

The Role of Parent Personality and Attribution Style in Preschool Children's Play Behaviour

by

Rachel Lathrop

Submitted in partial fulfillment of the requirements
for the degree of Masters of Arts in School Psychology

at

Mount Saint Vincent University

Halifax, Nova-Scotia
April 2014

© Copyright by Rachel Lathrop, 2014

Abstract

Parent personality and attribution style are two important variables which have been shown to independently contribute to child outcomes. To my knowledge, researchers have yet to examine the interaction of these two variables to predict child play behaviours. The current study examined the role of parent personality dimensions and attribution style in preschool children's play behaviours. Participants included 37 parents and 23 childcare providers of children aged 2 to 4 years old registered in part-time or full-time daycare in the Ottawa region. The results yielded several significant findings. In terms of parent personality, parents' higher rates of Openness to Experience were related to children's increased social play as well as children's increased rough-and-tumble play. Parents' higher levels of Openness to Experience were also related to children's decreased solitary-active play. In terms of parent attributions, for children who engaged in more solitary-passive play, parents depicted their child's misbehaviours as less typical and more situational. For children who engaged in predominantly solitary-active play, parents were more likely to make less purposeful attributions. Three significant interactions were also revealed. For parents with higher levels of Openness to Experience, their children's increases in rough-and-tumble play were related to more stable attributions. For parents with lower levels of Openness to Experience, their children's increases in rough-and-tumble play were related to less purposeful attributions. Lastly, for parents lower in Conscientiousness, their children's increases in solitary-passive play were related to less typical attributions. Limitations of the study were explored. Implications of these findings and others are discussed in terms of possible 'red flag' combinations of variables and importance of early-targeted interventions for children and families.

Acknowledgments

I would like to first express the deepest appreciation to my supervisor, Dr. Daniel Séguin, whose support, guidance, patience and encouragement have played an integral role in the completion of this thesis. I would also like to thank my committee member, Dr. Mike Foley, for his valuable insight and feedback throughout this process. To my fellow classmates and dear friends who have supported, motivated and encouraged me throughout my time in the program and continue to do so to this day, I cannot thank them enough. I would like to thank my family and friends, who have always been there for me and act as a constant reminder of what life is all about. I would also like to thank my reliable partner and friend, Rehber Omar, for believing in me, keeping me motivated with countless trips to Tim Hortons and always providing me with a good laugh when I needed it most. Finally, my most heartfelt and deepest gratitude goes to two wonderful people, without whom I have no doubt, this would not have been possible. I would like to dedicate this thesis to these two amazingly supportive, caring and thoughtful people, who have always believed in me, my parents.

Table of Contents

Abstract	2
Acknowledgements.....	3
Literature Review.....	6
Parenting.....	7
Attribution Theory.....	10
Parent Personality.....	14
Child Play Behaviours.....	18
Hypotheses.....	21
Methodology.....	24
Participants.....	24
Measures.....	24
Demographic questionnaire.....	24
Child behaviour vignettes and attribution scale.....	25
HEXACO Personality Inventory-Revised 60-item (HEXACO-60).....	26
Preschool Play Behaviour Scale (PPBS).....	27
Procedure.....	28
Results.....	29
Demographic Statistics.....	29
Preliminary Correlational Analyses.....	30
Regression Analyses.....	31
Overview.....	31
Rough-and-tumble play.....	32
Solitary-passive play.....	33

Discussion.....	33
Parent Sex Differences.....	33
Parent personality and child play behaviours.....	34
Parent attributions and child play behaviours.....	36
Parent personality, attributions and child play behaviours.....	38
Limitations and future directions.....	40
Implications for clinical intervention.....	42
References.....	46

The Role of Parent Personality and Attribution Style in Preschool Children's Play Behaviour

Literature Review

Children spend much of their time engaged in play. Indeed, play has often been referred to as the universal language of childhood. Over the years, there has been an increase in the recognition of play as being essential to optimal child development contributing to the cognitive, physical, social and emotional well-being of children. The extent to which children engage in play with others is of added developmental significance. In light of the importance of social play, it is imperative to have an understanding of the factors that either promote social play or conversely, are potential risk factors for the negative consequences associated with non-social play.

