was to examine whether mothers reacted differently to boys and girls when they were depicted displaying different forms of social, antisocial, and prosocial behaviours. Results from the gender-role socialization literature suggest that parents tend to encourage their children to play with gender-typed toys and perform stereotype-congruent activities and chores (e.g., Basow, 1992; Fagot, 1978).

There is also some indication that parents may expect their children to conform to gender-stereotypes when it comes to their social behaviours. For example, parents have been found to be more discouraging of physical aggression from girls than from boys (e.g., Blakemore et al., 2009; Martin & Ross, 2005), and more accepting of shyness in girls than boys (e.g., Birnbaum & Croll, 1984; Burgess et al., 2005; Stevenson-Hinde & Glover, 1996). It was therefore expected that mothers in the present study would respond more positively (and less negatively) to their children's gender-stereotypical social behaviours. Overall, the current results provided only mixed support for these hypotheses.

A two-way interaction between vignette and child sex was observed for mothers' anticipation of problems for their children. Specifically, in response to aggression, mothers anticipated more problems for boys than for girls. This finding runs counter to the hypothesis that physical aggression in girls (generally considered atypical) would be seen as more of a problem than it would for boys. This finding is especially surprising given that Crick (1997) and others have reported that overtly aggressive girls tend to experience more maladjustment than aggressive boys.

One possible explanation is that mothers attribute a higher degree of stability to aggression for boys than for girls. Before children enter preschool, incidents of aggression are relatively common among both boys and girls (e.g., Cummings et al., 1989). Mothers of preschool-aged girls, having experienced the tapering-off of their child's aggressive behaviours with age, may be more likely to view such behaviour as a transient 'phase' their girl is going through, rather than a stable tendency likely to result in long-term problems for their child. Although this study did not assess mother's

attributions of stability, some researchers have suggested that mothers of boys may be more likely to attribute aggression to stable, internal causes than are mothers of girls (Hastings & Rubin, 1999).

No other significant effects of sex on mothers' responses towards aggression were noted. As discussed earlier, whereas mothers may tolerate mild physical aggression more among boys, they prohibit severe physical aggression equally among boys and girls (Martin & Ross, 2005). The aggression vignette used in this study depicted the target child pushing another child down, which mothers may have considered a relatively severe offence, as compared to, for example, hitting the other child on the arm, or pushing him but not knocking him over. If this was the case, it follows that mothers would not be as likely to write off such behaviour from their sons as 'boys being boys'. There is also evidence to suggest that parents tend to expect gender-congruent behaviour more from boys than from girls (e.g., Freeman, 2007; Golombok & Hines, 2002; Kane, 2006;). It may therefore be that the mothers in the sample were less concerned about the gender-incongruence of their girls' aggression than they were about incongruent behaviour from boys.

Contrary to hypotheses, no significant effects involving child sex were observed in terms of mothers' reactions to affiliative and agentic prosocial behaviours. By and large, mothers' reactions to these behaviours were similar whether they were expressed by boys or girls. This finding seems to be supportive of the different-tracts theory rather than the social reinforcement theory. If gender differences do exist in boys' and girls' expressions of prosocial tendencies, it is possible that as Hastings and colleagues have

proposed, mothers' identical positive socialization of boys and girls fosters development along two separate trajectories (Hastings, Utendale, et al., 2007).

As well, it was somewhat surprising that mothers did not report differences in the frequencies of these prosocial behaviours between boys and girls. Although it is possible that this difference is illusory, as some researchers have suggested (e.g. Hastings, McShane et al., 2007), it may also be that the gender differences observed in previous studies of affiliative prosocial behaviour do not emerge until children are older. It has been noted that girls' prosocial behaviour shows an increase over time, whereas boys' decreases (Hay et al., 1999). Thus, the present sample of preschool-aged children may have been yet to experience this developmental change.

In addition, no overall sex differences were found in mothers' responses to shyness. This finding is at odds with previous literature suggesting that parents are more accepting of shyness in girls than in boys (e.g., Garside & Klimes-Dougan, 2002). One possible explanation for this lack of findings lies in the description of shyness used in the present study. Using a similar vignette description of shyness, Arbeau and Coplan (2007) did not report any sex differences in teachers' reactions to shy boys and girls. These researchers hypothesized that this may have been due to the relatively 'severe' depiction of shyness used in their study. For example, in their study of mother-child interactions, Stevenson-Hinde and Glover (1996) reported that *medium-shy* girls received more positive interactions from their mothers than did *medium-shy* boys. However, this difference was not found for *high-shy* children. It is possible that the vignettes used in the present study were more suggestive of high levels of shyness. More gender differences may have emerged if the vignette had described a more moderate level of shyness.

Notwithstanding, some additional effects of child sex on mothers' responses to shyness emerged in interaction with maternal gender role. These findings are discussed further in the following section.

Maternal Gender-Role Attitudes

The final goal of this study was to examine the role of maternal gender role attitudes in responses to different forms of social, antisocial, and prosocial behaviours in boys and girls. Results from previous studies have suggested that parents with traditional gender-role attitudes hold stronger expectations that their children behave in gender-congruent ways (e.g., Gervai, Turner, & Hinde, 1995). For example, parents with traditional gender-role attitudes have been found to initiate more, and respond more positively to, their children's gender-typical toy play, and to assign more gender-stereotypical chores to their children than do parents with more egalitarian attitudes (Fagot, Leinbach, and O'Boyle, 1992; McHale, Crouter, & Tucker, 1999). It was therefore speculated that traditional mothers would also be more likely than egalitarian mothers to respond more positively to children's gender-congruent social behaviours, and more negatively to their incongruent ones. The results of the present study were partially supportive of this hypothesis.

To begin with, a three-way interaction effect was found between child sex, maternal gender role attitude, and vignette for mothers' ratings of positive emotions. When the interaction was broken down, gender-role attitude was not found to contribute towards mothers' positive emotional responses to shyness for girls. In contrast, traditional-minded mothers reported significantly lower levels of positive emotions in response to shyness in boys than did their more egalitarian counterparts.

Because it is based in the emotions of fear and anxiety, shyness is often considered a more 'feminine' trait (Kimmel, 2004). Indeed, as described earlier, there is some evidence to suggest that this behaviour is less socially acceptable for boys than for girls (Rubin et al., 2002). This finding is congruent with the notion that mothers who are more traditional in their gender-role attitudes are likely to be less accepting of gender-incongruent behaviour in their children.

In contrast, traditional and egalitarian mothers did not differ in their positive emotional responses to shy girls. This may have less to do with the social acceptability of shyness in girls and more to do with floor effects due to the 'negative' nature of the behaviour. Since shyness constitutes a worrisome behaviour in both boys and girls (Rubin & Burgess, 2002), it was perhaps not surprising that mothers (even more traditional mothers, who should theoretically want their daughters to fit feminine stereotypes) did not anticipate a strong degree of happiness or pride in response to this behaviour.

