Although it may not be easy for parents to see

the power and promise of their toddlers

“no’s”, if handled appropriately,

it contains the seeds to healthy child development.

(Bronson, 2000)

University of Alberta

Autonomy Support and Control: Observed Mother-Father Differences and Parents' Contributions to Preschool Social-Emotional Competence

by

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Abstract

In a sample of 57 two-parent families, the current study investigated: (a) mother-father differences in observed autonomy supportive and control behaviours (i.e., directives and negative, parent-centered control); and (b) mothers' and fathers' unique and relative contributions to children's later social-emotional competence. Parents' behaviours were assessed during an observed clean-up task with mother-child and father-child dyads when children were 2 to 3-and-a half years of age. Parent ratings of children's social-emotional competence were obtained one year later, when children were 3 to 5-and-a-half years old. Results revealed that mothers engaged in significantly more autonomy support than fathers when observed interacting with their young children. Furthermore, mothers' negative, parent-centered control, and fathers' autonomy support uniquely predicted children's later social-emotional competence. These results suggest that mothers and fathers have differential influences on their young children's growing competences, and exemplify the importance of including fathers in parenting research and intervention.

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Introduction

Parents, researchers and practitioners alike would agree that parenting is an extremely challenging, yet rewarding and essential job. It is within early interactions that parents provide a central context where children's behaviours and competences are developed, learned, and supported. Essentially, parents are their children's first teacher, supporter, regulator and socializer (Dix & Branca, 2003), and are ultimately the people who facilitate their children's development. Given the huge influence that parents play in their children's lives, the parent-child relationship warrants the attention it has received in the last five decades (Deater-Deckard, 2004).

Since the early work of Baumrind's (1971) typology of parenting styles, a plethora of developmental researchers have examined parenting styles and behaviour in relation to the parent-child relationship and child development. In studies ranging from infancy to adolescence, researchers have consistently established a link between the quality of parenting and their children's developmental outcomes (Deater-Deckard, 2004). In general, children who are more emotionally well-adjusted, socially competent and academically motivated and successful tend to have parents who are involved, supportive, and consistent in their parenting practices, and who are not overly controlling, or reactive (Campbell, 1995; Deater-Deckard, 2004; Grusec, Goodnow & Kucynski, 2000)

Many researchers have focused specifically on, and have substantiated the link between authoritative parenting and positive child adjustment in multiple realms. Authoritative parents are characterized as being responsive and considerate of their child's needs and perspectives, while set appropriate limits, structure, and expectations

of their child's behaviours (Darling, 1999; Grolnick, 2003). Two dimensions of authoritative parenting- responsiveness (warmth) and demandingness (structure)- have been central to previous parenting studies (Mattanah, 2005). A third and less studied aspect which has also been seen as uniquely engaged in by authoritative parents is *Autonomy Support.* Autonomy support has received a great deal of attention in the motivation and education literature in recent years (e.g., Grolnick, 2003 for a review). However, extant parenting and early child development research has predominately subsumed the autonomy support construct into global measures of authoritative parenting style (Mattanah, 2001, 2005; Mattanah, Pratt, Cowan & Cowan, 2005; Silk, Morris, Kanaya, & Steinberg, 2003). Consequently, the specific influence of parents' autonomy support on young children's development remains in question. Accordingly, the current study sought to specify an aspect of authoritative parenting that might be uniquely important to children's adjustment, by examining parents' autonomy supportive behaviours as observed during parent-child interactions.

Autonomy support has been defined as parenting behaviour that promotes their child's ability to make choices and take initiative, respect their child's growing need for independence, and that are supportive and responsive to their child's feelings and perspectives (Clark & Ladd, 2000; Grolnick, 2003; NICHD, 2008). Such a parenting approach has been consistently shown to foster children's engagement and motivation to master their environment (Grolnick, 2003). In particular, parents' supportive guidance that acknowledges their child's sense of autonomy enables the parent-child relationship to function cooperatively and effectively (Dix & Branca, 2003), and over time, has been shown to promote self-regulation, internalization, intrinsic motivation,

school and social adjustment (e.g., Grolnick, 2003; Joussemet, Koestner, Lekes, & Landry., 2005; Mattanah, 2005; NICHD, 2004, 2008; Pomerantz & Eaton, 2001).

In contrast to autonomy supportive behaviours is parenting behaviours that involves solving problems for children, overriding children's leads and initiatives, and taking a parental rather than a child perspective (Grolnick, 2003). Previous research suggests that such controlling parenting behaviours undermine children's engagement, self-regulation, and feelings of competence, and consequently has been associated with aggression and defiance, low social competence, low intrinsic motivation, and internalizing and externalizing behaviours (e.g., Braungart-Rieker, Garwood, & Stifter, 1997; Calkins & Johnson, 1998; Crockenberg & Litman, 1990; Denhem, Renwick & Holt., 1991; Oleary, Slep & Reid, 1999; Pettit, Bates, & Dodge, 1993; Wood, McLeod, Sigman, Hwang, & Chu, 2003).

Although the concepts remain consistent, the nature and influence of autonomy support and control may differ at different child developmental periods (Grolnick, 2003). One developmental period where autonomy support and control has received conceptual focus, but surprisingly little empirical investigation is during toddlerhood (e.g., 2-3 years of age). During this period, autonomy and self-regulation are important developmental milestones; failures to master these transitions are central components of early behaviour, social and emotional problems, and in turn, can exacerbate later adjustment (Bronson, 2000; Calkins & Johnston., 1998; Forman, 2007). In response to these developmental changes, the onus is on the parents to strike a balance between teaching and supporting their children, while providing them with opportunities to practice newly emerging autonomy and motivation for self-regulation. This new

parental role seems particularly daunting, as it precisely this time when children also start to resist parental control (Bronson, 2000; Renk, Klein, Oliveros & McKinney, 2006). Kohn (2005) notes that a consequence of stress that often accompanies toddlerhood is the temptation for parents to focus their energies on getting their children to do what they tell them, and where parent-centered control frequently become a primary goal. In the context of toddlerhood being such a crucial period for later social-emotional adjustment, yet a time when supporting their child's emerging skills is difficult task for many parents, examining autonomy support and control assumes particular importance. Parents' ability to model autonomy support, provide opportunities for their child to practice adaptive behaviours, and to resolve or negotiate incompatible goals effectively when they occur calls for empirical investigation, given that it is within these early interactions that young children develop (or fail to) the skills to move toward increasing competence and independence (Bronson, 2000; Dix, Stewart, Gershoff, & Day, 2007; Renk et al., 2006).

Although the key role parents play in their young children's development is undisputed, the vast majority of parenting studies to date have included mothers only. Due to the relative lack of studies that include both mothers and fathers, it is unclear as to whether, (a) fathers' parenting behaviours are similar to or different from mothers' parenting behaviours (Tamis-LeMonda et al., 2004); and (b) whether mothers and fathers play unique roles in their children's development. Although this is a methodological gap in parenting literature in general, it is especially true for studies examining autonomy support and control. Of the parenting research that has included both mothers and fathers in their investigations, conclusions have been equivocal with

regards to whether there are differences in the frequency and type of behaviours engaged in by mothers and fathers at this age (e.g., Grolnick & Ryan, 1989; Tamis-Lemonda et al., 2004; Volling, Blandon, & Gorvine, 2006). Thus, examining the nature and contributions of mothers' and fathers' autonomy supportive and control strategies and behaviours during early childhood is greatly warranted.

The Present Study

The purposes of this study were two-fold. First, this study intended to provide a more comprehensive understanding of autonomy supportive parenting by explicitly examining both mothers' and fathers' behaviours during toddlerhood, using an observational method approach. Specifically, this study investigated (a) differences in mothers' and fathers' autonomy supportive and control strategies (i.e., directives and negative, parent-centered control) when interacting with their toddler on an goal-oriented task, and (b) the unique contributions of mothers' and fathers' observed parenting behaviours on later preschool social-emotional competence. Such an analysis aims to provide insight into parents' autonomy supportive and control behaviours for this age group, and to further eludicate the role *both* parents play in their children's developing competences, with hope of arming researchers and families with information to support optimal child development.

Literature Review

The following chapter will briefly review of the literature on autonomy support and control; its place in the larger construct of parenting style; and its relation to children's social-emotional competence. First, this chapter begins with a discussion of the importance of early parent-child interactions, and discusses parenting from a goal regulation perspective (Dix & Branca, 2003). This section then briefly highlights research on global parenting styles and child adjustment, which moves into to a specific discussion on the importance of autonomy support (i.e., an aspect of authoritative parenting), and the inverse construct of Control. The importance of, and lack of previous studies examining autonomy support specifically during early childhood is exemplified. Empirical evidence supporting the relation between autonomy support, control and early childhood adjustment, and possible pathways for such relations is presented. Then, as existing research has predominately including mothers only, the importance of including fathers in empirical parenting studies is discussed. Extant studies that have directly examined (a) mother-father differences on related dimensions of autonomy support and control, and (b) father contributions to young children's social-emotional and related competences is reviewed. Finally, the present study's research questions and hypotheses are presented.

Socialization and Early Parent-Child Interactions

Although theories of socialization have been looked at from many perspectives (e.g., attachment, social learning, social cognitive), most theories of child development do posit that socialization begins in close relationships at home (i.e., with parents) and is generalized to children's competence in relationships with adults and peers outside

the family setting (Feldman & Klein, 2003; Forman, 2007). The process of socialization has been said to begin with child compliance or non-compliance to requests and preferences from parents that intend to guide or limit their actions (Forman, 2007). These parental requests and preferences are then gradually internalized, so that children come to freely decide to act in accordance with the values and behaviours expected by their parents and culture (Blandan & Volling, 2008; Forman, 2007; Joussemet, Landry & Koestner, 2008; Kochanska, Coy & Murray, 2001, Smith, Calkins & Kane, 2006). The ability to act in accordance with social standards and regulate one's behaviour and emotions are among the hallmarks of socialization and healthy child development (Kochanska et al., 2001; Kochanska & Aksan, 1995).

In reality, parents would likely agree that socializing their children is *not* an easy task. Attempts to get a young child to share a toy, take turns, eat their vegetables or do their homework when they clearly assert otherwise attests to that fact that conflicting parent-child goals during this socialization period frequently occur. Thus, parents are faced with the important but challenging task of teaching their children values necessary to function skillfully and competently outside the parent-child relationship, while also supporting their children's perspectives and motivation to pursue the development of their own growing skills and competences (Dix & Branca, 2003; Joussemet et al., 2008). Aligned with this challenge, Dix and Branca (2003) view socialization as a problem solving activity and parenting a goal-regulation process. From this perspective, "effective" parents engage in behaviours that enable both their goals and their children's goals to be promoted cooperatively. That is, they accommodate their children's interests and manage and negotiate interactions so that both parent and child have compatible

goals. In turn, such parenting behaviour not only foster a cooperative parent-child relationship, but provide a context in which children become open to their parent's socialization attempts, and of which contributes positively to children's adjustment and learning (Dix & Branca, 2003; Grolnick, 2003; Kochanska et al., 2001). In contrast, when parents are unable to adjust their goals to consider and incorporate their child's perspective, interactions are said to end up working contrary to their child's interests, which can undermine learning and adjustment (Dix & Branca, 2003). This view highlights the importance of daily parent-child interactions, and specifically the crucial role that parents' behaviours and interactional styles play in young children's socialization and development.

Parent-Child Interactions: Global Parenting Styles

In turn, research has found global parenting styles that are conducive to the successful socialization of children, at least in Western culture. Baumrind's (1971) parenting style typology exemplifies this area of research. *Parenting styles* has been conceptualized as "general patterns" of child-rearing, or a parent's typical way of relating to, and interacting with their children (Darling, 1999; Darling & Steinberg, 1993). These styles have been traditionally composed based on two fundamental parenting dimensions: (a) warmth and responsiveness (i.e., responding contingently to children's needs), and (b) behavioural control, or limit-setting (i.e., setting age-appropriate expectations and limits on child behaviour) (Darling, 1999; Maccoby & Martin, 1983). These two dimensions have been central to most extant parenting studies (Mattanah, 2005).

Parents who are considered *Authoritarian* display high levels of control and low levels of warmth and support. Such parents are demanding and firm, enforce rules in a strict manner, discourage independence and are emotionally unresponsive (Darling, 1999). In contrast, *Permissive* or non-directive parents are warm and responsive but tend to pose few demands and structure on their child (i.e., low control), ignore or are overly tolerant of misbehaviour and give in to avoid confrontation when their goals conflict with their child's (Baurmind, 1971; Darling, 1999; Simon-Gordon & Conger, 2007). To date, research has shown that both authoritarian and permissive parenting styles have negative effects on various aspects of child adjustment (e.g., Bornstein & Bornstein, 2007; Maccoby & Martin, 1983; Simon-Gordon & Conger, 2007) or at least fail to promote positively to child adjustment (Kaufman, Gesten, Lucia, Salcedo, Rendina-Gobioff, & Gadd, 2000). As children indeed require appropriate structure and guidelines for healthy development, researchers have contended that too much or little does not enable children to develop optimally (Bornstein & Bornstein, 2007; Bronson, 2000). That is, excessive, parent-centered control that characterizes authoritarian styles may limit children's opportunities to make decisions and regulate themselves, as parents override their children's concerns and needs, whereas children of permissive parents may fail to acquire values and competences that are learned when appropriate behaviour is required, due to a lack the guidance and structure (Bornstein & Bornstein, 2007; Crockenberg, Jackson & Langrock, 1996).

Authoritative parenting is sometimes seen as a balance between the two above styles. Authoritative parents are characterized as being highly supportive and responsive to their child's needs, while setting clear limits and expectations of child behaviour

(Darling, 1999; Macobby & Martin, 1983). As well, authoritative parents encourage verbal "give and take" with their children, and make decisions with consideration to the needs and perspectives of their child (Baurmind, 1971; Grolnick, 2003; Kaufman et al., 2000; Mattanah, 2005). Aligned with Dix and Branca's (2003) view of parenting, an authoritative style is likely to be most effective because such parents demonstrate the flexibility to coordinate conflicting goals when they occur, accommodate their child's interests and maintain a cooperative relationship with their child. In doing so, they may create an environment in which their child is more receptive to their parents' socializing goals, and internalize their parents' expectations for socially acceptable behaviour (Bronson, 2000; Darling & Steinberg, 1993).

Likewise, many contemporary studies on parenting have focused on the benefits of authoritative parenting, and have substantiated its positive contribution to child adjustment. For instance, in community samples, authoritative parenting has been shown to be positively related to emotional-regulation, school achievement, higher self-esteem and social adjustment in children (Kaufman et al., 2000; Mattanah, 2005, Mattanah et al., 2005; Simon-Gordon & Conger, 2007), and has been consistently and negatively related to child behavioural problems (Kaufman et al., 2000; Rinaldi, Roger, Cook, & Gordon, 2009; Querido, Warner & Eyberg, 2002). In clinical child samples (e.g., ADHD), studies have also found that authoritative parenting may buffer children from social and behavioural difficulties (e.g., Hinshaw, Zupan, Simmel, Nigg, & Melnick, 1997). Moreover, the positive relation between authoritative parenting and healthy child adjustment have been found in children of all ages (e.g., Kaufman et al., 2000; Mattanah, 2005, Mattanah et al., 2005; Simon-Gordon & Conger, 2007), and has

been shown to be a significant and strong predictor even after controlling for the effects of child gender, grade level, ethnicity and family income (Kaufman et al., 2000).