In observing a group of young children at play, one would most likely be able to quickly identify the children who appear to be more social in their play versus those who tend to engage more often in solitary or perhaps even reticent play. This preferred play behaviour in children is determined by multiple factors stemming from both biological and environmental sources. Of these factors, parent personality has been shown to have a significant link to child behaviour and later outcome (Belsky & Barends, 2002). Although researchers have examined the link between parenting styles and child play behaviour, it is largely limited and fails to examine the role of parent personality (see Lagacé-Séguin & d'Entremont, 2006). Another factor, namely parent attributions for child behaviour, has also been shown to contribute to child outcome. Much of the research on attribution theory has focused primarily on the implications of parent and teacher attributions of academic achievement and problem behaviour in children (e.g. Brady & Woolfson, 2008; Mavropoulou & Padeliaou, 2002; Corcoran & Ivery, 2004). However, there has been very little emphasis on social outcomes related to parent attribution style particularly in

terms of early child play behaviour. The aim of the current study was to examine the interplay between parent personality and attribution style to predict play behaviour in preschool children. To my knowledge, researchers have yet to examine the link between these three variables. In identifying parent personality types and attribution styles that place children at risk for poor social development, the current study is likely to have important practical implications for intervention with children and families.

Parenting

Of the myriad of contributors that influence children's behaviour, parents are certainly of high importance. Although genetics and biology have been shown to significantly impact a child's temperament and in turn behaviour, the relationship to parenting is undeniable. One author described four essential functions of caregiving; namely, meeting the physical requirements of the child, material care and organization of the physical world, social care which includes behaviours parents use in interpersonal exchanges and didactic care which includes strategies parents use in stimulating children to engage in and understand the world outside the parent-child dyad (Bornstein, 1995). Ultimately, parents' central tasks are not simply relegated to keeping their infants alive or providing appropriate discipline as necessary but extend to providing the conditions in which children can develop to their fullest both inside and outside the family context.

Parenting involves a complex set of behaviours that is influenced by parental personality, values and marital quality and by a range of child characteristics (Kendler, Sham & MacLean, 1997). Belsky (1984) proposed a process model of parenting which presumes that parental functioning is determined by many factors including sources of contextual stress and support that influence parent psychological well-being and that personality influences this contextual

support/stress. In turn, both psychological well-being and personality feed back to shape parenting. A noteworthy conclusion drawn by Belsky (1984) is that parent psychological resources are more effective in protecting the parent-child relation from stress than contextual sources of support or child characteristics. Essentially, there are many factors that influence parenting behaviours, some more significantly than others. In terms of parenting style, two dimensions have repeatedly been suggested as core features (Maccoby & Martin, 1983).

The first dimension is *parental warmth* (sometimes labeled *acceptance/responsiveness*) referring to the amount of support, affection and encouragement a parent provides to a child (Maccoby & Martin, 1983). Parental warmth has been described as the single most important dimension of caregiving as it is present in almost all conceptualizations of parenting (Skinner, Johnson & Snyder, 2005). Conversely, parental rejection includes aversion, hostility, harshness and irritability. This approach also involves overt communication of negative feelings for the child such as criticism and disapproval (Skinner, Johnson & Snyder, 2005).

The second dimension is *parental control* (sometimes labeled *demandingness*) referring to the degree to which the child is monitored, disciplined, regulated and provided with appropriate limit setting (Maccoby & Martin, 1983). In general, control appears to be beneficial although the results tend to be complex and more variable than those for warmth (Vasta, Miller, Ellis, Younger & Gosselin, 2006). The opposite end of this dimension would be chaos, referring to parenting behaviours that are inconsistent, erratic, unpredictable, and undependable.

One of the most influential researchers on parenting styles, Diana Baumrind's (1967, 1971), identified three patterns of parenting based on combinations of these dimensions. The first one is *authoritarian parenting*, characterized by high control and low warmth. This style

involves a restrictive pattern of parenting in which the adult imposes many rules, expects strict obedience and will rely on power and use punitive and forceful tactics to elicit compliance. Such hostile and coercive parenting behaviors are viewed as inhibitors of prosocial development and risk factors for behavioral problems. Consistent with this perspective, parenting behaviors such as coercion and harshness have been associated with children's oppositional and aggressive behaviors, self-regulatory deficits, and psychopathology (Schofield, Conger, Donnellan, Jochem, Widaman & Conger, 2012). In fact, a meta-analysis by Hoeve, Dubas, Eichelsheim, Smeenk and Gerris (2009) revealed that negative aspects of support including rejection, hostility and neglect and psychological control had the strongest links to delinquency.