A similar pattern of results was observed in mothers rating of the likelihood that they would intervene immediately to speak to their child: a trend-level three-way interaction effect between child sex, maternal gender role attitude, and vignette was found for this outcome variable. When interpreting this result, it is important to keep in mind that this interaction only approached traditional levels of statistical significance. Furthermore, when parenting style and maternal education were added as covariates, this interaction was no longer found to be significant. Interpretation of this result must therefore be approached with caution, and any conclusions drawn should be regarded as tentative. However, since this interaction was of theoretical interest given the hypotheses

of the present study, follow up analyses were conducted. These analyses indicated differences between traditional mothers' reactions to shy behaviour in boys versus girls.

Egalitarian mothers did not differ in their likelihood of intervening directly in response to shy behaviours displayed by boys or girls. However, traditional mothers were more likely to pull aside and talk to a shy boy as compared to a shy girl. Though not a punitive strategy, immediately intervening in their son's shy behaviour may be indicative of traditional mothers' desire to change this behaviour. This finding lends further support to the hypothesis that traditional mothers would be more disapproving of gender-incongruent behaviours than would more egalitarian mothers.

Taken together, these findings are supportive of the notion that mothers with traditional gender role attitudes are more likely to respond negatively to children's gender-incongruent social behaviour (particularly for boys). The results of the present study have particular implications for the development of shyness and its concomitants in boys. There is a growing literature suggesting that shyness, though expressed with similar frequency by boys and girls, may have more severe short- and long-term negative consequences for boys than for girls. For example, as compared to shy girls, shy boys are more likely to experience peer exclusion and loneliness in childhood and tend to marry and start families later (e.g., Coplan et al., 2004; Gazelle & Ladd, 2003; Nelson, Rubin, & Fox, 2005; Rubin et al., 2009).

The present results were supportive of the notion that such differences in the outcomes and concomitants of shyness experienced by boys and girls may be due in part to the responses that this behaviour elicits from parents. Mothers (particularly those espousing more traditional gender role attitudes) responded with fewer positive emotions

to boys' shyness, and were more likely to pull aside and talk to a shy boy than a shy girl. In particular, this tendency to interrupt boys' social interactions (or attempts thereof) to speak with them may be indicative of an overprotective or intrusive parenting style. As discussed previously, this inappropriately intrusive style may be particularly deleterious to shy children, as it prevents them from acquiring and utilizing important social interaction skills (Rubin & Burgess, 2002).

Thus, shy boys of mothers who hold traditional gender attitudes may be at a particular risk of experiencing such overprotective parenting. By overtly and immediately intervening in their boys' shy behaviours, perhaps in an attempt to encourage more gender-congruent conduct, traditional mothers may actually be preventing their children from acquiring the skills that would allow them to cope adaptively with their anxiety. Conversely, having a mother who holds more egalitarian attitudes may be a protective factor for shy boys.

Role of parenting style. As a final note, because of its conceptual association with gender-role attitudes, maternal parenting style was initially chosen as a potential covariate to be controlled for in the current study. Results from previous literature has indicated that parents who endorse more traditional gender-role attitudes tend to engage in more authoritarian parenting, whereas parents with egalitarian attitudes tend to be more authoritative (e.g., Neitelbladt, Uddenbero, & Enoleson, 1981). Supportive of this notion, results indicated that mothers with more traditional gender role attitudes tended to be more authoritarian and less authoritative in their parenting styles. As well, authoritative and authoritarian parenting styles were related to some of mothers' reactions to child behaviours. For example, authoritative parenting was related to talking

immediately to shy children, and negatively related to mothers' negative feelings.

Authoritarian parenting, on the other hand, was related to mothers' punitive responses to aggression. Selected analyses were therefore rerun using these parenting measures as covariates.

When the covariates were added, many of the results remained unchanged, with a few notable exceptions. The previously observed three-way interactions between child sex, maternal gender role attitude, and vignette no longer had a significant effect on mothers' reports of positive emotions and use of the 'talk immediately' strategy. Main effects of vignette on mothers' anticipated problems and use of the talk immediately strategy were also reduced below traditional levels of statistical significance. However, it should be noted that results for the significant two-way sex by gender role interaction effect on mothers' anticipated problems did not change.

There are a number of ways to interpret these results. To begin with, from a statistical standpoint, the inclusion of psychometrically-measured covariates (such as the subscales of the parenting measure used in the current study) may result in a loss of power in ANCOVA (Tabachnik & Fidell, 2007). The lack of significance of the interaction effects with the addition of covariates may therefore be partially due to this reduction in power.

However, it is also possible that the observed interaction effects involving gender roles attitudes were at least partially accounted for by associations with mothers' parenting styles. Previous literature has suggested an association between gender role attitudes and parenting style. Specifically, parents who endorse traditional gender role attitudes have been found to employ more authoritarian parenting strategies (e.g.,

Neitelblatt et al., 1981). Thus, traditional mothers more negative reactions to gender-incongruent behaviour may be partially a result of their general tendency towards authoritarian parenting.

Limitations, Caveats, and Future Directions

Overall, the results of the study provided support for the hypothesis that mothers' gender role attitudes play a role in their reactions to the behaviours of their boys and girls. The most compelling evidence for this hypothesis came from mothers' reactions to children's shyness, with traditional mothers responding more negatively to shyness in boys than egalitarian mothers. However, some limitations and caveats must be acknowledged with an eye towards directions for future research.

First, this study was limited in part by its relatively small and homogeneous sample. In combination with the number of factors examined, this small sample size resulted in low power of analysis for the interaction effects. The present study may therefore have failed to detect sex- or gender role-related differences that may exist in the population. Future studies would benefit from larger, more socioeconomically diverse samples in order to detect such differences and to be able to generalize findings to a wider population.

As well, in the present study mothers scores from a continuous variable measure of gender-role attitudes (SRES) were used to create groups of 'egalitarian' and 'traditional' mothers. Creating discrete groups from continuous data may not be ideal, as it results in loss of information (Tabachnik & Fidell, 2007). However, this technique has previously been used to create distinct groups of participants based on SRES score (e.g., Ben-David & Schneider, 2005; Mosick-Feldis, 1990; Razzano, Lombardo, & Francis,

1988). Moreover, in their manual to the SRES, King and King (1993) note that although the scale does not have predetermined cut-off scores for classifying individuals as traditional, or egalitarian in their gender role attitudes, it still makes sense conceptually to speak of groups of respondents scoring “more egalitarian” or “less egalitarian” than others.