Components of Parental "Authoritativeness". Although Baumrind's (1971) typology of parenting styles has set the stage for an abundance of research, this typology approach has been critiqued by some researchers (e.g., Darling & Steinberg, 1993; Mattanah, 2001). First, parents themselves may not be easily categorized into one parenting style, rather may endorse some degree or elements of each style into their global style (Darling & Steinberg, 1993). Second, other researchers have noted that parents likely use different stylistic behaviours at different times, in different situations and with different children (Dix & Branca, 2003; Grusec & Goodnow, 1994). Lastly, a typology approach has been criticized because of its "broadness of categories" (Darling & Steinberg, 1993; Mattanah, 2001; Renk et al., 2006). Specifically, by categorizing parents, it makes it difficult to determine exactly which features of an authoritative style are most beneficial to children's development (Mattanah, 2001; Renk et al., 2006). Accordingly, there have been more recent attempts in research studies to examine the specific parenting behaviours that make up global parenting styles, and how they uniquely relate to child outcome variables (e.g., Mattanah, 2001, 2005; Mattanah et al., 2005; Silk et al., 2004).

As mentioned, the broad construct of "authoritativeness" has been repeatedly shown to be most advantageous in setting the stage for optimal child development. One feature of authoritative parenting that has been understudied is autonomy support. It is unclear as to whether autonomy support is a unique parenting style dimension, as some studies suggest (e.g., Mattanah et al., 2005; Steinberg, Elmen, & Mounts, 1989), or

characterized as a specific authoritative parenting behaviour that occurs in the context of connecting (through responsiveness) and engaging (through structure) with their child (Clark & Ladd 2000; Grolnick, 2003). Either way, autonomy support is central to authoritative parenting; relative to non-authoritative styles, authoritative parents are characterized as exercising the most flexibility in dealing with the balance between needed structure and supporting their children's autonomy (Mattanah, 2005; Weinfield, 2006). Moreover, autonomy support has been used to differentiate authoritative from more authoritarian styles of parenting (Silk et al., 2004). That is, both parenting styles are high in limit-setting and behavioural control, however, in contrast to authoritarian parenting behaviours, authoritative parents convey control in a way that encourage and supports (rather than stifles) their children's autonomy (Grolnick & Ryan 1989; Mattanah, 2005, Silk et al., 2004; Steinberg et al., 1994). Although autonomy support has been included in the conceptualization of an authoritative style, more often than not, autonomy support has been aggregated under the construct of global parenting style (Mattanah, 2005). As a result, we lose an understanding of the specific influence of parents' autonomy-support strategies and behaviours on children's adjustment and functioning.

Autonomy Supportive Parenting

This section aims to further define the term autonomy support, in addition to *control*, which has been frequently conceptualized as the inverse construct of autonomy support. Theory and conceptual frameworks of autonomy support and control in relation to child development is also highlighted.

As mentioned briefly, autonomy support is a multi-faceted construct that has essentially been defined as parenting behaviours that convey respect for their child's growing need for independence, a collaborative approach to help their child develop self control, and behaviours that promote children's initiatives in various contexts (e.g., play and learning) (Grolnick, 2003; NICHD, 2008). Some researchers have also included components of parental responsiveness and sensitivity in the concept of autonomy support. For instance, Clark and Ladd (2000) defined autonomy support as the "degree to which parents are responsive, reflective and validating of the child's opinions, feelings, and perspectives" (p. 485). Researchers agree that autonomy support is not permissive parenting, or parenting that encourages detachment (Grolnick, 2003; Joussemet et al., 2008). Rather, autonomy supportive parents encourage their child's attempts at autonomy, provide structure that incorporates and gives consideration to their child's interests and feelings (i.e., child centered), and do not yield the role as the parent by ensuring that their goals are not neglected (Crockenberg et al., 1996; Joussemet et al., 2008; Mattanah, 2005). Thus, autonomy support is how parents provide structure and involvement with their children- that is, whether parents' involvement and structure is communicated in a way that is more autonomy supportive or controlling (Grolnick & Ryan, 1989; Grolnick, 2003; Joussemet et al., 2008).

When parent and child goals are not conflicting, autonomy support can been seen as being emotionally supportive through acknowledging the child's accomplishments on a task, providing encouragement, and offering support and help if the child has difficulties (Grolnick, 2003; Joussemet et al., 2005; Mattanah, 2005; NICHD, 2004). When parent and child goals conflict, however (e.g., during activities that are not

intrinsically interesting to a child such as clean-up or homework, and where children's assertions go against their parents requests), autonomy support may take a more proactive form (Joussemet et al., 2008). Rather than giving in to the child or forcing compliance, autonomy supportive parents may negotiate with their children, acknowledge their child's perspectives and feelings, use explanations, or make the activity more interesting to facilitate children's motivation and engagement (Dix et al., 2007; Mattanah, 2005; NICHD, 2008). Similarly, Joussemet et al. (2008), in a recent review summarized how autonomy support has generally been operationalized in the literature, noting four essential features: (a) providing rationales for behavioural requests; (b) recognizing children's perspectives (empathy); (c) offering choices and encouraging child initiative; and (d) minimizing the use of controlling behaviours. Such strategies seem to facilitate child engagement in activities as well as create a positive and supportive environment that may decrease the need for parents to turn to more power assertive and controlling behaviours (Grolnick, 2003; Kochanska & Aksan, 1995). Moreover, as these parenting behaviours support children's autonomy, they are also more likely to facilitate children's engagement in a task for internalized reasons rather than because the child felt coerced to comply (Dix & Branca, 2003; Grolnick, 2003; Kochanska et al, 2001; Kochanska & Aksan, 2005).

Autonomy Support: Importance and Theory. Autonomy support is an important area of study because it is central to positive (authoritative) parenting, and because the development of autonomy and competence are central components of healthy child development (Grolnick, 2003). Self-determination theory posits that children have a natural drive to explore and master their environment, which are based

on fundamental needs for autonomy, in addition to competence and relatedness (Ryan & Deci, 2000). As well, internalization and socialization is thought to be a spontaneous process that children naturally engage in (Joussemet et al., 2008). Self-determination theory highlights the role of the social environment; a main component of this theory is when the environment support these natural needs, then internalization and positive development results (Grolnick, 2003; Joussemet et al., 2005). More specifically, parents who can promote their child's interests and autonomous efforts, while remaining involved and available for help are thought to support their child's self-reliance, intrinsic engagement, and competence in their environment (Fei-Yin Ng, Kenny-Benson, & Pomerantz, 2004; Grolnick, 2003; NICHD, 2008). Conversely, external pressure that stifles these developmental tendencies (e.g., parenting behaviours that do not retain a child's sense of being an autonomous agent) is thought to inhibit internalization, and have a negative effect on child development (Crockenberg et al., 1996; Grolnick, 2003; Joussemet et al., 2008).

The positive influence of autonomy support on child adjustment has been demonstrated predominantly in the realm of motivation and education. Specifically, most studies have used child reports or parental interviews to examine the concurrent and predictive effects of parents' autonomy support on children's school achievement and adjustment (Grolnick, Gurland, DeCourcey, & Jacob, 2002). This line of research has revealed that children are more motivated and competent academically when parents provide a give-and-take relationship that supports children's autonomous attempts, as opposed to over-directing and controlling them (e.g., Grolnick & Ryan, 1989; Joussemet et al., 2005; Pomerantz & Eaton, 2001).

Fewer studies have demonstrated the role of autonomy support in children's psychosocial adjustment. Grolnick and Ryan (1989) found that parents' autonomy support was positively associated with school-aged children's self-esteem, sense of competence, and teacher-rated behavioural and social adjustment. In a more recent, longitudinal study, Joussemet et al. (2005) found that mothers' autonomy support, as rated through comprehensive parent interviews when their child was 5 years old, was predictive of teacher-rated social competence and overall adjustment three years later, after controlling for demographic and child factors at age 5. Similarly, a study conducted by the National Institute of Child Health and Human Development (NICHD, 2008) found that parents' observed level of autonomy support at 54 months was predictive of classroom self-reliance (e.g., autonomy, self-regulation and a precursor of social adjustment) when boys were in grade one. Mattanah (2005) also found that mothers' autonomy encouragement predicted children's social and academic adjustment in early grade school, above and beyond the effects of parental warmth and structure. Together, these studies clearly suggest that children are more likely to learn to control their own behaviour and be competent socially and academically, if they are given an appropriate amount of choice and supportive guidance during interactions with their parents. Mattanah's (2005) study further raises the contention that optimal parenting involves not just warmth and structure, but also the need to encourage, validate and support their child's independent attempts, feelings and perspectives.

Parental Control

Parental control has frequently been conceptualized as the opposite of autonomy support (Grolnick, 2003), though others have contended that they are separate,

independent constructs (e.g., Silk et al., 2004). Parental control and closely related behaviours (e.g., intrusiveness; directiveness, restrictive guidance; parent-centered control) has received greater scholarly attention relative to autonomy support, and has been recognized as a central component of parenting (Barber, 2006; Deater-Deckard, 2004). However, parental control behaviours vary both conceptually and methodologically in the literature and results have been not been conclusive, which has led to some uncertainty regarding whether control is beneficial or harmful to children (Ballash, Leyfer, Buckley & Woodruff-Borden, 2006; Grey & Steinberg, 1999; Grolnick, 2003). Accordingly, Grolnick (2003) provides clarification on the influence of parental control on child adjustment by explicitly differentiating between parents who are "in control", through providing structure and appropriate expectations, and those who are "controlling", through behaviours that are power assertive and intrusive (p. 9). Controlling parenting can refer to behaviours that exert pressure, force compliance, and take a parental rather than a child perspective (Grolnick et al., 2002; Grolnick, 2003; Gurland & Grolnick, 2005). During interactions, such parents may control their children with imperatives and prohibitions, disregard their children's perspectives, override their children's initiatives, or abruptly change their children's focus of conversation or play (Deater-Deckard, 2004; Grolnick, 2003; Kohn, 2005). Kohn (2005) noted that often the goal for such control is merely to get their child to immediately comply with little consideration of their child's needs, feelings and long term development. This parallels recent efforts to distinguish behavioural control and psychological control in global parenting style research (e.g., Grey & Steinberg, 1999; Silk et al., 2004; Steinberg, Elmen & Mounts, 1989). Authoritarian parents use more

coercive, restrictive and psychological control (e.g., physical force, manipulation, guilt induction), which constrain children's behaviours and invalidates their feelings (Ballash et al., 2006; Barber, 1996; Joussemet et al., 2008; Pomerantz & Eaton, 2001). In contrast, authoritative control would be defined as more non-coercive control and inductive guidance (e.g., structure, limit-setting and supervision – i.e., behavioural control) (Darling, 1999; Joussemet et al., 2008). These two types of controls have been shown to be differentially related to child outcomes; authoritarian control (i.e., "controlling" behaviours) impose on children's sense of autonomy and interfere with their psychological and emotional development, whereas authoritative control maintains and supports children's autonomy, leading to positive adjustment (Barber, 1996; Grolnick, 2003; Gurland & Grolnick, 2005; Joussemet et al., 2008; Pomerantz & Eaton, 2001; Silk et al., 2004).

Self-determination theory asserts that when parents frequently engage in controlling, parent-centered behaviours, they create less opportunities for children's learning and engagement, and affect their children's perceptions of competence in their environment (Fei-Yin Ng et al., 2004; Grolnick, 2003; Joussemet et al., 2008). In turn, there is an abundance of research that has found controlling parenting to be negatively associated with children's motivation and self-assertiveness, and predictive of children's maladjustment in multiple realms (e.g., Ballash et al., 2006; Grolnick & Ryan, 1989; Scaramella & Leve, 2004; Smith, Calkins, Keane, Anastopoulos, & Shelton, 2004; Sprinrad et al., 2006; Wood et al., 2003). Specific studies examining parental control will be discussed later in this chapter.

Parents' directiveness. There is less consensus in the literature with regards to the influence of parents' directiveness (i.e., direct commands) on children's development. Previous observational studies have conceptualized and defined directives in various ways; some have included directives into composite measures of positive parenting (e.g., Blandon & Volling, 2008; Kochanska & Aksan, 1995; Volling et al., 2006); while others have included directives into negative or controlling parenting composites (e.g., Crockenberg et al., 1996; Calkins & Johnson, 1998, Grolnick et al., 2002; Smith et al., 2006). Those researchers that have conceptualized directives as a positive parenting feature suggest that the structure, guidance, and behavioural control inherent in parents' directives (stated in a positive or neutral tone) leads to children's positive development (Kazura, 2000; Volling et al., 2006). Conversely, researchers that have conceptualized directives as a negative parenting feature may suggest that directives are parent-centered and provide children with no choice or sense of autonomy. It seems that the context and frequency of parent's directives may dictate its influence on children's development (e.g., Crockenberg & Litman, 1990; Rubin et al., 2001). For instance, directives may be perceived as more appropriate in structured, goal-oriented tasks (e.g., teaching and clean-up tasks), and when tasks are beyond children's capabilities. In contrast, directives may be perceived as more controlling and inappropriate in child-centered tasks (e.g., play), and when children are capable of completing tasks independently. In sum, previous research provides a lack of clarity regarding the influence of parents' directives on children's development, though such behaviours likely depends on the context, frequency, and tone in which they are conveyed.

Parenting in Early Childhood

Literature in the area of autonomy support and control has been predominately examined in relation to school-age children and adolescent adjustment. Some researchers however have found that parents' use of autonomy support and control are relatively stable across tasks (e.g., Braungart-Rieker et al., 1997; Cleveland & Reese, 2005) and across earlier child developmental periods (e.g., Dallaire & Weinraub, 2000; NICHD, 2004). Notably, Dallaire and Weinraub (2000) in a large sample (n = 1364) found that stylistic parenting behaviours such as sensitivity and a supportive presence (i.e., components of autonomy support) during parent-child cooperative tasks was quite stable in the first 6 years of life. This study also found that parents' respect for children's autonomy showed relative stability between ages 3 and 6. Furthermore, NICHD (2004) found parents' autonomy support to be moderately stable from preschool to grade 3. Controlling parenting behaviours has also been shown to be relatively stable across the toddler and preschool period (Calkins, 2002; O'leary et al., 1999). Certainly then, such relative persistence in these parenting behaviours can have both immediate and lasting effects on functioning and adjustment during earlier development periods.