In the current study, participants in the lowest quartile based on SRES score were considered ‘traditional’ while those in the top three quartiles were labeled ‘egalitarian’. Since norms are only currently available for the long versions of the SRES, no reliable information about percentile ranks could be obtained. However, two studies using the short form of the SRES with female samples were available for comparison. In a study of female college faculty members, Billingham & King (1991) reported a mean SRES score of 4.55 ($SD = 0.37$). Rosenfeld & Jarrad (1985), in a study of female college students, reported a mean of 4.36 and standard deviation of 0.47. The present study yielded a mean SRES score of 4.02 (approximately one standard deviation lower than the means obtained in the comparison studies) and a standard deviation comparable to those obtained in the comparison studies ($SD = 0.35$).

In the present study, participants in the ‘traditional’ group had SRES scores ranging from 3.11 to 3.71 (z -scores -2.6 to -0.9). When these scores are compared to the means obtained in other samples, this provides some reassurance that this group’s scores actually do correspond to relatively traditional attitudes in the population.

Both the comparison studies were conducted using samples of highly educated women (one sample of women enrolled in undergraduate degrees or higher, one of college professors), comparable to the present study, in which 78% of participants had

completed an undergraduate degree or higher. It should be noted that the results of the study may therefore be generalizable only to comparable populations, with limited generalizability to lower SES populations.

It must also be acknowledged that conclusions regarding causality cannot be derived from the present findings. For example, it is possible that traditional gender role attitudes espoused by some mothers may have *caused* them to react in specific ways to their son's shy behaviours. However, it is also possible that mothers' experience of their sons' shy behaviour influenced their attitudes towards appropriate gender roles. Or, as described previously, a third variable (i.e., parenting style) may have contributed to both gender-role attitudes and reactions to shyness.

As well, since the present study focused exclusively on mothers, it was not possible to assess how mothers' differential responses to children's social behaviours might impact upon the trajectories, outcomes, and concomitants of these behaviours. Longitudinal studies assessing women's gender roles prior to motherhood and following them as their child grows up are necessary to help to understand how gender roles may impact mothers' responses to their children's behaviours, and how these responses affect child behaviour over time.

Qualitative data about mothers' attitudes and motivations may also be useful in this respect. Asking mothers directly about their goals for their children's socialization and the reasons behind their reactions to their children's behaviour may provide some insight into the impact of gender role attitudes on these reactions. In the present study, mothers were asked to rate their gender role attitudes, as well as the likelihood of several emotions and behavioural responses. A more qualitative approach would have been able

to assess the links between these three constructs as well. For example, a mother may feel worried that her shy boy will be perceived as a 'sissy', and decide to talk with him immediately to try and alter his behaviour. In this vein, qualitative data would also help to reduce the ambiguity in some of the questions used in the present study. Although mothers rated the likelihood of speaking with their child about the various behaviours both immediately and later, they were not asked to indicate the content of this talk. When a mother pulls her child aside to talk she may communicate a multitude of different messages. More open-ended questioning would help researchers gain an understanding of mothers' socialization intentions and practices in the domain of social behaviours.

The present study employed hypothetical vignettes to assess mothers' purported reactions to child behaviours. Although the use of vignettes provides a reasonable alternative to observational data when the latter is not feasible, direct observation of mothers interacting with their children is still the gold standard. Offering response choices can never anticipate the entire range of reactions mothers may have to their children's behaviour. Moreover, mothers can only report on behaviour that they are consciously aware of. Future studies using observational methods may provide more insight into the full range of reactions mothers' may experience towards their children's asocial, antisocial, and prosocial behaviours. In the same vein, there is also a possibility that mothers' responses may have been influenced by social desirability. Although the gender role attitude scale used has been shown to be independent from measures of social desirability (King & King, 1993), it is not known how the desire to present themselves in a favourable light may influence mothers' responses to the vignettes. As an alternative to direct observation, employing forced-choice responses or asking mothers to rank order a

list of reactions following each vignette may be useful in future studies of these constructs to help combat this effect.

The accuracy of mothers' predictions of their own responses to these behaviours may also have been limited by the relatively wide age-range of the children in the sample. Target children ranged in age from 27 – 72 months, or roughly 2 to 6 years. This represents a broad age range during which children may undergo several important developmental milestones. Children at the younger end of this spectrum may not yet exhibit behaviours more common among older children. For this reason, some of the behaviours presented via vignette in this study may be less familiar to some mothers than to others. Moreover, behaviours which may be entirely appropriate to two-year-olds may be less appropriate for older children, and mothers may therefore react differently to such behaviours depending on the age of their child. While child age was not significantly associated with any of the outcome variables in the present study, future research should aim to disentangle any possible effects of child age.

The current study investigated only mothers' attitudes and reactions to these behaviours. As mentioned earlier, there is some evidence to suggest that fathers may play a particularly important role in the gendered socialization of their children (Kane, 2006; Cassano, Perry-Parrish, & Zeman, 2007). Fathers tend to enforce gender boundaries more strongly than do mothers (Cassano et al., 2007; Fabes & Martin, 1991; Kane, 2006), and are also more concerned about the "gender appropriateness" of their children's behaviour (Lippa, 2002). In particular, it has been reported that fathers give fewer positive responses to their children's gender-incongruent play (Fagot & Hagan, 1991). Fathers also tend to hold more traditional gender role attitudes than do mothers (Leaper &

Friedman, 2007). The results of the present study indicated a difference in traditional and egalitarian mothers' responses to boys' shyness. Such a difference might be expected to be even more pronounced among fathers. A study including fathers may also have uncovered differences in attitudes and reactions to the other behaviours assessed (i.e., aggression, prosocial behaviours). Future research would benefit from assessing both fathers' and mothers' attitudes and reactions towards these behaviours, and any differences that may exist between them.

Finally, the present study provided preliminary evidence that mothers do, at least in some cases, distinguish between the two forms of prosocial behaviour presented. However, this is but a first step in teasing apart these behaviours and their origins and implications. Until very recently, research on prosocial behaviour has focused exclusively on affiliative prosocial behaviour. Hastings and colleagues set the stage for such research by suggesting the existence of a second form of prosocial behaviour more typical of boys: agentic prosocial behaviour (Hastings, McShane, et al., 2007; Hastings, Utendale, et al., 2007). Future research should first focus on refining the definitions of each form and the distinctions between them, and validating these definitions via observational techniques. To gain a better understanding of how differences in girls' and boys' prosocial behaviours might emerge, both socialization hypotheses should be examined empirically. Future studies of these constructs should also include more questions geared specifically towards teasing apart any differences that may exist in the way parents react to, speak about, and model these behaviours.

Overall, this study represents an important step towards understanding the ways in which parents' attitudes may impact their socialization practices with their children. The

results provided support for previous literature suggesting that boys and girls may be at differential risk for deleterious outcomes of maladaptive social behaviours. In this vein, results have potential implications for targeting family structures which may place children, (e.g., shy boys) at particular risk of exacerbating the negative consequences of these behaviours. The study also marks an important first step in differentiating between different forms of prosocial behaviour.

References

- Ajzen, I., & Fishbein, M. (1977). Attitude-behavior relations: A theoretical analysis and review of empirical research. *Psychological Bulletin*, *84*, 888-918.
- Arbeau, K. A. & Coplan, R. J., (2007). Kindergarten teachers' beliefs and responses to hypothetical prosocial, asocial, and antisocial children. *Merrill-Palmer Quarterly*, *53*, 291-318.
- Bandura, A. (1977). *Social Learning Theory*. New York: General Learning Press.
- Basow, S. A. (1992). *Gender stereotypes and roles*, (3rd ed). Pacific Grove, CA: Brooks/Cole.
- Ben-David, S., & Schneider, O. (2005). Rape perceptions, gender role attitudes, and victim-perpetrator acquaintance. *Sex Roles*, *53*, 385-399.
- Berenbaum, S. A., & Hines, M. (1992). Early androgens are related to childhood sex-typed toy preferences. *Psychological Science*, *3*, 203-206.
- Bernard, V. R. (1999). Perceptions of sex role egalitarianism and dyadic adjustment among African-American couples. *Dissertation Abstracts International Section A: Humanities & Social Sciences*, *59(11-A)*, 4291.
- Birnbaum, D. W. & Croll, W. L. (1984). The etiology of children's stereotypes about sex differences in emotionality. *Sex Roles*, *10*, 677-691.
- Blakemore, J. E. O., Berenbaum, S. A., & Liben, L. S. (2009). *Gender Development*. New York: Psychology Press.
- Blakemore, J. E. O., & Hill. C. A. (2008). The child gender socialization scale : A measure to compare traditional and feminist parents. *Sex Roles*, *58*, 192-207.

- Brannon, L. (2008). *Gender: Psychological Perspectives*, (5th ed.). Boston : Pearson Education Inc.
- Burgess, K. B, Rubin, K. H., Cheah, C. S. L., & Nelson, L. J. (2005). Behavioral inhibition, social withdrawal, and parenting. In W.R. Crozier & L.E. Alden (Eds), *The essential handbook of social anxiety for clinicians* (pp. 99-120). Sussex, UK: Wiley.
- Cahill B., & Adams, E. (1997). An exploratory study of early childhood teachers' attitudes toward gender roles. *Sex Roles*, 36, 517-529
- Cairns, R. B., Cairns, B. D., Neckerman, H. J., Ferguson, L. L., & Garipey, J. (1989). Growth and aggression: 1. Childhood to early adolescence. *Developmental Psychology*, 25, 320- 330.
- Capaldi, D. M. (1991). Co-occurrence of conduct problems and depressive symptoms in early adolescent boys: I. Familial factors and general adjustment at Grade 6. *Development and Psychopathology*, 3, 277-300.
- Capaldi, D. M., Crosby, L., & Stoolmiller, M. (1996). Predicting the timing of first sexual intercourse for at-risk adolescent males. *Child Development*, 67, 344-359.
- Caspi, A., Elder, G. H., & Bem, D. J. (1987). Moving against the world: Life course patterns of explosive children. *Developmental Psychology*, 23, 308-313.
- Cheah, C. S. L. & Rubin, K. H. (2004). A cross-cultural examination of maternal beliefs regarding maladaptive behaviour in preschoolers. *International Journal of Behavioral Development*, 28, 83-94.

- Coplan, R.J., Arbeau, K.A., & Armer, M. (2008). Don't fret, be supportive! Maternal characteristics linking child shyness to psychosocial and school adjustment in kindergarten. *Journal of Abnormal Child Psychology*, *36*, 359-371.
- Coplan, R. J., Gavinski-Molina, M., Lagacé-Séguin, D. G., & Wichmann, C. (2001). When boys versus girls play alone: Nonsocial play and adjustment in kindergarten. *Developmental Psychology*, *37*, 464-474.
- Coplan, R. J., Girardi, A., Findlay, L. C., & Frohlick, S. L. (2007). Understanding solitude: Young children's attitudes and responses toward hypothetical socially withdrawn peers. *Social Development*, *16*, 390-409.
- Coplan, R.J., Hastings, P., Lagace-Seguin, D., & Moulton, C.E. (2002). Authoritative and authoritarian mothers' parenting goals, attributions, and emotions across different childrearing contexts. *Parenting: Science and Practice*, *2*, 1-26.
- Coplan, R. J., Prakash, K., O'Neil, K., & Armer, M. (2004). Do you "want" to play? Distinguishing between conflicted shyness and social disinterest in early childhood. *Developmental Psychology*, *40*, 244-258.
- Coplan, R. J., Reichel, M., & Rowan, K. (2009). Exploring the associations between maternal personality, child temperament, and parenting: A focus on emotions. *Personality and Individual Differences*, *46*, 241-246.
- Crick, N. R. (1997). Engagement in normative versus nonnormative forms of aggression: Links to social-psychological adjustment. *Developmental Psychology*, *33*, 610-617.
- Crick, N. R., & Grotpeter, J. K. (1995). Relational aggression, gender, and social-psychological adjustment. *Child Development*, *66*, 710-722.

- Crowne, D. P. & Marlowe, D. (1960). A new scale of social desirability independent of psychopathology. *Journal of Consulting Psychology, 24*, 349-354.
- Crozier, W. R. (1995). Shyness and self-esteem in middle childhood. *British Journal of Educational Psychology, 65*, 85-95.
- Cummings, E. M., Iannotti, R. J., & Zahn-Waxler, C. (1989). Aggression between peers in early childhood: Individual continuity and developmental change. *Child Development, 60*, 887- 895.
- Cunningham, B., & Sugawara, A. (1988). Preservice teachers' perceptions of children's problem behaviors. *Journal of Educational Research, 82*, 34-39.
- Dittmann, R. W., Kappes, M. E., & Kappes, M. H. (1992). Sexual behavior in adolescent and adult females with congenital adrenal hyperplasia. *Psychoneuroendocrinology, 17*, 153-170.
- Eisenberg, N., & Fabes, R. A. (1998). Prosocial development. In W. Damon (Series Ed.) & N. Eisenberg (Vol. Ed.), *Handbook of Child Psychology: Vol 3. Social, emotional, and personality development* (5th ed., pp. 701-778). New York: Wiley.
- Fagot, B. I. (1978). The influence of sex of child on parental reactions to toddler children. *Child Development, 49*, 459-465
- Fagot B. I., & Hagan, R. (1985). Aggression in toddlers: Responses to the assertive acts of boys and girls. *Sex Roles, 12*, 341-351.
- Fagot, B. I., Leinbach, M. D., & O'Boyle, C. (1992). Gender labeling, gender stereotyping, and parenting behaviors. *Developmental Psychology, 28*, 225-230.
- Ferster, C. B. & Skinner, B. F. (1957). *Schedules of Reinforcement*. New York: Appleton-Century-Crofts.