Although parents may be classified as autonomy supportive or controlling across time and tasks, the specific nature and influence of autonomy support and control may differ at different child developmental periods (Grolnick, 2003). One developmental period where autonomy supportive parenting behaviours seems particularly crucial but has not been the focus of empirical investigation is early childhood (i.e., 2-3 years old). The major transition that characterizes the toddler-preschool period poses new

challenges for parents relative to earlier developmental periods , and has been associated with the most absolute change in parenting (Deater-Deckard, 2004; Renk et al., 2006; Shaw & Bell, 1993). Specifically, as parents' limit-setting and stress increases during this period, parents' level of autonomy support and control gain particular importance. The following section briefly discusses the normative social-emotional developmental milestones that take place during early childhood, the changing role of parents, and the importance of autonomy support and control to young children's emerging competences. Extant literature on parenting constructs similar to autonomy support and control, and early childhood adjustment is then reviewed.

Developmental milestones and social-emotional competence. The toddler period, and particularly between the ages of 2 and 3, is recognized as a developmentally significant period in many realms (Bornstein & Bornstein, 2007; Bronson, 2000; Renk et al., 2006). It is during this time in development that children now explore away from their parents and are able to follow directions and comply with others' requests (Bronson, 2000; Dix et al., 2007; Woodsworth, Belsky, & Crnic, 1996). Furthermore, as children's ability to control goal-directed behaviours emerges, their motivation to be autonomous also increases (Dix et al., 2007). In particular, children at this age become very motivated to choose their own activities and to control the way such activities are completed, show much pride in attempting tasks on their own, and now actively resist assistance from others (Bronson, 2000; Dix et al., 2007).

In addition to these developments, the toddler period is a time when negativity and testing limits peaks (Campbell, 1995; Shaw & Bell, 1993), particularly when toddlers' motivation surpasses their ability to regulate themselves, and when their

emerging autonomy conflicts with their parents requests and goals (Bronson, 2000; Renk et al., 2006). Although this increase in difficult behaviours is considered quite common, toddlers need to gradually learn to manage their own negative reactions appropriately in the face of frustration and conflicting goals with others (Bronson, 2000; Calkins & Johnson, 1998; Denham et al., 1991; Smith et al., 2004). These developments in early self (i.e., emotional and behavioural) regulation underscore the potential for children to set out on either an adaptive developmental path or be placed on a trajectory of increasing risk for later social-emotional difficulties.

When children enter the preschool period, skills in cooperation, pro-social behaviours, autonomy, self-regulation, and conflict management gain importance (Bronson, 2000; Calkins & Johnson, 1998; Squires, Bricker & Twombly, 2002). These skills are often subsumed under the broad construct of *Social-Emotional Competence*. Social-emotional competence, or children's ability to effectively interact with others by being able to regulate their emotions, and balance their own needs with the needs of others, provides an important foundation to child well-being and adjustment (Squires, Bricker, Heo, & Twombly, 2001). Bronson (2000) states that it is during the first three years of life that the groundwork is laid for children's later motivation to regulate themselves in these areas. Once children reach preschool age, strong emotional and behavioural reactance is associated with behaviour, social and emotional difficulties and poor parent-child relationships (Bronson, 2000; Kochanska, 2002). Furthermore, children who fail to master these competences may also be at risk for early intervention referrals, as they may begin to display significant difficulties when they encounter the many challenges (i.e., interacting with peers and separating from parents) of their

preschool years (Bronson, 2000; NICHD, 2008; Squires et al., 2001). As well, research suggests that once developed, social-emotional problems are resistant to change, and may have implications for later maladjustment in other (e.g., academic) realms (Campbell, 1995; NICHD, 2008; Squires et al., 2001; Ladd & Price, 1987). Accordingly, social-emotional competence has been shown to be important for early school readiness (Laparo & Pianta, 2000) and for children's ability to take advantage of the classroom in later years (NICHD, 2004).

Given the importance of young children's social-emotional development, supporting children's emerging competences in these areas is a crucial yet challenging endeavour for parents. In contrast to the infancy period in which parents had to be responsive and sensitive to their child's cues and demands, during the toddler-preschool years, parents become more of a resource to their children as they attempt to develop self-regulation and adaptive skills more independently (Bornstein & Bornstein, 2007; Renk et al., 2006; Scaramella & Leve, 2004). Thus, in order to successfully help their toddlers develop the skills and confidence needed to deal with challenges and be effective in their environment, parents must balance the demands of daily tasks (i.e., getting jobs done) while appropriately supporting their child's autonomy and dependency needs (Denham et al., 1991). It is within this context that parents are in particularly central position to foster early social-emotional growth.

Processes linking parenting with early social-emotional competence. There is a number of ways parents' autonomy supportive and control behaviours influence the development of children's early competences. As mentioned earlier, self-determination theory has been predominately used as the theoretical framework for autonomy support

studies with school-age children, which asserts that autonomy support facilitates healthy development by influencing child's feelings of autonomy, in addition to competence and relatedness (Fei-Yin Ng et al., 2004; Joussemet et al., 2008; Ryan & Deci, 2000). However, it is important to note that during earlier developmental periods (i.e., toddler-preschool period) children's imperfect efforts at autonomous regulation are still very much tied to parents' presence and support (NICHD, 2008). Thus, additional sets of processes also have merit as they highlight the importance of early parent-child interactions as a primary arena for the development of such skills. In particular, social learning and attachment models have been central to early childhood parenting studies, and are briefly discussed here.

There is no doubt that parents act as important models for ways to deal with challenging situations, emotions and behaviours (Spinrad et al., 2007). Social learning theory underscores the importance of parental modelling in child development. That is, parents' own style of interacting with their children (e.g., how they respond to their child's initiatives, requests etc.) provides an important means of acquiring new skills, as they are internalized and then attempted independently (Bronson, 2000; Kennedy, 1992; Spinrad et al., 2007). In particular, autonomy supportive parents may model responsive and constructive ways of solving problems, interacting with others, and dealing with their own negative emotions in times of challenge or when their goals conflict with others (Crockenberg et al., 1996; Denham, Mitchell-Copeland, Strandberg, Auerbach, & Blair, 1997; Dix et al., 2007). In turn, children have the opportunity to observe and internalize their parents' ability to keep a social agenda in a cooperative and friendly way, by negotiating and asserting their own autonomy, while being respectful and

accommodating of others' needs (Crockenberg et al., 1996; Denham et al., 1991; Dix & Branca, 2003). In the same vein, parents who are reactive and overly controlling may teach their children problematic ways to solve problems, as well as fail to model cooperative and socially appropriate strategies for regulating emotions and interacting with others (Kennedy, 1992; Scaramella & Leve, 2004). In line with this theoretical framework, there have been empirical studies that have shown that children and parents use similar strategies in social interactions, both contemporaneously and longitudinally (e.g., Crockenberg et al., 1996; Denham et al., 1997; Kuczynski & Kochanska, 1990).

Other researchers have asserted that it is the quality of the early parent-child relationship that supports the child's feelings of emotional security and confidence, which allows them to explore new social endeavors skillfully (e.g., Clark & Ladd, 2000; Kennedy, 1992; NICHD, 2004; Scaramella & Leve, 2004). For instance, attachment theory posits that parents who are able to provide support for their children's efforts at autonomy while remaining available for assistance and comfort promote children's self-regulation, social skills and assertiveness necessary for successful interactions and relationships within and outside the family (Calkins, Smith, Gill & Johnson, 1998; Campbell, 1995; NICHD, 2004; Scaramella & Leve, 2004). Autonomy support is an important aspect of a "reciprocal" relationship that is created in a secure attachment with parents (Clark & Ladd, 2000; Kochanska & Aksan, 1995; Shaw & Bell, 2003). In turn, children have been shown to be more likely to internalize parental requests if they perceive the relationship with their parents as mutually responsive (Bronson, 2000; Kochanska & Aksan, 1995; Kochanska, 2002; Maccoby & Martin, 1983), and to have better adjustment when parents show attributes (i.e., autonomy support) of a secure

relationship (Denham et al., 1991; Kochanska, 1995). In contrast, it has been shown that parents who do not support their children's attempts at autonomy and who are negatively controlling early in development facilitate emotional insecurity in the parent-child relationship, and have children with lower pro-social competences (e.g., defiance, lower engagement in cooperative problem-solving, and adjustment difficulties) (Campbell, 1995; Denham et al., 1991; Scaramella & Leve, 2004; Smith et al., 2006)

Regardless of which of these perspectives one adheres to, each suggests that parents' autonomy supportive (versus control) behaviours are important in providing the necessary conditions for young children to master social-emotional competences. It may be that no single framework is able to capture the whole picture rather components of each can be considered as complimentary to one another. That is, autonomy supportive parenting behaviours may promote children's social-emotional competence through providing opportunities to practice and model negotiation and regulation strategies themselves; through creating a secure, reciprocal, give- and-take relationship that facilitates children's motivation to internalize such strategies; as well as supports children's natural needs for autonomy.

Previous findings. Much research has substantiated the associated and predictive effects of parenting styles and behaviours on early childhood adjustment, though few studies have specifically examined the construct of autonomy support and control. There has been work, however, that has examined factors associated with, or that characterizes autonomy support (e.g., sensitivity, positive/gentle guidance; collaborativeness, supportive presence) and control behaviours (e.g., directiveness, intrusiveness, overbearing, negative control) during this early developmental period.

Although each may have its specific definitions, they all generally describe parents' ability to lead activities and interactions with their child by providing support and guidance, without being overly controlling and parent-centered.

As mentioned, one early indicator of social-emotional competence is the way in which children are able to negotiate their autonomy when their interests and goals conflict with others (Braungart-Rieker et al., 1997; Crockenberg & Litman, 1990; Crockenberg et al., 1996; Kochanska & Aksan, 1995). Early in development, active resistance to parents has been shown to reflect children's immature attempts to control events, not poor parenting or dysfunctional parent-child relationships (Dix et al., 2007). In particular, Dix et al. (2007) found that young toddlers (1-2 years old) who were defiant (i.e., directly opposing parents' requests accompanied by negative affect) during a clean-up task also tended to initiate positive interactions with mothers during play, as well as had mothers who were sensitive and autonomy supportive. As toddlers progress through this developmental period, however, they begin to negotiate and assert their independence in more skillful and socially appropriate ways (Donovan, Leavitt & Walsh, 2000; Kuczynski & Kochanska, 1990; Power, McGrath, Hughes & Manire, 1994). When children are supported appropriately, overt defiance gradually subsides and is replaced by self-regulated compliance, negotiation and non-coercive assertion (i.e., simply refusing without strong negative affect) (Braungart-Rieker et al., 1997; Crockenberg & Litman, 1990; Kuczynski & Kochanska, 1990; Volling et al., 2006). It may be that autonomy supportive parenting facilitates this transition, as research has shown that parents' supportive guidance strategies that emphasize choice and encourage autonomy is associated with more skillful forms of self-assertion and self-regulated

compliance during these later toddler and early preschool years (e.g., Braungart-Rieker et al., 1997; Crockenberg & Litman, 1990; Feldman & Klein, 2003; Kuczynski & Kochanska, 1990).

For instance, Crockenberg and Litman (1990) examined the association between mothers' control behaviours and toddlers' levels of autonomous and skillful reactive behaviours during a clean-up task. They found that parental strategies and requests that were less power-assertive and more autonomy supportive (e.g., suggestions, explanations, adapting requests, giving the child choice) was associated with children's willing compliance (i.e., cooperative and active involvement in the task) and self-assertion (i.e., simply saying no without affect; reasoning, bargaining and negotiation with parents), which were posited to reflect developmental strides toward self-regulation and social-emotional competence. In contrast, these authors found that mothers' high power assertive behaviours such as negative control (i.e., threats, physical interventions and negative affect) were associated with children's negative defiance. Braungart-Rieker et al. (1997) and Donovan et al. (2000) found additional credence for these results, finding that parenting strategies that were intrusive and high in power assertion during a compliance task were associated with toddler defiance. Braungart-Rieker et al. found significant associations even after child negative reactivity was controlled for. Significant associations have also been found in observed interactional tasks (i.e., play, teaching, and discipline) with fathers (e.g., Feldman & Klein, 2003).

Moreover, the relation between parental control behaviours and child compliance behaviour has been found longitudinally. Kuczynski and Kochanska (1990) found that

the best predictor of unskillful compliance strategies in 5 year olds was the observed level of controlling strategies mothers used during toddlerhood. Furthermore, these authors found significant associations between the level of social skill in child compliance strategies and the level of skill children exhibited in their influence strategies with their mothers. That is, children who often responded with defiance to mothers were also more likely to use coercive reprimands when requesting their mothers to do something for them (Kuczynski & Kochanska, 1990). Thus, it seems that parental control strategies that support or inhibit children's autonomy not only reduce or escalate parent-child conflict in the immediate situation, but may affect children's willingness to cooperate with parents in the long run (Crockenberg & Litman, 1990; Dix & Branca, 2003). Furthermore, Feldman and Klein (2003) found that mothers' positive guidance strategies predicted preschooler's willing compliance and cooperation to their daycare caregivers, which exemplifies the contention that the social skills and self-regulation inherent in child (non)compliance strategies not only develop in the context of early interactions that involve parental autonomy support and control, but that such child behaviours generalize to other agents outside the family.

More generally, studies have found that children of mothers who use supportive guidance behaviours that characterize autonomy support are more likely to use positive emotional and behavioural regulation strategies. Conversely, mothers of children displaying social, emotional and behaviour problems have been found to be more parent-focused and controlling during activities with their children (e.g., Gardner, 1994; Smith et al., 2004).

Rubin et al. (2001) found that parents who took over and restricted child behaviour during an observed free-play task (i.e., overbearing and directive parenting regardless as to whether it was positive or negative) significantly and positively predicted observed inhibited/shy and fearful child behaviours among peers. Calkins and Johnston (1998) also found significant positive associations between mothers who interfered and took over a play task with their toddlers, and toddlers who were unable to regulate their emotions and who were more distressed by frustrating events. Mothers who used more positive guidance (e.g., suggestions, guidance, encouragement, positive expressions) and allowed their children to do things for themselves during the play interaction was associated with children's use of positive self-regulation skills. Likewise, in a recent meta-analysis examining 41 studies, Karreman, van Tuijl, van Aken & Dekovi (2006) found that in general, parents' positive guidance was related to more adaptive regulation in preschoolers, whereas parents' negative control was found to be related to less adaptive functioning in preschoolers.

With regard to behavioural regulation, Smith et al. (2004) examined mothers' parent-focused, intrusive controlling behaviours and child-focused, positive guiding behaviours, and found that, at age 4, mothers' controlling behaviour was related to behavioural difficulties for both boys and girls. Furthermore, Garner (1994) examined the quality of interaction between mothers and their disruptive preschoolers during home observations. Garner found that, compared to control dyads, mothers of difficult children issued fewer suggestions of joint activity, were less likely to comply with, and were less responsive to their child's suggestions, used less explanations, used more imperatives, and displayed more negative affect towards their children, even though

there were no significant differences between control and difficult children's behaviours. Hart, DeWolf, Wozniak and Burts (1992) further found that parents' who used more power assertive and control strategies, as measured via parent interview and parent–child interactions on a playground, were more likely to have children who were disruptive and less competent during peer play interactions.

Parents' autonomy supportive behaviours may also have important implications for later social-emotional competences. Crockenberg et al. (1996) examined parents' "collaborative" parenting behaviours, which definition is very much in line with autonomy support (i.e., parents' ability to negotiate mutual goals with children, and support them in a child-centered rather than parent-centered way). The authors specifically examined negative control strategies (e.g., imperatives), positive strategies (e.g., suggestions, praise, acknowledgment) and negotiation (e.g., alters an original request to compromise with child's interests) during two home observed conflict tasks with their toddlers, and found that more collaborative parents had children who were better able to later negotiate conflict with their peers in more socially competent ways. Evidence was also found that when parents were more coercive during parent-child interactions, children were less socially competent in interactions with peers.

Clark and Ladd (2000) examined mothers' autonomy support and mother-child connectedness during narrative conversations with their preschoolers. They found that mothers' level of autonomy support and connectedness were highly correlated, and that only dyads' level of connectedness emerged an independent predictor in children's social-emotional orientation and relational competence. The authors suggested potential reasons for the null findings for autonomy support, noting that their constructs of

autonomy support and connectedness were redundant and that the conversational task may not provide sufficient opportunity to see variability in autonomy support behaviours.

In teaching and play tasks, Denham et al. (1991) examined mother-preschool interactions in relation to later social-emotional competence. Among other child and parent predictors, these authors found that mothers' observed support for autonomy and positive emotions during these tasks were associated with, and uniquely predictive of preschoolers' level of social assertiveness. Autonomy support was found to contribute to overall positive social behaviour for girls, but not boys, and a lack of maternal support and allowance of autonomy predicted children's sadness and rejection in preschool. Interestingly, observed child factors (i.e., task orientation, reliance on mother, positive emotions) did not uniquely predict later social-emotional competence in the peer setting.

In sum, the way parents convey structure and guidance (i.e., either in an autonomy supportive or more controlling way) seems to directly relate to young children's growth in social, emotional and behavioural realms, and in turn, facilitate children's ability to engage in successful interactions within and outside the family.

It should be acknowledged that parent and child behaviour is bidirectional and that the aforementioned studies are correlational in nature. Thus, although control has been shown to predict poor child adjustment, it is possible that difficult children elicit more controlling parenting behaviours (Renk et al., 2006). Indeed, parents of emotionally negative children during discipline tasks have been shown to use more control and less supportive guidance (e.g., Barungart-Rieker et al., 1997; Campbell,

1995). Interestingly however, in a recent review specifically on autonomy support and control, Joussemet et al. (2008) noted that previous research on parent-child interactions has generally failed to show significant links between autonomy supportive behaviours and reported child temperament (e.g., Joussemet et al., 2005). Other researchers posit that parenting behaviours that are stylistic in nature may be less sensitive to children's attributes because they may be more likely to stem from parents' general values and beliefs (Darling & Steinberg, 1993; Pomerantz & Eaton, 2001), as may be the case with autonomy supportive parenting behaviours. Furthermore, some research has shown that mothers' negative control has an influence on children difficult behaviours, but that children have no significant effect on mothers control behaviours during toddlerhood (e.g., O'leary et al., 1999; Smith et al., 2004). Thus, parenting may be less influenced by their children's behaviour at this early age.

Support for parents' influence on child behaviour and adjustment is further exemplified in a large body of intervention studies, which has found that changing parents' control strategies reduces child maladjustment. For example, Strand (2002) found that controlling mothers who were taught to coordinate their behaviour with their 3-5 year child's behaviour (i.e., modulate their directives during a joint problem solving task to match child's behaviour rather than take over and control the activity) had children who were significantly more cooperative during a subsequent clean-up task. Moreover, Spiker, Ferguson and Brooks-Gunn (1993) found that mothers who took part in an early infant health and development intervention program to improve their supportive assistance, had children who had higher ratings of persistence, enthusiasm, overall competence and involvement. These studies suggest that if parents can maintain

structure in an autonomy supportive manner, even in the face of difficult child behaviour, they can help buffer their child from later maladaptive adjustment, and promote optimal development. In sum, although acknowledging that the parent-child relationship is not unidirectional, an important piece of the puzzle is to examine parents' behaviour on children's developing skills and competences, as parents are no doubt active contributors to their children's growth. Thus, the present study chose to examine parent-to-child directional influences.

Fathers' Parenting

One of the major limitations of work in this area to date has been an almost exclusive focus on mothers' parenting styles and behaviours. This exclusiveness may be due to the fact that mothers have been traditionally viewed as the more active parent in child-rearing endeavours, and thus more influential in their socialization efforts. Indeed, a common research finding on two-parent families is that mothers spend more time involved interacting with, and managing the activities of their children, and thus are considered primary caregiver (Kazura, 2000; Marsiglio, Amato, Day, & Lamb, 2000). With that said, in recent years, fathers are taking on more responsibility for early child care relative to previous decades, and are now viewed as active partners in parenting and influential agents in their children's development[1] (Deater-Deckard, 2004; Parke, 2004; Woodworth et al., 1996). Given this more active role, we still know significantly less about fathers' parenting behaviours, as the inclusion of fathers in empirical studies is still quite limited. Recent research has asserted the need to move beyond traditional mother-child dyads (e.g., Gamble, Rumakumar, Diaz, 2007; Simon-Gordon & Conger,

[1] Although there are various family compositions, this review focuses exclusively on intact two-parent (mother-father) families.

2007; Volling et al., 2006) to a more systematic examination of each parent–child dyad, given that mothers and fathers may play unique and complementary roles in their child's development (NICHD, 2008; Tamis-Lemonda et al., 2004). Accordingly, two major aims of the present study were to examine differences of mothers' and fathers' autonomy support and control behaviours (i.e., directives and negative, parent-centered control) during early parent-child interactions, as well as to examine mothers' and fathers' unique and relative contributions to preschool social-emotional competence.

The following section discusses previous research on first, the differences and similarities found between mothers' and fathers' parenting behaviours. Due to the limited studies examining specifically autonomy supportive behaviours in early childhood, related parenting constructs at various child ages are highlighted and used as a base for the present study's hypotheses. Secondly, few previous studies that have examined the unique effects of fathers' autonomy support and control behaviours in relation to child adjustment are briefly discussed.

Mother-father parenting differences. Researchers who stress differences in parenting behaviours note that, relative to mothers, fathers tend to be more directive and power assertive, and less engaged and sensitive in their interactions with their children (e.g., Blandon & Volling, 2008; Kazura, 2000; Power et al., 1994). For instance, Power and colleagues (1994) found, using home observations, that fathers were more direct and power-assertive in their requests for children's compliance than were mothers, who were less directive, more cooperative, and more responsive to their child's needs. These parental differences varied little with the age of the child (2, 4, and 6 years of age). Similarly, in a more recent study, Volling et al. (2006) found that mothers used

more gentle guidance (i.e., strategies that motivate child behaviour but not in a power-assertive way) than did fathers in a cleanup task with their 16- month-old toddlers and older preschool siblings. Blandon and Volling (2008) replicated this study with a slightly older sample (2 and 5 year old siblings), and also found that mothers used more gentle guidance than fathers. Specifically, mothers tended to soften their requests with justifications, bargaining, and affection whereas fathers used more direct commands and imperatives when making requests to their children. Like Power et al. (2004), no differences were found in mothers' and fathers' parenting across toddler and preschool children. Kazura (2000) also found that fathers were observed to be more directive than were mothers in joint free play task with their young children even though there was no differences in how children participated socially with their fathers versus mothers. As well, Russell, Aloa, Feder, Glover, Miller and Palmer (1998) found parenting differences in mothers and fathers in a sample of parents and their preschoolers. Specifically, mothers were more likely than fathers to engage in authoritative parenting (an autonomy supportive parenting style), where fathers were more likely than mothers to be more authoritarian, or more controlling and parent-centered.

Other researchers have highlighted that differences between mothers' and fathers' parenting behaviours may be more a matter of degree, not type (Deater-Deckard, 2004). For example, Mclaughlin (1983) investigated differences in the way mothers and fathers achieved compliance by verbal means in an interactional play task with their toddlers. The authors found few differences between mothers and fathers in the type of control directives observed, although fathers tended to use imperatives/control more frequently than mothers with their 2-and a half- and 3-and a half year-old children. Fathers also

tended to repeat their directives more than mothers in order to obtain child compliance. Furthermore, Gamble et al., (2007) found in an observed emotions task with preschoolers, that mothers and fathers engaged in significantly similar behaviours on verbalized support, coaching, being dismissive and disapproving, and showing responsiveness to their child. However, mothers were observed to engage in supportive and responsive behaviours more frequently than fathers. Together, this body of research indicates that parental strategies and interactional behaviours that place clear expectations on child behaviour yet are supportive of child autonomy and minimally power assertive, seem to be more characteristic of mothers, whereas parent-centered control seems to be more frequently characteristic of fathers.

It should be noted however, that the above findings are by no means consistent as many other parenting studies in this area indicate that fathers are just as autonomy supportive, directive and controlling as mothers. Notably, Mattanah (2001) found that school-grade children reported (via child report and interview) no significant differences in the amount of autonomy support from mothers and fathers. Mattanah et al. (2005) also found that mothers and fathers were similar in their level of autonomy support during interactional teaching tasks with their school-age children. Furthermore, Tamis-Lemonda et al. (2004) found that fathers were equally high on positive aspects of parenting and just as low on negative aspects of parenting, relative to mothers, when observed interacting with their toddlers on a play task. Specifically, among other parenting behaviours, these authors found no significant differences on mothers' and fathers' level of sensitivity (e.g., parent takes child's perspective and appropriately responds to child) and intrusiveness (e.g., parenting that is over-controlling). Likewise,

Tiano (2008) found that fathers did not exhibit more controlling behaviours (i.e., direct and indirect commands) with their young children than mothers during play and clean-up tasks. Together, these findings suggest that, at least to some extent, children may experience similar levels of control and autonomy support from mothers and fathers.

In summary, attempts to compare mothers' and fathers' parenting have yielded inconclusive findings (Lamb & Lewis, 2004). These equivocal results may be attributable to many factors, such as differences in methodology (e.g., child-report, observations or parent interview), the specific parenting behaviours and interactional tasks examined, differences in the age of the child, and the broader social context (e.g., SES) involved. For example, play tasks are presumably not as demanding on parents and tend to generally elicit positive parenting behaviours (e.g., Rubin et al., 2001). As such, variations in mothers' and fathers' parenting strategies and styles may not be consistently observed. Alternatively, in more challenging, parent and goal-oriented activities (e.g., clean-up and homework), differences in interactional styles and tactics may then be displayed. Moreover, it is possible that parents could demonstrate more or less agreement on how to interact and respond within a specific domain of socializing their child, thus observational measures may yield different findings than parent reports and interviews which assess parenting behaviours in broader contexts, and rely on the perception of the rater (Winsler, Madigan & Aquilino, 2005). At any rate, given the inconsistent results of studies examining mother' and fathers' parenting behaviours, additional examination is warranted to further our understanding of this topic.

The distinct role of fathers in children's development. There is more consistent evidence that fathers in two-parent families significantly contribute to their children's

development, and may play influential roles that is unique to mothers. For instance, McDowell, Parke and Wang (2003) examined the relationship between mothers' and fathers' controlling and supportive styles in a discussion task with their grade 2 children, and children's social competence and psychosocial functioning. These authors found that fathers' behaviours predicted peer and teacher-rated social competence above and beyond that of mothers. Similarly, Crockenberg et al. (1996) found that preschool children who were most competent socially had both mothers and fathers who were collaborative during parent-child interactions on conflict tasks. In addition, the effect of fathers' behaviours remained significant when mothers' predictors were co-varied out of the analysis.

Mattanah (2005) also examined mothers' and fathers' autonomy encouraging behaviours (e.g., listening to and negotiating with their child when parent-child desires conflicted) in observed play interactions with their preschool child. Findings revealed that fathers who decreased their autonomy encouragement across the kindergarten period had children with more internalizing and externalizing problems at end of first grade, as rated by teachers.

Lastly, in a large, longitudinal study, NICHD (2004) investigated fathers' and mothers' distinct roles in their children's adjustment to the transition to formal schooling (i.e., behaviour problems, social skills, and the quality of relationships with teachers). Parents' level of sensitivity (i.e., supportive presence, respect for autonomy, and hostility-reversed scored) were observed during parent-child interactional games at 54 months and grade one. These authors found that the most competent and least problematic children, as rated by teachers, were those whose fathers were sensitive and

supportive of their children's autonomy, and whose mothers' parenting beliefs support self-directed child behaviour.

Together, these few findings cast little doubt that both mothers and fathers are important agents in supporting their children's developing competences, and that fathers' may play unique roles in parenting with mothers. Ultimately, this research exemplifies the need to continue on the trend of including fathers in parenting research.

Summary

Early parent-child interactions serve a primary context by which young children internalize social expectations, as well as model and react in ways that contribute to their social-emotional development. Since the early work of Baumrind's (1971) typology of parenting styles, many developmental researchers have substantiated the positive effects of authoritative parenting to child adjustment. When examining parenting style, however, we are unable to determine the nature and influence of unique parenting behaviours that make up this global style. One central aspect of positive, authoritative parenting that has only recently been studied in its own right is autonomy support (Mattanah, 2005). Despite conceptual and methodological differences across studies, taken together researchers agree that autonomy support appears to establish an environment which fosters healthy child adjustment in multiple realms. In contrast, negative, parent-centered control has been shown to adversely affect child social, emotional and behavioural adjustment.

Despite recent investigations on parents' autonomy support and control in relation to child development, additional work is needed. For one, autonomy support has almost exclusively been investigated with school-age children and adolescents. One would

expect, however, that parents' autonomy support would be especially valuable during the toddler-preschool period, as this is precisely the time in development when attempts at autonomy and mastery are beginning to emerge.

Secondly, the autonomy support literature continues to be situated in the academic and motivation domains. This study posits that when parents pursue goals in ways that allow children appropriate autonomy and support, they actively contribute to their child's social-emotional growth. Moreover, of the studies that have examined components of, or dimensions related to autonomy support during the toddler-preschool period, most have exclusively focused on its concurrent relations to child compliance and self-regulation. Considerably less attention has been paid to the role of autonomy support and control to *later* social-emotional competences in early childhood (exceptions: Denham et al., 1991; Mattanah, 2005; NICHD, 2004).

Third, researchers have predominately relied on self-reports, child reports, and maternal interviews to assess autonomy supportive and control (Grolnick et al., 2002; Woodsworth et al., 1996). Such reports may not accurately reflect how parents actually behave in a given situation with their child. Observational measures, on the other hand, are central to identifying the social processes that distinguish parent-child relationships and provide insight into how children develop skills needed for healthy development (Bronson, 2000). Thus, the present study addresses this methodological gap by examining autonomy supportive and control behaviours (i.e., directives and negative, parent-centered control) using observational measures.