- Fitzpatrick, M. K., Salgado, D. M., Suvak, M. K., King, L. A., & King, D. W. (2004). Associations of gender and gender-role ideology with behavioral and attitudinal features of intimate partner aggression. *Psychology of Men & Masculinity, 5*, 91-102.
- Fischer, A. R. & Good, G. E. (1994). Gender, self, and others: Perceptions of the campus environment. *Journal of Counseling Psychology, 3*, 343-355.
- Fisher, P. A., & Fagot, B. I. (1993). Negative discipline in families: A multidimensional risk model. *Journal of Family Psychology, 7*, 250-254.
- Fordham, K., & Stevenson-Hinde, J. (1999). Shyness, friendship quality, and adjustment during middle childhood. *Journal of Child Psychology and Psychiatry and Allied Disciplines, 40*, 757-768.
- Freeman, N. K. (2007). Preschoolers' perceptions of gender appropriate toys and their parents' beliefs about genderized behaviors: Miscommunication, mixed messages, or hidden truths? *Early Childhood Education Journal, 34*, 357-366.
- Frey, K. S., & Ruble, D. N. (1992). Gender constancy and the "cost" of sex-typed behavior: A test of the conflict hypothesis. *Developmental Psychology, 28*, 714-721.
- Galen, B. R., & Underwood, M. K. (1997). A developmental investigation of social aggression among children. *Developmental Psychology, 33*, 589-600.
- Garside, R. B., & Klimes-Dougan, B. (2002). Socialization of discrete negative emotions: Gender differences and links with psychological distress. *Sex Roles, 47*, 115-128.

- Gazelle H., & Ladd, G. W. (2003). Anxious solitude and peer exclusion: A diathesis-stress model of internalizing trajectories in childhood. *Child Development, 74*, 257-278.
- Gervai, J., Turner, P. J., & Hinde, R. A. (1995). Gender-related behavior, attitudes, and personality in parents of young children in England and Hungary. *International Journal of Behavioral Development, 18*, 105-126.
- Golombok, S., & Hines, M. (2002). Sex differences in social behavior. In P. K. Smith & C. H. Hart (Eds.), *Blackwell Handbook of Childhood Social Development* (pp. 117-136). Oxford: Blackwell.
- Groom, P. D. (1999). Prediction of parenting attitudes and behaviors among adolescents. *Dissertation Abstracts International: Section B: The Sciences & Engineering, 59(9-B)*, 5136.
- Grusec, J. E. (1991). Socializing concern for others in the home. *Developmental Psychology, 27*, 338-342.
- Grusec, J. E., Davidov, M., & Lundell, L. (2002). Prosocial and helping behavior. In P. K. Smith & C. H. Hart (Eds.), *Blackwell Handbook of Childhood Social Development* (pp. 457 - 474). Oxford: Blackwell.
- Grusec, J. E., Dix, T., & Mills, R. (1992). The effects of type, severity, and victim of children's transgressions on maternal discipline. *Canadian Journal of Behavioural Science, 14*, 276 - 289.
- Hämäläinen, M., & Pulkkinen, L. (1995). Aggressive and non-prosocial behaviour as precursors to criminality. *Studies on Crime and Crime Prevention, 4*, 6-21.

- Hart, C. H., Yang, C., Nelson, L. J., Robinson, C. C., Olsen, J. A., Nelson, D. A., et al. (2000). Peer acceptance in early childhood and subtypes of socially withdrawn behavior in China, Russia, and the United States. *International Journal of Behavioural Development, 24*, 73-81
- Hastings, P. D., McShane, K. E., Parker, R., & Ladha, F. (2007). Ready to make nice: Parental socialization of young sons' and daughters' prosocial behaviors with peers. *Journal of Genetic Psychology, 168*, 177-200.
- Hastings, P.D. & Rubin, K. H. (1999). Predicting mothers' beliefs about preschool-aged children's social behavior: Evidence for maternal attitudes moderating child effects. *Child Development, 70*, 722-741.
- Hastings, P. D., Utendale, W. T., & Sullivan, C. (2007). The socialization of prosocial development. In J. E. Grusec & P. D. Hastings (Eds.), *Handbook of Socialization: Theory and Research* (pp.638-66?). New York: Guilford Press.
- Hay, D. F., Castle, J., & Davies, L. (2000). Toddlers' use of force against familiar peers: A precursor of serious aggression? *Child Development, 71*, 457-467.
- Hay, D. F., Castle, J., Davies, L., Demetriou, H., & Stimson, C. A. (1999). Prosocial action in very early childhood. *Journal of Child Psychology and Psychiatry, 40*, 905-916.
- Kane, E. (2006). "No way my boys are going to be like that!" Parents' responses to children's gender nonconformity. *Gender & Society, 20*, 149-176.
- Karraker, K. H., Vogel, D. A., & Lake, M. A. (1995). Parents' gender-stereotyped perceptions of newborns: The eye of the beholder revisited. *Sex Roles, 33*, 687-701.

- Kerestes, G., & Milanovic, A. (2006). Relations between different types of children's aggressive behavior and sociometric status among peers of the same and opposite gender. *Scandinavian Journal of Psychology*, *47*, 477-483.
- Kern, R., Libkuman, T. M., & Temple, S. L. (2007). Perceptions of domestic violence and mock jurors' sentencing decisions. *Journal of Interpersonal Violence*, *22*, 1515-1535.
- Kimmel, M. S. (2004). *The Gendered Society*. (2nd ed.). New York: Oxford University Press.
- King, L. A., & King, D. W. (1993). *Sex-Role Egalitarianism Scale*. Port Huron, Michigan: Sigma Assessment Systems.
- King, L. A., & King, D. W. (1986). Validity of the Sex-Role Egalitarianism Scale: Discriminating egalitarianism from feminism. *Sex Roles*, *15*, 207-213.
- Kohlberg, L. (1966). A cognitive-developmental analysis of children's sex role concepts and attitudes. In E. E. Maccoby (Ed.), *The Development of Sex Differences* (pp. 82-173). Stanford, CA: Stanford University Press.
- Kokko, K. & Pulkkinen, L. (2000). Aggression in childhood and long-term unemployment in adulthood: A cycle of maladaptation and some protective factors. *Developmental Psychology*, *36*, 463-472.
- Ladd, G. W. (2003). Probing the adaptive significance of children's behavior and relationships in the school context: A child by environment perspective. In R. V. Kail (Ed.), *Advances in child development and behavior* (Vol. 31). San Diego, CA: Academic Press.