Lastly, there has been a relative lack of early child development studies that include fathers as an integral part of their investigations. Furthermore, the few studies

that have directly compared mothers and fathers on the same parenting measures have resulted in inconsistent findings. Given the demonstrated importance of autonomy supportive parenting during the early childhood years, more specific knowledge on the types of behaviours that both mothers and fathers engage in, and the role that both parents' autonomy support and control behaviours play in their children's development could further our understanding of how to facilitate effective family parenting practices**.**

Purpose of the Present Study

The purpose of the present study was to add to the existing body of early parenting literature by focusing on autonomy support and control (i.e., directives and negative, parent-centered control). First, most parenting studies have not specified the types of strategies mothers and fathers engage in during early child developmental periods, and have employed global or unidimensional measures of autonomy support and control (e.g., Braungart-Rieker et al., 1997). Thus, in the present study the frequency of specific autonomy supportive and control behaviours were observed during parent-toddler interactions, to more precisely examine the types of behaviours mothers and fathers engage in at this age (i.e., 2-3 years). Additionally, a main objective of this study was to investigate whether there were significant differences between mothers' and fathers' observed autonomy support and control behaviours when interacting with their toddlers.

Furthermore, in contrast to the bulk of work, this study aimed to elucidate the role that both parents play in their young children's development. Accordingly, the second objective of the present study was to examine the relative and unique influence of mothers' and fathers' autonomy support, directives, and negative, parent-centered

control in predicting children's ability to meet the social-emotional challenges of their preschool years.

In order to answer these questions, the following hypotheses were made, based on theory and previous research in the area of parent-child interactions, parenting styles, and autonomy support and control.

Hypotheses. 1. It was expected that both mothers and fathers would use autonomy supportive behaviours and directives most frequently (Blandon & Volling, 2008; Tamis-Lemonda et al., 2004), and negative, parent-centered control least frequently. Within this context, it was hypothesized that mothers would use autonomy supportive behaviours significantly more than fathers, as some studies suggest (Blandon & Volling, 2008; Parke et al., 1994; Volling et al., 2006). Furthermore, it was predicted that fathers would use a more direct approach to get their child to adhere to the goal-oriented task, and thus would use directives and negative, parent-centered control behaviours significantly more than mothers.

2. It was expected that both mothers' and fathers' autonomy support, as observed in parent-toddler interactions, would uniquely predict children with higher social-emotional competence ratings as preschoolers. Conversely, mothers and fathers who were observed to engage in negative, parent-centered control behaviours were expected to each uniquely predict children with lower preschool social-emotional competence ratings. Few studies have examined parents' directives as a separate category, but rather have subsumed directives into larger positive and negative parenting composites. Thus, given the lack of empirical evidence on the unique influence of parents' directiveness in young children's social-emotional growth, no directional hypothesis was made.

Methods

Participants

The participants for this study were recruited as part of a larger longitudinal study which investigated mutuality in parent-child interactions and children's social-emotional development. Ethics was approved and obtained from the Department of Educational Psychology Research and Ethics Committee at the University of Alberta.

Fifty-seven two-parent families were recruited from advertisements placed in Edmonton's Child and Family Focus magazine in addition to parenting messaging boards on the internet; child daycares throughout the Edmonton area; and word-of-mouth (see Appendix A and for parent information and consent forms). The sample was predominantly (72%) middle to upper class, (over $70,000 per year total family income) and Caucasian (87.7 % Caucasian, 8.8% mixed Ethnicity, 3.5% Asian). The sample included 57 children (29 girls and 28 boys) between the ages of 25 and 42 months of age (M = 32 months), and both their mothers and fathers. Mothers and fathers were either married or common law and were living in the same home with their child at the time of the study. Observations were collected during two home visits: one visit for mother-child observations and one visit for father-child observations, conducted approximately one to two weeks apart. Social-emotional competence was measured via parent reports approximately one year later (M = 13 months), when children were 38 to 59 months of age (M = 46 months). One family had moved between time 1 and time 2, and three families did not return the social-emotional report measure at time 2, leaving 53 families that were included in the longitudinal analyses. There were no differences on study variables between families who participated at time 2, and those who did not.

Procedures

Data for the current study were drawn from observations during a clean-up task with mother-child and father-child dyads. A clean up paradigm was chosen because it was seen as a typical task that parents and children likely encounter and that may involve parent-child conflict and cooperation. This goal-oriented "do" task has been shown to be particularly challenging for toddlers (Braungart-Rieker et al., 1997; Kochanska et al., 2001; Kochanska & Aksan, 1995), and thus was seen as providing an optimal observational opportunity to view the behaviours and strategies parents use to elicit and maintain child cooperation and engagement in task completion.

After 15 minutes of free play with a set of toys a research assistant had brought to the home, the research assistant asked the dyad to spend some time and clean up the toys. No specific directions were given as to how to put the toys away, though several Ziploc bags were provided for smaller toys and a large carry-all bag provided for the bigger toys. The instructions were the same for every dyad and were read as follows: "It's time to stop now and move on to the next task; so I'll leave these bag here for you and I'll give you two a few minutes to clean up." The research assistant left the room after giving the clean-up directions. The toys were supplied to standardize the task, which included a farm set and a carnival/exhibition set. The paradigm was finished when the parent communicated to the child or research assistant that the clean-up was completed. The time it took for dyads to complete the task averaged 5 minutes in length (range = 2 to 15 minutes).

Measures

Demographic questionnaire. Each family completed a demographic questionnaire at the time of the first observation to provide descriptive data on the parents, child, and family. Information obtained included child's age, gender, ethnicity, relationship of parents, parents' education and annual household income. This questionnaire was used for descriptive purposes (see Appendix B).

Mothers' and fathers' observed parenting. All observations were videotaped and both verbal and non-verbal interactions were transcribed by two research assistants. Mothers' and fathers' statements from the transcripts were then coded using a coding manual derived, in part by Dix and colleagues' (2007) scheme on autonomy-granting (accommodation) behaviours. Additional content codes were also created on the basis of broader autonomy supportive and control definitions in extant literature. Many observational autonomy support studies have examined autonomy support and control on a continuum or interval scale. The scale approach however, may be problematic because the absence or opposite of control could merely indicate parental disengagement (Mattanah, 2005), and not necessarily high autonomy support, and vice versa (i.e., low autonomy support may indicate disengagement, not control). Moreover, some researchers posit that parents may use control and autonomy support independently of one another (e.g., Fei-Yin Ng et al., 2004; Pomerantz & Eaton, 2001; Silk et al., 2004). Thus, for the present study, autonomy support and control (directives and negative, parent-centered control) were examined separately. For all parent codes, observers attempted to account for the child's needs, developmental level and context as much as possible. For example, a parent would receive a "directive" code when the

parent told the child the precise way to put away a toy, but would receive no code if such a directive was said in response to the child's request for such information. Off-task verbalizations were also coded.

Task variation. The time it took dyads to complete the clean-up task varied, therefore, frequencies of each behaviour code were standardized into proportions by dividing the number of codes by the length of the task to the nearest minute.

Inter-rater reliability. For reliability purposes, two coders- the current author and supervisor- independently coded 20% of mother-child and father-child clean-up transcriptions. Cohen's Kappas were calculated for the entire task and for each set of parenting behaviours, using methods derived from Bakeman and Gottman (1997). Specifically, the percentage of agreement was computed by comparing the number of agreements with the total number of behaviours coded, accounting for chance agreements. Disagreements include misses, and when one coder marked the occurrence of a parenting behaviour and the other coded an alternate behaviour. Such disagreements merited discussion, code clarification, and recoding at frequent meetings. Cohen's Kappas across all parenting behaviours was .81 (range = .76 to .87). Reliability for each set of parenting behaviours is further reported below.

Autonomy supportive content codes. Autonomy supportive behaviours were defined as behaviours that supported their child's autonomy, through providing structure that incorporated their child's interests, feelings, and perspectives. Eight behavioural codes were used to measure parents' autonomy support: *Autonomy Supportive Requests* included questions, suggestions, and requests that offered the child some degree of choice about following through, and choice in how to carry out the task.

Rather than telling children exactly what to do, these commands grant some autonomy to children. *Adapting, Sequencing*, *Justifications, Understanding* and *Negotiations* (Dix et al., 2007; see Table 1 for a summary of definitions) were coded as autonomy supportive because they are accommodating to their children's interests and perspectives, and promote motivation for children to negotiate and willing comply with their task, rather and coerce compliance (Dix et al., 2007; Dix & Branca, 2003). *Positive Reinforcement* (e.g., verbal praise and encouragement) was coded when parents encouraged and verbally reinforced their child in order to keep the child motivated and on-task (Grolnick et al., 2002). *Child-Centered Communication* included supportive, reflective and validating statements in response to their child's actions and behaviours (Clark & Ladd, 2000).

Control content codes. Parental control was defined as behaviours that restricted, or override children's attempts at autonomy (see Table 1). Three behaviour codes were used to measure parents' rates of control: *Negative Control* included commands, statements or comments issued with negative affect or disapproval, as well as verbal or non-verbal statements or actions that override their children's initiatives, and abruptly changed or negated the children's focus of the task. Although psychological control is often examined in research with older children and adolescents, instances of such control, though very infrequent, was also captured with this negative control code. *Physical Intervention* included any unwelcome and/or physically restrictive contact with children. Physical intervention did not need to be overtly aggressive or harsh, but behaviours that were intrusive and were initiated by parents rather than the child (Dix et al., 2007). *Directives* included "Do" or "Don't" commands initiated by the parent, and

imply that parents want the child to engage in particular actions with no choice offered. Directives, in contrast to negative control, were considered less power-assertive, and were coded when parents issued direct commands or prohibitions in a positive or neutral tone.

Table 1

Observed Parenting Behaviours

Autonomy Supportive Content Codes	Descriptions
Autonomy Supportive Requests	Questions, suggestions, requests that offered the child some degree of choice about following through with the command and choice in how to carry out the task. Rather than telling children exactly what to do, these commands grant some autonomy to children. (e.g., Which toy do you want to put away first? Do you want to do up the zipper?)
Adapting	Parental behaviours that involved attempts to structure the activity in ways designed to increase the attractiveness (or at least decrease the aversiveness) of the activity itself, so that child's interests are better addressed and promoted. (e.g., taking a game-like approach; singing a clean-up song)
Sequencing	Parental behaviours or requests that implied that, although the parents interests would be met now, the child's interests would be met soon (e.g., you can play with your own toys once we put these ones away).
Justifications	Requests or statements that explained the value of completing the task in a way that attempted to motivate compliance (E.g., Can you clean up for Mommy?; We have to clean up because the research has to go home)
Negotiations	Parental attempts to elicit cooperation by negotiating how both parent and child could achieve part of what they wanted if each relinquished part (e.g., we can put your favourite toy in last if you put the others away; let's child play for one more minute before cleaning up)
Understanding	Any incidences of empathizing, acknowledging child's perspectives, or expressing affection (e.g., I know it's a sad

	situation sweetheart, but we have to clean up; I know you like that toy, but it's time to clean-up)
Positive reinforcement	Any affirmative statements (e.g., praise, encouragement, clapping) that were aimed at keeping the child motivated and on-task.
Child-Centered Communication	Supportive statements in response to child's actions and behaviours. Specifically, this code captured incidences when parent repeated what the child has said, in the language the child had used. (e.g., Child: "I don't want to clean- up"; Parent: "you don't want to clean-up?")

Control Content Codes	Descriptions
Negative Control	(a) Commands, statements or comments issued with negative affect or disapproval; "no's"; criticisms and manipulation (e.g., verbal threats or false incentives; guilt induction, such as "you're going to make Mommy do it all by herself? Like always...") (b) Verbal or non-verbal statements or actions that override their children's initiatives, and abruptly negate or change the children's topic of conversation or focus on task. (e.g., child starts to put the people away and parent says to put the animals away first).
Physical Intervention	Any unwelcome and/or physically restrictive contact with children. Physical intervention does not need to be harsh, but these behaviours are intrusive and are initiated by parents rather than children. Examples include forcing compliance, and picking up or moving children against their will.
Directives	Directives included "Do" or "Don't" commands initiated by the parent, which imply that parents want children to engage in particular actions, with no choice offered (e.g., "Come over here"; "Put the toys away", "Let's put the animals away first"; "We have to clean up now").

Parenting behaviour composites. To reduce the number of predictors and to develop conceptually meaningful parent measures, three summary composite scores were created by summing the standardized proportions of conceptually related parent codes and then examining their inter-correlations.

An *autonomy support* composite was computed by summing parents' autonomy supportive strategies (i.e., autonomy supportive requests, justification, sequencing, negotiation, adapting, understanding, child-centered communication and positive reinforcement). Although the pattern of correlations among the indicators of autonomy support reflected only low to modest convergence in the rate of using each behaviour (*r*'s ranged from -.01 to .56 for mothers and -.14 to .41 for fathers), conceptually, the frequency of parents' use of any indicator of autonomy-support was important. Moreover, low convergence among similar codes have been found in previous studies (e.g., Grolnick et al., 2002, r =.10 to .36 for n = 60; Crockenberg et al., 1996, r = .18 to .24 with n = 164; Sohr-Preston, 2007, r = *-.04 to .38* with n = *55)*, which further justified collapsing conceptually related behaviours. Inter-rater agreement for autonomy supportive strategies was .90.

A *negative, parent-centered control* composite was created by summing parents' negative control and physical intervention behaviours. Such behaviours were seen as intrusive and power assertive, leaving the child with no sense of autonomy. The pattern of inter-correlations among indicators of parents' control behaviours (i.e., negative control and physical intervention) was significant (r = .44, p < .01 for mothers and r = .38, p < .01 for fathers). Inter-rater agreement for negative, parent-centered control strategies was .71.

Directives were left as a stand-alone category because, particularly for this age group, directives may be reflective of structure or behavioural control (i.e., the extent to which parents provide clear and consistent guidelines and expectations for child behaviour) (Ballash et al., 2006; Grolnick, 2003; Kazura, 2000; Mattanah, 2001; Pomerantz & Eaton, 2001). Furthermore, previous researchers have inconsistently included directives into both positive and negative parenting composites, which have resulted in equivocal findings with regard to its influence on child adjustment. Following Crockenberg and Litman (1990), the present study coded parents' directives separately in the belief that, although parents may combine control strategies (e.g., directives with negative, parent-centered control), they may be differentially related to child outcomes. Inter-rated agreement for parents' directives was .87.