- Lagerspetz, K. M. J., Bjorkqvist, K., & Peltonen, T. (1988). Is indirect aggression typical of females? Gender differences in aggressiveness in 11- to 12- year old children. *Aggressive Behavior, 14*, 403-414.
- Langlois, J. H. & Downs, C. (1980). Mothers, fathers and peers as socialization agents of sex-typed play behavior in young children. *Child Development, 51*, 1217-1247.
- Leaper, C. & Friedman, C. K. (2007). The socialization of gender. In J. E. Grusec & P. D. Hastings (Eds.), *Handbook of Socialization: Theory and Research* (pp. 561-587). New York: Guilford Press.
- Levy, G. D. (1989). Relations among aspects of children's social environments, gender schematization, gender-role knowledge, and flexibility. *Sex Roles, 21*, 655-667.
- Li, J. T., & Caldwell, R. A. (1987). Magnitude and directional effects of marital sex-role incongruence on marital adjustment. *Journal of Family Issues, 8*, 97-110.
- Lippa, R. A. (2002). *Gender, Nature, and Nurture*. Mahwah (NJ): Lawrence Erlbaum Associates.
- Luecke-Aleksa, D., Anderson, D. R., Collins, P. A., & Schmitt, K. L. (1995). Gender constancy and television viewing. *Developmental Psychology, 31*, 773-780.
- Lytton, H. & Romney, D. M. (1991). Parents' differential socialization of boys and girls: A meta-analysis. *Psychological Bulletin, 109*, 267-296.
- Maccoby, E. E. (1988). Gender as a social category. *Developmental Psychology, 24*, 755-765.
- Maccoby, E. E. (1998) *The two sexes: Growing up apart, coming together*. Cambridge, MA: Belknap Press.

- Maccoby, E. E., & Jacklin, C. N. (1974) *The psychology of sex differences*. Stanford, CA: Stanford University Press.
- Maccoby, E. E. & Jacklin, C. N. (1980). Sex differences in aggression: a rejoinder and reprise. *Child Development, 51*, 964-980.
- Martin J. L., & Ross, H. (2005). Sibling aggression: Sex differences and parents' reaction. *International Journal of Behavioral Development, 29*, 129-138.
- McHale, S. M., Crouter, A. C., & Tucker, C. J. (1999). Family context and gender role socialization in middle childhood: Comparing girls to boys and sisters to brothers. *Child Development, 70*, 990-1004.
- McNeilly-Choque, M. K., Hart, C. H., Robinson, C. C., Nelson, L. J., & Olsen, S. F. (1996). Overt and relational aggression on the playground: Correspondence among different informants. *Journal of Research in Childhood Education, 11*, 47-67.
- Meaney, M. J., Stewart, J., & Beatty, W. W. (1985). Sex differences in social play: The socialization of sex roles. In J. S. Rosenblatt, C. Beer, C. M. Busnell, & P. Stater (Eds.), *Advances in the study of behavior* (Vol. 15, pp. 1-58). New York: Academic Press.
- Mills, R. S. L. & Rubin, K. H. (1990). Parental beliefs about problematic social behaviors in early childhood. *Child Development, 61*, 138-151.
- Mischel, W. (1966). A social learning view of sex differences in behavior. In E. E. Maccoby (Ed.) *The development of sex differences* (pp. 56-81). Stanford, CA: Stanford University Press.

- Mondschein, E. R., Adolph, K. E., & Tamis-LeMonda, C. S. (2000). Gender bias in mothers' expectations about infant crawling. *Journal of Experimental Child Psychology, 77*, 304-316.
- Mosick-Feldis, M. (1990). Sex role attitudes and life role expectations in a sample of college students. Unpublished doctoral dissertation, The California School of Professional Psychology.
- Nelson, L. J., Rubin, K. H., & Fox, N. A. (2005). Social withdrawal, observed peer acceptance, and the development of self-perceptions in children ages 4 to 7 years. *Early Childhood Research Quarterly, 20*, 185–200.
- Raine, A., Moffit, T. E., Caspi, A., Stouthamer-Loeber, M., & Lyman, D. (2005). Neurocognitive impairments in boys on the life-course persistent antisocial path. *Journal of Abnormal Psychology, 114*, 38-49.
- Rapee, R. M., Kennedy, S., Ingram, M., Edwards, S., & Sweeney, L. (2005). Prevention and early intervention of anxiety disorders in inhibited preschool children. *Journal of Consulting and Clinical Psychology, 73*, 488–497.
- Razzano, L., Lombardo, J. P., & Francis, P. L. (1988). Sex-role egalitarianism and the devaluation of women's competence. Paper presented at the annual meeting of the Midwestern Psychological Association, Chicago.
- Rubin, K. H., Burgess, K. B., & Coplan, R. J. (2002). Social withdrawal and shyness. In P. K. Smith & C. H. Hart (Eds.), *Blackwell Handbook of Childhood Social Development* (pp. 329-352). Oxford: Blackwell.
- Rubin, K. H. & Coplan, R. J. (2004). Paying attention to and not neglecting social withdrawal and social isolation. *Merrill-Palmer Quarterly, 50*, 506-534.

- Rubin, K. H., Coplan, R. J., & Bowker, W. (2009). Social withdrawal in childhood. In S.T. Fiske (Ed.) *Annual review of psychology*. Chippewa Fall, WI: Annual Reviews.
- Russell, A., Hart, C. H., Robinson, C. C., & Olsen, S. F. (2003). Children's sociable and aggressive behaviour with peers: A comparison of the U.S. and Australia, and contributions of temperament and parenting styles. *International Journal of Behavioral Development, 27*, 74-86.
- Rubin, K. H. & Mills, R. S. L. (1990). Maternal beliefs about adaptive and maladaptive social behaviors in normal, aggressive, and withdrawn preschoolers. *Journal of Abnormal Child Psychology, 18*, 419-435.
- Rubin, J. Z., Provenzano, F. J., & Luria, Z. (1974). The eye of the beholder: Parents' views on sex of newborns. *American Journal of Orthopsychiatry, 44*, 512-519.
- Sabattini, L., & Leaper, C. (2004). The relation between mothers' and fathers' parenting styles and their division of labor in the home: young adults' retrospective reports. *Sex Roles, 50*, 217-225.
- Schwartz, C. E., Snidman, N., & Kagan, J. (1999). Adolescent social anxiety as an outcome of inhibited temperament in childhood. *Journal of the American Academy of Child & Adolescent Psychiatry, 38*, 1008-1015.
- Slaby, R. G., & Frey, K. S. (1975). Development of gender constancy and selective attention to same-sex models. *Child Development, 46*, 849-856.
- Snow, M. E., Jacklin, C. N., & Maccoby, E. E. (1983). Sex-of-child differences in father-child interaction at one year of age. *Child Development, 54*, 227-232.
- Spence, J. T. & Helmreich, R. (1972). The Attitudes towards Women Scale: An objective

- instrument to measure attitudes toward the rights and roles of women in contemporary society. *Catalog of Selected Documents in Psychology*, 2, 1-48.
- Spinrad, T. L., Losoya, S. H., Eisenberg, N., Fabes, R. A., Shepard, S. A., Cumberland, A., et al. (1999). The relations of parental affect and encouragement to children's moral emotions and behaviour. *Journal of Moral Education*, 28, 323-337.
- Stevenson-Hinde, J. & Glover, A. (1996). Shy girls and boys: A new look. *Journal of Child Psychology and Psychiatry*, 37, 181-187.
- Stith, S. M., Crossman, R., & Bischof, G. (1991). Alcoholism and marital violence: A comparative study of men in alcohol treatment programs and batterer treatment programs. *Alcoholism Treatment Quarterly*, 8, 3-20.
- Sy, S. R., DeMeis, D. K., & Scheinfeld, R. E. (2003). Pre-school children's understanding of the emotional consequences for failures to act prosocially. *British Journal of Developmental Psychology*, 21, 259-272.
- Tam, S. Y. & Tang, K. S. (2005). Comparing wife abuse perceptions between Chinese police officers and social workers. *Journal of Family Violence*, 20, 29-38.
- Tapper, K. & Boulton, M. J. (2004). Sex differences in levels of physical, verbal, and indirect aggression amongst primary school children and their associations with beliefs about aggression. *Aggressive Behaviour*, 30, 123-145.
- Teichner, G., Ames, E. W., & Kerig, P. K. (1997). The relation of infant crying and the sex of the infant to parents' perceptions of the infant and themselves. *Psychology: A Journal of Human Behavior*, 34, 59-60.

- Tenenbaum, H. R. & Leaper, C. (2002). Are parents' gender schemas related to their children's gender related cognitions? A meta-analysis. *Developmental Psychology*, 38, 615-630.
- Tisak, M. S., Holub, S. C. & Tisak, J. (2007). What nice things do boys and girls do? Preschoolers' perspectives of peers' behaviors at school and at home. *Early Education and Development*, 18, 183-199.
- Underwood, M. K. (2002). Sticks and stones and social exclusion: Aggression among girls and boys. In P. K. Smith & C. H. Hart (Eds.), *Blackwell Handbook of Childhood Social Development* (pp. 533-548). Oxford: Blackwell.
- Unger, R. K. (1979). Towards a redefinition of sex and gender. *American Psychologist*, 34, 1085-1094.
- Vitaro, F., Gendreau, P. L., Tremblay, R. E., & Oligny, P. (1998). Reactive and proactive aggression differentially predict later conduct problems. *Journal of Child Psychology and Psychiatry and Allied Disciplines*, 39, 377 – 385.
- Warin, J. (2000). The attainment of self-consistency through gender in young children. *Sex Roles*, 42, 209-231.
- Yeung, D. Y. L., Tang, C. S., & Lee, A. (2005). Psychosocial and cultural factors influencing expectations of menarche: A study on Chinese premenarcheal teenage girls. *Journal of Adolescent Research*, 20, 118-115.

APPENDIX A- INFORMATION LETTER, CONSENT FORM, DEMOGRAPHIC SURVEY

Dear Parent,

I am writing to ask you to participate in a study being conducted by researchers from Carleton University with the help of your child's preschool/daycare. We are trying to learn more about the social behaviours of preschoolers. Learning to socialize with other children is a major task of childhood, and preschool is often the first time a child has to interact with other kids their age on a daily basis. Not surprisingly, parents play a very important role in their children's social development. In this study, we are interested in the different attitudes and responses that parents might have towards different types of social behaviours by boys and girls. We hope that this will help us understand more about some of the ways that boys and girls might learn how to interact with other children in different ways.

In this study, mothers are being asked to provide some background information, and fill out a brief questionnaire package, which should take about 20 minutes to complete. The package includes questions about how parents might react to different social behaviours by their child, as well as some general questions about appropriate social roles for adults. Please note – your child's participation is not being requested for this study.

If you agree to participate in this study, please complete the attached background questionnaire and return it to your child's teacher along with the signed consent form (*sealed in the envelope provided*). You are free to not answer any questions that you choose to omit. The data collected in this study will be strictly confidential and will be made available only to researchers associated with this project. All questionnaires will be coded with numbers, and not participant names, meaning that the information you provide will be kept anonymous.

This study has been approved by the *Carleton University Ethics Committee for Psychological Research*. If you have any questions related to this study, please feel free to contact me directly at 520-2600, (or via e-mail at: mreichel@connect.carleton.ca). Should you have any ethical concerns about this study, please contact Dr. A. Parush (Chair, Carleton University Ethics Committee for Psychological Research, 520-2600, ext. 6026) or Dr. J. Mantler (Chair, Dept. of Psychology, 520-2600, ext. 4173).

Thank you for considering participating in our study!

Sincerely,

Mila Reichel
M.A. Candidate, Department of Psychology
Carleton University

Robert J. Coplan, Ph.D.
Professor, Department of Psychology
Carleton University

PRESCHOOL SOCIAL BEHAVIOUR STUDY: CONSENT FORM

The information collected for this project is confidential and protected under the Municipal Freedom of Information and Privacy Act, 1989.

Date: _____

(name of child - please print)

(name of parent or guardian - please print)

Child's Age (in years) _____

Child's birth date

Month Day Year

Child's gender _____

Please check one:

_____ I give my permission to participate in the **Preschool Social Behaviour Study**.

_____ I do not give my permission to participate in the **Preschool Social Behaviour Study**.

(signature of parent or guardian)

Please keep the letter (first page) and return the signed consent form and the completed questionnaire to your child's teacher sealed in the enclosed envelope. Please return the consent form as soon as possible even if you are not going to be participating in the study.

If you would like to receive a summary of the findings from this study please indicate an e-mail address or a mailing address to which we can send the results:

APPENDIX B – TEXT OF THE SRES (SHORT FORM BB)

Below are statements about men and women. Read each statement and decide how much you agree or disagree. We are not interested in what society says. We are interested in *your personal opinions*. For each statement, check the answer that best describes your opinion. Please *do not omit* any statements. Remember to check *only one* of the five choices for each statement.