Child social-emotional competence. Mothers and fathers independently completed the *Ages and Stages: Social-Emotional Questionnaire* (ASQ: SE; Squires, Bricker, & Twombly, 2002) when children were 37 to 65 months of age (i.e., one year after the clean-up task). The ASQ: SE is a series of parent screening questionnaires used in home and clinical settings to provide information on the social-emotional behaviours of children, 6 to 65 months of age. The 36 month (31-41 months), 48 month, (42-53 months), and 60 month questionnaire (54- 65 months) was used in the present study. Questionnaires contained 34-36 items that address both competent and problem behaviours, and of which can be organized into seven behavioural areas: self-regulation, compliance, communication, adaptive functioning, autonomy, affect, and interaction with people (see Table 2 for definitions). For each ASQ-SE item, parents indicated whether their child engages in the behaviour, *most of the time*, *sometimes*, or *never or*

rarely. A fourth column allowed parents to mark off whether the indicated behaviour was a concern to them. Parents' responses were assigned number values (0, 5, or 10), and scores for each item are then aggregated for a total score. Higher scores are indicative of social-emotional difficulties whereas lower scores indicate that the child is considered social-emotionally competent by the parent (Squires et al., 2001). For the purposes of this study, raw scores for each of the three child age groups were standardized to z- scores and then summed in order to conduct a normative comparison of the entire preschool sample.

Previous utility of the ASQ-SE has demonstrated good reliability and validity estimates (Squires et al., 2001, 2002, 2004). For the 36 to 60 month questionnaires (data from 891 questionnaires) internal consistency (Cronbach's coefficient alpha) ranged from 0.89 to 0.91, and test–retest reliability, (measured as the agreement between two ASQ: SE questionnaires completed by parents at 1- to 3-week intervals), was .94 (Squires et al., 2001, 2002). Concurrent validity, sensitivity and specificity were also good, indicating that the ASQ: SE is able to adequately discriminate between children with social-emotional difficulties and those who do not (Squires et al., 2001). Overall, these results confirm the ASQ-SE as a valid and reliable screening instrument to assist in early identification of social-emotional difficulties in preschoolers.

Table 2

The ASQ-SE's Behavioural Areas and Definitions

ASQ-SE Behavioural Area	Definition
Self-Regulation	Child's ability or willingness to calm or settle down or adjust to physiological or environmental conditions or stimulation
Compliance	Child's ability or willingness to conform to the direction of others and follow rules
Communication	Child's ability or willingness to respond to or initiate verbal or nonverbal signals to indicate feelings, affective or internal states
Adaptive Functioning	Child's success or ability to cope with physiological needs (e.g., sleeping, eating, toileting, safety)
Autonomy	Child's ability or willingness to self-initiate or respond without guidance (i.e., moving towards independence)
Affect	Child's ability or willingness to demonstrate his or her own feelings and empathy for others
Interaction with others	Child's ability or willingness to responds to or initiate social responses to parents, other adults and peers.

Squires, Bricker, & Twombly, (2002)

Results

Preliminary Analyses

Table 3 presents descriptive statistics for parent predictor composites (i.e., autonomy support, directives and negative, parent-centered control) and child outcome variables (mothers and fathers ratings of child social-emotional competence). Observed level of negative, parent-centered control was positively skewed for both mothers and fathers, indicating that most parents rarely engaged in such behaviours during the clean-up task. This was expected given the non-clinical nature of the present parent sample. Parents' autonomy support and directives were also slightly positively skewed, which may further reflect the short length of the interactional task.

A one-way ANOVA was conducted to ensure that the three preschool age groups (i.e., 36, 48 and 60 months) did not significantly differ in their social-emotional competence ratings. There were no significant differences for both mother, F (1, 51) = .14, *ns*, and father ratings, F (1, 51) = .31, *ns*, and thus groups were aggregated across the entire preschool sample. The distribution of children's social-emotional competence ratings was positively skewed (skewness = 1.51; kurtosis = 1.80), suggesting that most mothers and fathers reported their children to have low levels of social-emotional difficulties. This was also expected given the non-clinical sample of children in the present study and parallels the positively skewed distribution found in the normative sample (Squires et al., 2001, 2002). Furthermore, the mean ASQ scores in the present sample was 31 (SD = 26 for mothers ASQ and SD = 22 for fathers ASQ), which approximates non-clinical means cited in past research (M = 30-33 for 36 to 60 month old children; Squires et al., 2001). Overall, the data violates the assumptions of normality,

though this violation was not due to a problem with the measures, rather the underlying nature of the construct and sample which comprised this study (Pallant, 2006). The level of significance for analyses was set a-priori at .05.

Frequency of mothers' and fathers' observed parenting behaviours. To examine the frequency of mothers*'* and fathers*'* observed parenting behaviours during the goal oriented task, the descriptive statistics presented in table 3 were examined. Mothers and fathers use of strategies to elicit and maintain child cooperation and engagement in task completion varied. The most frequently used strategy was autonomy supportive requests for mothers ($M = 4.17$) and directives for fathers ($M = 3.91$). For both mothers and fathers, the least frequent strategy used during interactions with their toddler was physical intervention ($M = .15$ for mothers and $M = .19$ for fathers). It may be that parents rarely resorted to physically controlling or restricting behaviours (e.g., grabbing toy away from child; picking up the child against their will) because their children were not significantly overactive or defiant, as per the non-clinical nature of the child sample. As well, for this age group, parents guide and control children through increasingly verbal, rather than physical means (Deater-Deckard, 2004; McLaughlin, 1983).

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Table 3

Descriptive Statistics for Parent and Child Variables

	Mothers		Fathers	
	Mean	*SD*	Mean	*SD*
Child Variable[a]				
Social-emotional competence ratings (ASQ-SE)	30.77	25.98	31.42	22.13
Parenting Variables[b]				
Autonomy Support	10.20	5.68	7.25	3.05
Sequencing	.46	.69	.34	.45
Adapting	.50	.75	.43	.44
Justifications	1.06	.82	.68	.49
Negotiation	.47	.68	.28	.34
Autonomy Supportive Requests	4.18	2.53	3.00	1.55
Child-Centered Communication	.97	.84	.72	.62
Understanding	.60	.89	.32	.44
Positive Reinforcement	1.95	2.24	1.48	1.57
Negative, Parent-Centered Control	.89	1.29	.89	1.04
Physical Intervention	.15	.31	.19	.35
Negative Control	.73	1.12	.70	.85
Directives	3.60	2.70	3.91	3.02

Note. ASQ-SE ratings = combined 36, 48 and 60 month raw scores. Parent variables in standardized frequencies.

[a] $N = 53$; [b] $N = 57$

$^{*}p < .05$. $^{**}p < .01$.

Relations among parenting variables. Pearson product moment correlations were calculated among all measures (see Table 4). Mothers' and fathers' autonomy support and negative, parent-centered control were not significantly related (r =.10, *ns* and r = .13, *ns*, respectively), though mothers' and fathers' use of directives were (r =.57, $p <$ .01). For both mothers and fathers, autonomy support was unrelated to directives and negative, parent-centered control, though directives and negative, parent-centered control were moderately related to each other (r = .41, $p < .05$, and r =.40, $p < .05$). Thus, parents tended to use autonomy supportive strategies independent of control strategies, though tended to use control strategies (i.e., directives and negative, parent-centered control) together. Directive and negative, parent-centered control were not combined, however, because it was uncertain as to whether control strategies that varied in power assertion would be differentially related with and predictive of child outcomes (Crockenberg & Litman, 1990). Mother and father ratings of preschool social-emotional competence were significantly related, r = .62, $p < .01$.

Relations among parent and child variables. As shown in table 4, mothers' negative, parent-centered control was significantly and positively associated with children's social-emotional difficulties, as rated by mothers and fathers, r = .48, $p < .01$. Mothers' directives were significantly correlated with children's social-emotional difficulties, as rated by mothers, r = .24, $p < 0.05$. Mothers' autonomy support was not associated with children's social-emotional competence ratings. For fathers, level of autonomy support was significantly and negatively associated with preschoolers social-emotional difficulties, as rated by fathers, r = - 30, $p < .05$. As well, fathers' directives (though not

negative, parent-centered control) were positively related to later social-emotional difficulties as rated by mothers, $r = .24$, $p < .05$.

Table 4

Correlations among Mother, Father and Child Variables

Variables	2	3	4	5	6	7	8
1. ASQ (mothers)	.62**	-.15	.24*	.48**	-.09	.24*	-.04
2. ASQ (fathers)	—	-.07	.14	.48**	-.30*	.16	.01
3. Mothers' Autonomy Support		—	.05	-.09	.10	.10	-.12
4. Mothers' Directives			—	.41**	.10	.57**	.11
5. Mothers' Negative, Parent-Centered Control				—	-.00	.32*	.13
6. Fathers' Autonomy Support					—	.23	.05
7. Fathers' Directives						—	.40**
8. Fathers' Negative, Parent-Centered Control							—

Note: $N = 57$ for correlations between mother and father variables; $N = 53$ for correlations with ASQ ratings

* $p < .05$. ** $p < .01$.

Control variable: Child gender. Since previous research has found boys to have greater and more extreme scores than girls on social-emotional competence ratings, particularly at 36-60 month age intervals (Squires, 2004), child gender was tested as part of the present study's preliminary analysis. Specifically, independent t-tests were conducted on

mothers' and fathers' ASQ ratings, in order to determine whether there were significant differences in competence ratings as a function of child gender. Results revealed that fathers rated boys as having significantly more social-emotional differences than girls, t (52) = 4.19, $p < .05$. Mother ratings did not significantly differ for boys and girls, t (52) = 2.50, *ns.* Based on these results, child gender was controlled for in the central analyses that used fathers' ASQ ratings as a criterion variable.

Central Analyses

Mother-father differences. To address the question of observed mother-father differences, three paired t-tests were conducted, where gender (2 levels: mothers and fathers) served as the independent variable, and autonomy support, directives, and negative, parent-centered control composites served as the criterion variables. Paired t-tests were performed because mothers and fathers were married (or at least residing in the same home) and thus have some influence or shared variance on each others' parenting behaviours (i.e., they may not be independent of one another) (Morgan, Leech, Gloeckner, & Barrett, 2004). Results revealed significant differences between mothers' and fathers' autonomy support. That is, mothers were found to be significantly more autonomy supportive than fathers during the observational task, t (56) = 3.61, $p < 0.01$. Subsequently, post hoc analyses were conducted to examine mother and father differences on the specific parenting strategies or indicators of autonomy support. Because multiple paired t-tests were conducted simultaneously, a more stringent alpha (0.01) was set to reduce the chance of a type 1 error. It was revealed that mothers used significantly more justifications and autonomy supportive requests than fathers (see Table 5). Alternatively, mothers and fathers did not significantly differ in the level of positive

reinforcement, negotiation, adapting, sequencing, understanding, and child-centered communication they demonstrated when interacting with their young children. Contrary to predictions, no significant differences were found in mothers' and fathers' observed level of directives, t (56) = -.88, *ns*, and negative, parent-centered control, t (56) = -.01, *ns*. That is, mothers and fathers did not differ in the amount directive and controlling behaviours exhibited with their toddlers, when attempting to elicit and maintain compliance and engagement on the clean-up task.

Table 5

Mother-Father Differences on Proportions of Autonomy Support, Directives, and Negative, Parent-Centered Control Behaviours

	Mothers	Fathers	T (56)
Autonomy Support Composite	10.20	7.25	3.61**
Directives Composite	3.60	3.91	-.88
Parent-Centered Control Composite	.89	.89	-.01
Post Hoc Analyses			
Sequencing	.46	.34	1.22
Adapting	.50	.43	.66
Justifications	1.06	.68	3.37**
Negotiation	.47	.28	1.88
Autonomy supportive Requests	4.18	3.00	3.27**
Child-Centered Communication	.97	.72	2.00*
Understanding	.60	.32	2.04*
Positive Reinforcement	1.95	1.48	1.39

Note. $N = 57$. Results were significant when alpha was less than .01 for post-hoc t-tests

* $p < .05$. ** $p < .01$.

Regression analyses of children's social-emotional competence. To test mothers' and fathers' combined and unique influences on preschool competence, regression analyses were conducted where both mothers' and fathers' composite behaviours were entered into the analyses together and served as the predictor variables. Analyses were run separately for mothers' and fathers' social-emotional competence (ASQ) ratings, which served as criterion variables. For mothers' ratings, a simultaneous method of entry was chosen to provide the most conservative assessment of the unique predictive contribution of each parenting predictor, while controlling for all other parenting predictors in the model (Morgan et al., 2004). Because fathers were found to rate boys as having significantly more social-emotional difficulties than girls in the preliminary analysis, a hierarchical method was chosen in order to account and control for child gender. Thus, with fathers' ASQ ratings, child gender was entered first into the model, and mothers' and fathers' parenting behaviours second, in order to examine the unique contributions of parents' behaviours after the influence of child gender was co-varied out.

In the prediction of mothers' ratings of preschool social-emotional competence, mothers' and fathers' behaviours combined accounted for a significant amount of variance, $R^2 = .27$, $p < .01$. Furthermore, mothers' negative, parent-centered control uniquely contributed to greater social-emotional difficulties in preschoolers, $\beta = .39$, $p < .01$. That is, mothers who were observed to engage in higher levels of parent-centered and negative control with their young children had children who were rated as having more social-emotional difficulties one year later (see Table 6). Mothers' and fathers' directives were not significant predictors of children's competence after controlling for

the other significant parenting behaviours in the model, β = -.01, *ns* and β =.23, *ns*, respectively.

Table 6

Summary of Simultaneous Regression Analysis for Variables predicting Mothers' Social-Emotional Competence Ratings

Predictors	β	R^2	*F* for Model	*p*
		.27	2.88	.02*
Mothers' Autonomy Support	*-.15*			*.26*
Mothers' Directives	*-.01*			*.94*
Mothers' Negative, Parent-Centered	*.39*			*.01***
Control	*-.13*			*.32*
Fathers' Autonomy Support	*.23*			*.20*
Fathers' Directives	*-.20*			*.16*
Fathers' Negative, Parent-Centered Control				

Listwise deletion used (*N* =53)

* $p < .05$. ** $p < .01$.

In the prediction of fathers' ratings of preschool social-emotional competence, mothers' and fathers' behaviours combined accounted for a significant amount of variance, $R^2 = .29$, $p < .01$ (see Table 7). Fathers' autonomy support and mothers' negative, parent-centered control were significantly and uniquely predictive of children's later social-emotional competence ratings, β = -.33, $p < .01$, and β =.40, $p < .01$, respectively. These significant findings with child gender controlled for indicates that

child gender differences were not, for the most part, affecting the relationship between parents' autonomy support and control and children's later social-emotional competence, as rated by fathers.

Table 7

Summary of Hierarchical Regression Analysis for Variables predicting Fathers' Social-Emotional Competence Ratings

Predictors	β	ΔR^2	*F* for Model	*p*
Step 1: Child gender	-.28	.08	4.19	05*
Step 2:		.29	3.71	01**
Mothers' Autonomy Support	-.10			.49
Mothers' Directives	-.11			.49
Mothers' Negative Parent-centered Control	.40			.01**
Fathers' Autonomy Support	-.33			.01**
Fathers' Directives	.21			.22
Fathers' Negative Parent-centered Control	-.09			.51

Listwise deletion used ($N = 53$)

* $p < .05$. ** $p < .01$.