	Strongly Agree	Agree	Neutral/ No opinion	Disagree	Strongly Disagree
1. Home economics courses should be as acceptable for male students as for female students.					
2. Women have as much ability as men to make major business decisions.					
3. High school counselors should encourage qualified women to enter technical fields like engineering.					
4. Cleaning up the dishes should be the shared responsibility of husbands and wives.					
5. A husband should leave the care of young babies to his wife.					
6. The family home will run better if the father, rather than the mother, sets the rules for the children.					
7. It should be the mother's responsibility, not the father's, to plan the young child's birthday party.					
8. When a child awakens at night, the mother should take care of the child's needs.					

	Strongly Agree	Agree	Neutral/ No opinion	Disagree	Strongly Disagree
9. Men and women should be given an equal chance for professional training.					
10. It is worse for a woman to get drunk than a man.					
11. When it comes to planning a party, women are better judges of which people to invite.					
12. The entry of women into traditionally male jobs should be discouraged.					
13. Expensive job training should be given mostly to men.					
14. The husband should be the head of the family.					
15. It is wrong for a man to enter a traditionally female career.					
16. Important career-related decisions should be left to the husband.					
17. A woman should be careful not to appear smarter than the man she is dating.					
18. Women are more likely than men to gossip about people they know.					
19. A husband should not meddle with the domestic affairs of the household.					

	Strongly Agree	Agree	Neutral/ No opinion	Disagree	Strongly Disagree
20. It is more appropriate for a mother, rather than a father, to change their baby's diapers.					
21. When two people are dating, it is best if they base their social life around the man's friends.					
22. Women are just as capable as men to run a business.					
23. When a couple is invited to a party, the wife, not the husband, should accept or decline the invitation.					
24. Equal opportunity for all jobs regardless of sex is an ideal we should all support.					

APPENDIX C – TEXT OF THE CHILD BEHAVIOUR VIGNETTES (MALE VERSION)

Aggression :

One afternoon you are at the park, watching your son play in the sandbox with a few other children. One of the other children has a toy your son wants. Your son grabs the toy and pushes the other child down. You have seen him do this a few times before.

Shyness :

One afternoon you are watching your son on the playground. You see him standing against the fence, watching some other children playing a game. He appears somewhat anxious. He inches closer to the other children, but does not try to join in. You have seen him behave like this in the past.

Prosocial behaviour (affiliative):

Your son is out in front of your home, playing with a few other children. One of the other boys trips, falls, and starts crying. The other children continue playing. Your son goes to the crying boy, and sits with him until he stops crying. You have seen your son do this kind of thing before.

Prosocial behaviour (agentic):

You are watching your son on the playground after school one day. The children are playing a game, and your son seems to be one of the leaders. Another boy is sitting on the sidelines, not joining in. Your son goes up to this child and invites him to join in the game. You have seen him act this way before.

Questionnaire (follows each vignette):

1. How do you think you would feel in this situation? Please rate how strongly you would feel:

	Not at all				Very strongly
Happy	1	2	3	4	5
Angry	1	2	3	4	5
Embarrassed	1	2	3	4	5
Proud	1	2	3	4	5
Worried	1	2	3	4	5
Confused	1	2	3	4	5

2. What would you do? Please rate how likely you would be to do each of the following. Please note that some of the behaviours may be more or less relevant to the situation.

	Not likely				Very likely
Intervene to stop the behaviour	1	2	3	4	5
Direct your child to a new activity	1	2	3	4	5
Praise your child	1	2	3	4	5
Scold your child	1	2	3	4	5
Physically punish your child	1	2	3	4	5
Give a time-out (or other non-physical punishment).	1	2	3	4	5
Comfort your child	1	2	3	4	5
Pull your child aside and talk to her/him	1	2	3	4	5
Speak to your child about this later	1	2	3	4	5
Do nothing	1	2	3	4	5

3. How much would you tolerate this kind of behaviour?

Not at all					Very much
1	2	3	4		5

4. How much would you encourage this kind of behaviour?

Not at all					Very much
1	2	3	4		5

5. If your child continued to act in this way, how much of a problem would this be for your child:

	Not a problem			Very problematic	
At home	1	2	3	4	5
At school	1	2	3	4	5
With friends	1	2	3	4	5
With teachers	1	2	3	4	5

6. If your child continued to act in this way, how much would this benefit your child:

	No benefit			Very beneficial	
At home	1	2	3	4	5
At school	1	2	3	4	5
With friends	1	2	3	4	5
With teachers	1	2	3	4	5

APPENDIX D: Parenting Styles and Dimensions Questionnaire

Parenting Styles and Dimensions Questionnaire

The following page contains a list of behaviours that parents may exhibit when interacting with their children. The questions are designed to measure how often you exhibit certain behaviours towards you child. Think specifically about how you behave with your preschool-aged child. Please do not discuss the items with other family members until you have finished the questionnaire.

**For each of the 32 items, make a rating using the following five point scale:
I exhibit this behaviour 1=never, 2=once in a while, 3=about half the time, 4=very often,
5=always**

-
1. I am responsive to my child's feelings or needs. _____
 2. I use physical punishment as a way of disciplining my child. _____
 3. I take my child's desires into account before asking him/her to do something. _____
 4. When my child asks why he/she has to conform, I state: 'Because I said so',
or: 'I am your parent and I want you to'. _____
 5. I explain to my child how I feel about his/her good and bad behaviour. _____
 6. I spank when my child is disobedient. _____
 7. I encourage my child to talk about his/her troubles. _____
 8. I find it difficult to discipline my child. _____
 9. I encourage my child to freely express him/herself even when disagreeing with parents. _____
 10. I punish by taking privileges away from my child with little if any explanations. _____
 11. I emphasize the reasons for rules. _____
 12. I give comfort and understanding when my child is upset. _____
 13. I yell or shout when my child misbehaves. _____
 14. I give praise when my child is good. _____
 15. I give into my child when he/she causes a commotion about something. _____
 16. I explode in anger towards my child. _____
 17. I threaten my child with punishment more often than actually giving it. _____
 18. I take into account my child's preferences in making plans for the family. _____
 19. I grab my child when he/she is being disobedient. _____
 20. I state punishments to my child and do not actually do them. _____
 21. I show respect for my child's opinions by encouraging him/her to express them. _____
 22. I allow my child to give input into family rules. _____
 23. I scold and criticize to make my child improve. _____
 24. I spoil my child. _____
 25. I give my child reasons why rules should be obeyed. _____
 26. I use threats as punishment with little or no justification. _____
 27. I have warm and intimate times together with my child. _____
 28. I punish by putting my child off somewhere alone with little if any explanations. _____
 29. I help my child to understand the impact of behaviour by encouraging him/her to talk
about the consequences of his/her actions. _____
 30. I scold or criticize when my child's behaviour doesn't meet my expectations. _____
 31. I explain the consequences of my child's behaviour. _____
 32. I slap my child when he/she misbehaves. _____
-