Discussion

The main purpose of this study was to examine differences in mothers' and fathers' autonomy supportive and control behaviours (i.e., directives and negative, parent-centered control), as well as mothers' and fathers' unique contributions to their preschoolers' social-emotional competence. In this section, the results from the current investigation will be interpreted and discussed in relation to past research and theory. As well, limitations, directions for future research, and implications of the present study will be highlighted.

Mother-Father Differences

The results of this study supported the prediction that mothers would be significantly more autonomy supportive than fathers during parent-child interactions. Specifically, compared to fathers, mothers used significantly more autonomy supportive requests (i.e., suggestions and requests in the context of choice) and justifications with their toddlers. This finding is consistent with others (e.g., Blandon & Volling, 2008; Volling et al., 2006) and lends credence to the existing body of empirical research that suggests mothers engage in more autonomy support than do fathers, at least when attempting to engage their young children in observed goal-oriented tasks. This finding also supports broader parenting style research, which has found mothers to be more authoritative (i.e., an autonomy supportive parenting style) than fathers (e.g., Russell et al., 1998).

Upon further examination of the specific behaviours and strategies that comprised the autonomy support composite, results showed that fathers and mothers did not significantly differ on many of the autonomy supportive strategies. In particular, mothers

and fathers did not significantly differ in their rate of negotiations, adapting, understanding, child-centered communication and positive reinforcement. That is, fathers encouraged and praised their children, attempted to make the task fun, compromised with their children to lessen task demands, and were responsive and validating of their children's perspective at a rate that did not significantly differ from mothers. Adapting (i.e., taking a more game-like approach and making the task more interesting to the child) in particular seems to fall in line with previous studies that have found fathers to be just as positive and interactive as mothers during play (e.g., Tamis-Lemonda et al., 2004). Together, these findings suggest that although mothers are generally more autonomy supportive than fathers, it is valuable to delineate the "autonomy support" construct as it is typically measured (i.e., a global or composite score) to understand the precise differences and similarities in mothers' and fathers' autonomy supportive strategies and behaviours.

A general possibility for the finding that fathers were observed to be overall, less autonomy supportive than mothers is that fathers may spend less time involved with their toddlers (Kazura, 2000; Marsiglio et al., 2000; Parke, 1994), and thus may have less of a history in leading goal-oriented parent-child activities. Although parental involvement was not assessed in this study, if this is the case, then fathers may have had less opportunity over time to develop the full repertoire of autonomy supportive strategies that mothers more frequently engaged in, simply because they are generally less involved in the task-oriented parenting demands of daily life. Additional research would be valuable to empirically examine this interpretation.

Contrary to predictions, fathers did not engage in significantly more directives and negative, parent-centered control behaviours than mothers. In particular, this sample of mothers and fathers were not significantly different in their observed levels of physical interventions, negative control and directives when attempting to elicit and maintain child cooperation and engagement during the clean-up task. Given that previous research in this area had yielded inconclusive findings, the current results challenge previous investigations that have found fathers to be more directive and power assertive during early parent-child interactions (e.g., Kazura, 2000; Power et al., 1994; Russell et al., 1998), while supports other studies that have not found differences in control used by mothers and fathers (e.g., Mcdowell and Parke, 2005; Tamis-Lemonda et al., 2004; Tiano, 2008). Upon further examination, Power and colleagues (1994) observed parents' use of control in two, much broader home observations than the present study. As well, parenting style research (e.g., Russell et al., 1998) that has rendered fathers as more authoritarian frequently use parent-reports to capture how parents *generally* interact with their children. Thus, discrepancies between the current studies and many previous studies may be a function of the broadness of context assessed. That is, parents may not consistently differ in control when assessed in a single domain of socializing their children (i.e., clean-up), though may show more differences when methodologies gauge parenting behaviours across broader socialization contexts.

Mothers' and Fathers' Predictive Contributions to Preschooler Social-Emotional Competence

Autonomy support. The present findings partly supported the proposed hypothesis that mothers' and fathers' autonomy supportive behaviours would uniquely

predict later social-emotional competence in preschool. One important finding was that although fathers engaged in significantly less autonomy support than mothers during parent-toddler interactions, fathers' level of autonomy support was associated with, and was uniquely predictive of preschooler social-emotional competence ratings. Surprisingly, and in contrast to expectations, mothers' level of observed autonomy support was not associated with, or predictive of greater preschool social-emotional competence, as rated by both mothers and fathers.

This finding suggests that fathers who led parent-child interactions in ways that were child-centered and allowed toddlers' appropriate autonomy to attain goals, had children who were rated as more socially-emotionally competent during their preschool years. This result lends support to the assertion that fathers serve a particularly central function in their children's early development (e.g., Crockenberg et al., 1996; Marsiglio et al., 2000; Mattanah, 2001; NICHD, 2004), and further exemplifies the need to include fathers from two-parent families in research and intervention. This finding also supports theoretical views that caregivers' autonomy support is an important aspect of young children's social-emotional growth, and that fathers may be a particularly important model and resource for young children as they attempt newly emerging autonomous regulation, skills and competences.

Given that fathers' autonomy support uniquely predicted fathers' ratings of social-emotional competence (but not mothers ratings) highlights the contention that the content and meaning of the mother-child relationship may be different from the father-child relationship, and that parents may have unique perceptions of, and experiences with their children. Here, fathers' ratings may reflect more directly on the relationship processes

and children's social-emotional skills that transpire and develop within father-child interactions specifically, rather than children's competences in broader social interactions (e.g., with mothers). That is, these findings suggest that fathers who are more autonomy supportive during their interactions with their toddlers, in turn, have (or perceive) their children to more autonomous, skillful, self-regulated, and compliant (i.e., social and emotionally competent) during later interactions with their fathers. Thus, it seems that children learn to regulate their emotions skilfully and negotiate and assert their autonomy socially with fathers, when fathers do so in interactions with them.

It is uncertain as to why mothers' autonomy support, which overall was significantly higher than fathers, was unrelated to either parent's ratings of social-emotional competence. This finding is in contrast to theory and research that suggest the importance of mothers' autonomy support and similar parenting constructs in the development of their children's pro-social competences. Specifically, mothers' autonomy support has been found in some previous studies to be an important determinant in the emergence of young children's internalization, compliance and emotional regulation, and preschoolers' positive and socially-skilled interactions with others (e.g., Crockenberg et al., 1996; Denham et al., 1991; Grolnick, 2003; Joussemet et al., 2005). Perhaps one plausible hypothesis is that mothers' autonomy supportive behaviours may gain importance in later child developmental periods. For instance, Mattanah (2005) noted that although we generally expect parenting behaviours to be associated with children's development, the actual findings may depend on when and how it is assessed. Likewise, Mattanah found that mothers' observed autonomy support in kindergarten predicted children's adjustment in elementary school, and did not find significant results when

autonomy support was assessed just prior to kindergarten. Thus, not only do mothers' and fathers' behaviours seem to play unique roles in their children's development, one parent may be more significantly influential during specific child developmental periods. Accordingly, the present findings would suggest that as children reach the toddler and preschool period, fathers' autonomy supportive behaviours demonstrates particular importance. It is possible that mothers influence may gain importance later, when children face the greater social-emotional challenges of the formal school environment, and where child difficulties become more salient. Another possible interpretation is that although mothers' autonomy support does not seem to have a direct influence on child outcomes, perhaps mothers' autonomy support instead serves as a protective factor in children's early social-emotional development; that is, buffering against unsupportive interactions with fathers (Laible, & Carlo, 2004). Specifically, mothers' autonomy support may serve to protect children from later difficulties when fathers are unsupportive, but not when fathers are sufficiently autonomy supportive. Although examining interaction affects were beyond the scope of the present study, such analyses would be valuable for future research in this area.

Negative, parent-centered control. As expected, mothers' level of negative, parent-centered control as observed during parent-toddler interactions was significantly and uniquely predictive of preschoolers' social-emotional difficulties. This finding is particularly convincing, given that mothers' negative, parent-centered control did not merely predict mothers' social-emotional ratings longitudinally, but also fathers. This finding is consistent with a substantial body of parenting research which has indicated that mothers' negative control contributes to child difficulties, both concurrently and

longitudinally (e.g., Calkins & Johnson, 1998; Crockenberg et al., 1996; Gardner, 1994; O'leary et al., 1999; Smith et al., 2004). Thus, mothers' use of negative or parent-centered control seems to be primary in hindering positive social-emotional growth during the toddler-preschool period. Specifically, it seems that mothers who impose their own agenda and take over tasks may result in less opportunity for children to model, practice and master autonomous attempts at self-regulation and adaptive behaviours (Crockenberg et al., 1996; Denham et al., 1997; Dix & Branca, 2003). As well, mothers who override their children's feelings, perspective and initiatives to accomplish their own goal may create an emotional environment that inhibits a children's motivation to endorse and internalize their parents' requests, impair the parent-child bond, as well as stifle their children's natural striving for autonomy (Grolnick, 2003; Shaw & Bell, 1993). In turn, toddlers with mothers who engage in frequent controlling behaviours may be less prepared to cope with the social-emotional challenges of subsequent developmental periods. In sum, this finding suggests that although some parents may opt for more parent-centered, controlling techniques in short term, goal-oriented situations (i.e., getting their children to cooperate with instructions) that do not have consequences beyond the immediate time, such controlling behaviours may actually have important implications on their child's later development, at least when initiated by mothers. In contrast to expectations and previous research (e.g., McDowell et al., 2003), fathers' level of negative, parent-centered control during interactions with their toddler was not associated with children's social-emotional competence ratings. The enduring effects of mothers' negative, parent-centered control and not fathers control on toddlers development however, has been found in some previous investigations (e.g., Tamis-Lemonda et al.,

2004). Together, this finding exemplifies the fact that mothers and fathers may have differential influences on their children's development.

One hypothesis for the predictive effects of mothers' negative, parent-centered control but not fathers on their children's early competences is again regarding parenting involvement. Presumably, if mothers spend more time with their children in child-rearing endeavours, their controlling behaviours may be more likely to significantly affect their children's development, because children would be exposed to greater bouts of such negative parent-centered control on a daily basis. In contrast, fathers' controlling behaviours may have less of an impact on their children's early development because in general, their involvement with young children is less relative to mothers (Kazura, 2000; Marsiglio et al., 2000; Parke, 1994). Thus, further investigation is necessary to more fully understand the factors (e.g., involvement) that may affect parents as influential agents in their children's social-emotional competence.

Parents' directives. Directives were analyzed separately because it was thought that a clean-up situation may warrant structure and behavioural control from parents in order to keep children attending to the demands of the task. No direct hypotheses were made a-priori regarding the influence of parents' directives on children's later competences, as previous studies have combined directives into both positive and negative parenting composites and have yielding inconsistent findings.

The present study found parents' directives to be associated negatively to preschoolers' competence, as rated by mothers. That is, mothers' and fathers' use of direct control (i.e., requests with no choice) was associated with later social-emotional difficulties. The correlational findings linking parents' directives and children's

competence ratings parallel other studies that have found significant relations between parents' use of directiveness during parent-child interactions and child non-compliance and difficulties (e.g., Braungart-Rieker et al., 1997; Calzada, Eyberg, Rich, & Querido, 2004; Donovan et al., 2000). However, the present finding contrasts some researchers which have asserted that in situations that are relatively structured and goal-oriented, the use of directives may be normative and appropriate (e.g., Rubin et al., 2001), as well as theory and research that suggests that the structure inherent in directiveness fosters healthy development (Joussemet et al., 2008; Karreman et al., 2006; Kazura, 2000). Here, although parents' directives are considered only moderately power-assertive and not negative (Crockenberg & Litman, 1990), they were nonetheless associated with greater child difficulties, as rated by mothers. It is possible that parents used more directives in an attempt to engage more socially-emotionally incompetent toddlers or that non-compliant children evoked more direct commands from their parents in an attempt to gain compliance and cooperation to the task demands (Campbell, 1995; Crockenberg & Litman, 1990; Karreman et al., 2006).

Although mothers' and fathers' use of directives was originally significant in the correlational analysis, they were not unique predictors of later social-emotional competence. This can in part be explained by the fact that both mothers' and fathers' directives were significantly and positively related to mothers' negative, parent-centered control. Thus, although parents who use more directives tended to have children with more difficulties, it was mothers' negative, parent-centered control that predicted greater difficulties in their preschool children. Some previous studies have highlighted that more controlling, intrusive, parent-centered behaviours are more broadly related to child

difficulties than behavioural control (Crockenberg & Litman, 1990; Silk et al, 2003). Perhaps the use of directives was nullified if unaccompanied by negative tone, or more effective when jointly accompanied with more autonomy supportive strategies (which then invites negotiation and maintains children's sense of autonomy)? In sum, directives do not seem to independently contribute to child difficulties, rather it may be the way structure or behavioural control was conveyed (i.e., autonomy supportive or controlling), and by whom (i.e., mothers or fathers) that have implications on children's developing social-emotional growth. This further highlights the necessity of examining the relative influence of multiple parenting behaviours in the context of child development.

To summarize, the present findings suggest that the type of strategies and behaviours mothers and fathers engage in have important implications on children's later social-emotional competences. However, the associated and predictive effects depend on who was engaging in which behaviours and who rated their children's later competence (i.e., mothers or fathers). That is, mothers and fathers appear to differentially contribute to their children's early social-emotional development. In particular, mothers' negative, parent-centered control and fathers' autonomy supportive behaviours emerged as important predictors of children's competence, and these predictors remained significant when all other parenting predictors and child gender were controlled for. The influence of mothers' negative and not positive parenting behaviours has been found in some previous work (e.g., Calkins et al., 1998; Smith et al., 2004). Thus, mothers' positive, autonomy supportive behaviour may not have a significant influence on early social-emotional competence, especially when other, more potent parenting factors such as negative control are considered (Smith et al., 2004). Furthermore, previous researchers have

asserted that fathers might uniquely contribute to children's pro-social development by providing support to their child's autonomy to function effectively in social contexts outside the family, whereas mothers might contribute more so by providing connectedness and security to the family (Grossmann, Fremmer-Bombik, Scheueer, & Zimmermann, 2002; Marsiglio et al., 2000; NICHD, 2008). This assertion may further explain the differential contributions of mothers' and fathers' parenting behaviours to children's social-emotional development.

Limitations

Although the present study supports and extends previous research on parents' autonomy support and control, and provides additional insight into the influence both parents play in their children's early social-emotional development, there are some notable limitations that prevent this study from drawing more detailed conclusions, and thus will be important to address for future research.

First, a potential shortcoming in this study, as with any study that employs non-experimental designs, is the issue of causality. Although longitudinal investigations help to address issues of directionality (i.e., that parenting behaviours preceded children's outcomes), these results cannot confirm causal inferences or the presence of spurious third variables. The present results suggest that fathers who are autonomy supportive better prepare their children for later social-emotional competence, and mothers' who are negatively controlling contribute to their children's social-emotional difficulties. However, an alternative explanation that cannot be ruled out is that child behaviours may directly affect parenting behaviours well as their children's later competences. Specifically, toddlers who exhibit lower social-emotional competence (e.g., autonomy,

self-regulation, compliance etc.) may be perceived as needing more directives and control from parents while children who are more independent and competent make parents' provision of autonomy support more effective (Grolnick & Ryan, 1989; Grolnick et al., 2002). Thus, although the present study was interested in how mothers and fathers interacted with their children, and parents' influence on child outcomes, it would be helpful in future work to have measures of both parent and child variables cross-sectionally in addition to longitudinally, to further address the direction of effects issue.

The results of these findings were also based on one brief, observational task, and thus there should be some caution in generalizing the observed parenting behaviour to differences in mothers and fathers parenting behaviours in general. Observational measures are beneficial because they provide an objective view of the parent-child interaction, and give a great deal of detailed and rich information, though on a narrow set of exchanges between parents and their children (Simon-Gordon & Conger, 2007). It is quite possible that mother and father differences may be context dependent; in reality, parents may modify their behaviours to fit the requirements of a given situation (e.g., Grolnick et al., 2002; Grusec et al., 2000; Rubin et al., 2001). Thus, the context of the interaction itself may moderate the relationship between parenting behaviours and child outcomes (Rubin et al., 2001). For instance, in a less stressful, free play task, where there are few goals to be completed, we may expect fathers to show greater autonomy support than they did during the clean-up task. Furthermore, it is important to note the children's development is not restricted to one interactional context, but many contexts over time. We can assume that short-term parenting behaviours would happen not just in a clean-up context, but during other situations that make up the daily social context of parents and

children. However, the results from the present investigation cannot confirm this assumption. In more child-centered tasks (e.g., play), it is plausible that parent's directives and negative, parent-centered control may be viewed as more inappropriate and intrusive, and thus may have greater, or differential influences on children's social-emotional outcomes. In sum, although this brief observational glimpse of mothers' and fathers' behaviours was influential in predicting individual differences in children's social-emotional competence ratings, additional cross-task analyses would both strengthen and extend these findings. Specifically, direction for future studies should replicate these analyses with a broader range of interactional tasks to (a) determine whether there are differences in parents' level of autonomy support, directives and control in different contexts; and (b) examine whether the context in which mothers' and fathers' autonomy support and control emerges has important and differential implications on children's development.

Another possible limitation of the present study is that only parent (i.e., mother and father) ratings of preschool social-emotional competence were utilized. Parents at this early age generally spend a great deal of time with their children, and thus provide valuable insight into their perceptions of their children's capabilities and difficulties. However, parent ratings may reflect more directly on the relationship processes and children's social-emotional skills that transpire and develop within the family (i.e., with parents and siblings) specifically, rather than children's competences in broader social interactions. Thus, competence rating from additional caregivers (e.g., daycare providers or preschool teachers) or observational measures (e.g., with peers) may have been valuable to obtain a more comprehensive picture of child competence and functioning, as

children's behaviours may vary pending the situation, setting, and who it is they are interacting with.

A last notable limitation of the present study was the sample itself. Specifically, the data for this study were derived from a relatively homogeneous sample, consisting of mostly Caucasian and high SES families, and all who willingly volunteered for a larger longitudinal study. Thus, the generalizibility of the present findings is quite limited to other populations. It is plausible that parents who participated were those mothers and fathers who are very involved and active in their young children's lives. Moreover, some researchers have pointed out that autonomy support is significantly related to social-economic status (e.g., Clark & Ladd, 2000; Joussemet et al., 2005), with higher social-economic groups exhibiting higher autonomy supportive behaviours. We also know relatively little as to whether autonomy support has similar influences in different culture groups and with families of different compositions (Grolnick, 2003; Grusec et al., 2000). Accordingly, future studies should include a greater diversity within the sample to test whether parents' autonomy support and control operates similarly or differently with different cultures, socio-economic status, families with different structures, and high-risk child and parent groups. Such future endeavours are crucial so that we can apply the benefits of research of all types of families (Bornstein & Bornstein, 2007).

Additional Directions for Future Research

In addition to the above limitations, the present study also points to some important directions for future research. Three are noted here.

First, the modest size of correlations and predictors suggests that there is additional variance in children's social-emotional development that could be accounted

for by many other factors that were beyond the scope of this study. For example, child factors such as children's temperament have been shown in extant studies to play a role in children's later behaviours and competences (e.g., Calkins, 2002; Diener & Kim, 2004). As well, broader factors such as parenting and contextual stress, parental involvement, and marital satisfaction may also play a role in predicting parents' level of autonomy support (Grolnick et al., 2002) and difficult child behaviours (e.g., Calzada et al., 2004). In sum, it is important to note that parenting behaviours are only one of many risk factors that influence children's early adaptive functioning, and future investigations should work towards the inclusion of broader child and family variables to better capture the ecological context that surrounds the parent-child relationship. As well, including context variables in analyses would help gain information on the factors that may make it difficult for parents to maintain an autonomy supportive approach with children, which would help facilitate parenting intervention efforts.

Another future consideration for this topic of study is to aggregate past and present research to cover the span of child development. The present study examined more overt controlling behaviours that stifled their child's autonomy, but it would be interesting to see if such behaviours predict parents' psychological control (i.e., more covert strategies of control), as seen in later child developmental periods. Furthermore, there is still a lack of clarity in the literature as to how exactly autonomy support fits with more global parenting styles (e.g., is it an independent dimension or characteristic of authoritative parenting style?) and how autonomy support fits with parent control (e.g., opposite of the same continuum or independent constructs?). In this sample of mothers and fathers, autonomy supportive behaviours were unrelated to directives. This may

exemplify the importance for future studies to not only differentiate between behavioural control (i.e., structure) and controlling behaviours, but to also differentiate between behavioural control and autonomy support. As well, parents' autonomy supportive behaviours were unrelated to negative, parent-centered control. This aligns with research that suggests that autonomy support and control may be separate independent constructs, rather than opposites of the same continuum (e.g., Barber, 1996; Silk et al., 2003), which may have implications for the future measurement of autonomy support and control. That is, it may be more appropriate to study autonomy support and control separately, rather than combining the two constructs into one scale, at least with regard to examinations that focus on the early childhood years and when using observational methodologies.

A third important consideration for future research is how mother and father behaviours interact to predict child competences. For instance, do the benefits of an autonomy supportive father buffer the effects of more controlling mothers? Or does mothers' negative, parent-centered control override the positive effects fathers' autonomy support has on their children's social-emotional growth? Furthermore, given that the present study found that parents do exhibit some differences in parenting (i.e., autonomy support), this raises the issue of the manner in which discrepancies in mothers' and fathers' behaviours within the family influences children's development (Gordon-Simon & Conger, 2007). This may be especially important to examine during the early childhood years, when children may not yet have the ability to understand and accommodate to different co-parenting behaviours. Thus, examining the cumulative and moderating effects of mothers and fathers in the same family is an important future consideration, as such an analysis could examine children's emerging competences as

predicted by children's simultaneous exposure to both parents' behaviours, and thus would more accurately reflect the intricacies of family dynamics (Gamble et al., 2007).

Implications and Conclusions

Notwithstanding these limitations and future considerations, the present study contributes to the literature in many ways. As noted earlier, this study examined observed, rather than parent or child reports to obtain measures of autonomy support and control (directives and negative, parent-centered control). Furthermore, these findings help to fill the gaps in extant literature which has consistently demonstrated the benefits of parents' autonomy support in school-aged children's academic and intrinsic motivation (e.g. Grolnick et al., 2002; Pomerantz & Eaton, 2001), by underscoring the relevance of parents' autonomy support and control, (a) in relation to child development in social-emotional realms; and (b) during the toddler-preschool period, when autonomy and bids for independence has just begun to emerge. Lastly, fathers were an integral part of the present study. The inclusion of fathers merited investigation given that autonomy support is thought to play such an important role in children's healthy adjustment, and the fact that most studies center only on mothers' parenting.

Results of the current study have implications for our understanding of the specific role mothers' and fathers' autonomy support and control play in setting the stage for later competences. It is hoped that from this investigation that practitioners, researchers and parents alike will acquire a greater understanding of the influence that both parents have on their young children's social-emotional development. These results may ideally and ultimately prove useful for assisting intervention initiatives that focus on young children and their families, as well as help to continue the advocacy of including

fathers in both research and early family intervention. The fact that fathers in two-parent families were found (compared to mothers) to engage in less autonomy support, but fathers' autonomy support was uniquely important in facilitating children's social-emotional competence suggests that efforts to improve fathers' parenting should attend to these behaviours. Likewise, decreasing mothers' controlling behaviours which stifle children's growing sense of autonomy may be helpful in tailoring parent interventions which aim to facilitate the trajectory of children's pro-social development. Such an endeavour may be particularly important prior to formal school entry, when social-emotional difficulties may become resistant to change, and can begin to affect functioning in other (e.g., academic) realms (Squires et al., 2001).

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Appendix A

Parent Information and Consent Form

INFORMATION LETTER

Dear Parents,

I am a professor in the Department of Educational Psychology at the University of Alberta. I have worked with young children and their families across a variety of educational and community settings. I am especially interested in parent-child interactions and what parents and children learn and teach one another. I am writing to ask for your participation in a study on parent-child interactions. I am looking for children between 24 and 42 months of age and both their parents to participate. I will briefly explain the purpose of the study below.

I am interested in finding out about both mothers' and fathers' social interactions with their toddlers (girls and boys). At about the age of two, children attempt to gain more independence from their parents. I am especially interested in how children and parents go about achieving the balance between child autonomy and parental guidance. If you choose to participate in this study I (or one of my trained research assistants) will visit your home twice. One visit will be to observe mom and child in a variety of fixed play activities I have planned for a total of 45 minutes. A second visit will be to watch dad and child engage in the same play activities for an additional 45 minutes. You will also be asked to fill out a few questionnaires asking about parenting styles, your child's social awareness, and play skills. You will have the option of filling these forms out while one parent plays with the other child, or you may fill them out at a later time. In this case we will call you to find a time that is convenient for you and pick the questionnaires up.

To verify my understanding of what happens during these tasks and activities, I will be videotaping the play interactions. Unless you indicate otherwise, I will not be showing any of the video clips to other researchers. If however you will permit me to show clips of the videotapes when I present study results, please indicate your permission by initialling on the next page.

Finally, if your child attends child care or preschool, we would like your child's primary educator to fill out 2 forms about their social behaviours in that setting.

The Research Ethics Board requires me to tell you how I will use and store the information I collect from you and your family. The information I collect will be analyzed by me, or a member of my research team. No one else will have access to any information I collect. The information will be stored in a locked room and will be shredded or deleted from the computer or destroyed once they are no longer being used. The results of this study for the group of families as a whole may be presented or discussed publicly or published. Your family and any information you provide will not be identifiable, unless you grant specific permission for me to use the videotape of your interactions in an academic presentation. If I show a clip of your family, you will not be identified by name.

In my experience, families find participating in this type of study to be fun and informative. It is an opportunity for moms and dads to learn more about their children, ask questions and

obtain feedback. Since participation is completely voluntary, you and your family may withdraw from the study at any time.

The plan for this study has been reviewed for its adherence to ethical guidelines and approved by the Faculties of Education, Extension and Augustana Research Ethics Board (EEA REB) at the University of Alberta. For questions regarding participant rights and ethical conduct of research, contact the Chair of the EEA REB at (780) 492-3751.

Upon your family's completion of participation (both home visits and all questionnaire data has been collected), you will receive a gift certificate of $25 (e.g., Hbc™ gift card) as token of appreciation for your time and involvement in the study.

Once the study is completed you will receive a summary of the general findings. I am available for one-on-one feedback sessions if you wish to have more detailed information.

Participating in this family study may:

1. Encourage parents to engage in self-awareness and self-evaluation of their parenting practices and behaviors and the influence these practices may have on their children;
2. Provide an opportunity for parents to access resources from the outside research community related to parenting and children's social-emotional development; and
3. Increase parents' knowledge about their own and their child's strengths in the area of social-emotional competence, as well identify areas that may require attention

Having your family's participation in this project will help me gain a better understanding of the importance of parent-child relations in the toddler years. If you have any questions or concerns please do not hesitate to contact me at 492-5624 or through email at crinaldi@ualberta.ca . Please complete the attached consent form and return it to your child's day care or preschool (will vary depending on method of recruitment).

I thank you for your time and consideration.

Sincerely,

Christina Rinaldi, PhD, CPsych

PARENT CONSENT FORM

I, _____, hereby
(print name of Mother/Father – please circle one)

- ☐ Consent
- ☐ Do not consent

To have **Christina Rinaldi** or a member of her trained research team visit me and my family at my home and engage in the following study activities:

In Year One:

- Videotape me and my child during play activities and tasks set up by the researchers in my home for approximately 45 minutes
- Provide me with some questionnaires to complete relating to: parenting and childrearing practices, child development, my child's temperament, social skills and behaviors

In Year Two:

- Have my child's primary child care educator complete two brief behavior checklists on my child's social behavior in the childcare setting
- Provide me with two child social functioning questionnaires to complete
- Have my child complete a social problem-solving task with a researcher in my home (this will be videotaped for accuracy)

I understand that:

- My family may withdraw from the research at any time without penalty
- All information gathered will be treated confidentially and used for the sole purpose of research
- Any information that identifies my family will be destroyed upon completion of this research (please note: data will be kept for a minimum of 5 years following the completion of research)
- My family will **not** be identifiable in any documents resulting from this research

I also understand that the results of this research will be used only in the following cases:

- Presentations and written articles for other developmental researchers, educators, parents, and schools
- General feedback sessions with individual families

_____
signature of parent

Date signed: _____

Please provide us with a contact number so I may contact you about your participation in the project:
Telephone: _____

Email: _____

For further information concerning the completion of the form, please contact Christina Rinaldi, PhD, University of Alberta, Department of Educational Psychology, Edmonton, AB, T6G 2G5, (780) 492-74

Appendix B

Demographic Information Questionnaire

Often when research is submitted to scholarly journals for publication those journals require that researchers specify and describe the group characteristics of those we have studied. For example, we might find that 15% of the group was French Canadian or that only 20% of the people we studied were single. The information obtained from this form will help us to be able to better classify the group we are studying. Furthermore, all information obtained on an individual level is strictly confidential.

Child's Name:_____

Child's Age:_____(months) Child's Birth date:____/____/____
yy/mm/dd

Child's Gender: M F

Child's Ethnicity:
a. Asian
b. Black
c. East Indian
d. First Nations
e. Hispanic
f. Mixed Ethnicity
g. White
h. Other

Relationship status of parent: (parent filling out this sheet)
a. Single
b. Married
c. Common-law
d. Divorced
e. Separated
f. Widowed

Highest level of education of parent:

a. Graduate/Professional education
b. College/University degree
c. Partial college/University
d. Certificate in a trade/Technology
e. High school diploma/GED
f. Partial high school training
g. Junior high school graduate
h. 8 years of schooling or less

Approximate combined annual income of your household (circle one):

a. less than $35,000
b. $ 35,000 - $69,000
c. $70,000 +