The second identified parenting style is labeled *authoritative parenting*, which is characterized by a high standing on both warmth and control. This style involves a flexible, democratic approach to parenting where warm and accepting parents provide guidance and control while seeking the child's participation in decision-making (Baumrind, 1967; 1971). These parents engage in nurturing and supportive behaviours, reasonable disciplinary actions and are overall responsive to their children's needs. Of the three different parenting styles, authoritative parenting style has been most consistently associated with positive outcomes in children (Baumrind, 1971; Steinberg, 2001). Researchers have also shown that parental warmth and responsiveness predict a host of indicators of positive development including adolescent school performance and stronger school engagement, adaptive coping strategies, secure attachment and more effective social skills (Baumrind, Larzelere & Owens, 2010; Davidov & Grusec, 2006). In addition, children of these parents demonstrate fewer aggressive behaviours and lower levels of social withdrawal and psychological distress (Pettit, Bates & Dodge, 1997).

High levels of warmth but low levels of control characterize the last identified parenting style, *permissive parenting*. This style involves an accepting but lax approach in which few demands are placed on the child and attempts to control the child's behaviour are rare (Baumrind, 1967). Children of permissive parents have been associated with having higher rates of impulsivity, rebellious behaviour and lower achievement (Baumrind, 1971). Similar to authoritarian styles, permissive parenting styles are associated with less positive child outcomes including internalizing and externalizing problems as well as attention difficulties (e.g. Aunola & Nurmi, 2005; Lagacé-Séguin & d'Entremont, 2006). Furthermore, parental monitoring, a behaviour relatively nonexistent in permissive parents, has been shown to be negatively linked to delinquency (Hoeve et al., 2009).

Researchers have also suggested the addition of a fourth parenting style, that of neglectful or *uninvolved parenting* (Maccoby & Martin, 1983). This parenting style is characterized by low parental warmth and low parental control. Children with these types of parents tend to lack self-control, have lower self-esteem and tend to have poorer social skills in comparison to their peers. Overall, there is substantial research on how parenting styles have an influence on child behaviour and outcomes in many areas. Fewer studies, however, have examined another important related factor, that of parent attributions of child behaviour.

Attribution theory

In addition to the reported links between parenting behaviour and child outcome, parental attributions of child behaviour is another factor of interest when it comes to the parent-child relationship. Attribution theory posits that the ways in which we explain events help us to manage and control these events (Corcoran & Ivery, 2004). Bernard Weiner's contribution to

attribution theory is one based on achievement and claims that a person's achievement depends very critically on how they interpret prior successes and failures and on whether they think these outcomes can be controlled (Shaffer, 2009). According to Weiner (1985), attributions are classified along three causal dimensions; namely, locus of causality, stability and controllability. The first dimension of causality involves the extent to which people attribute causes of events to be either internal (within the individual) or external (outside the individual) factors. For example, an external locus of causality would attribute behaviour to factors in the environment whereas an internal locus of causality would attribute behaviour as innate to the individual. The dimension of stability involves how enduring the cause appears to be and whether the causes change over time or not. For example, an internal and stable cause of achievement could be ability while an internal yet unstable cause could be exerted effort. Lastly, the third dimension of controllability refers to the degree of control an individual has over the cause of the behaviour. Examples could include a person's skills (controllable) versus luck or other people's actions (uncontrollable) (Weiner, 1985).

Attribution theory has important implications for parenting behaviour as well. The causal attributions or explanations parents make for their children's behaviour affect the way in which they behave towards them (White & Barrowclough, 1998). The internal attributions parents make for their children reflect the perception that their children's behaviours are intentional, dispositional, stable and typical. On the other hand, external attributions involve perceiving children's behaviour as provoked, transitory, accidental and atypical. Researchers have found that mothers of children who do not display behaviour problems tend to employ a positive attributional bias for their children (Freeman, Johnston & Barth, 1997). They view prosocial behaviour as internal and stable characteristics of the child and see deviant behaviour as

situational and temporary. Parents of children who have significant behaviour issues tend to show an opposite pattern. They tend to attribute their child's problem behaviour to stable and internal characteristics of the child, thus downplaying the effect of their parenting practices (Corcoran & Ivery, 2004). Consequently, when parents attribute their children as responsible for their misbehaviour, they are more likely to blame their children, become angry and use power-assertive discipline. Joiner & Wagner (1996) distinguished between these two types of attributions by labeling them as either self-focused or child-centered parental attributions. Self-focused attributions are those that occur when parents relate their children's misbehavior to something about themselves. For example, if a parent responds to their child hitting his or her sibling by thinking, "my child's behavior is such a problem, and I need to be a better parent," this would be a self-focused attribution. On the other hand, if a parent responded to the same situation by thinking, "my child is so bad", this would be a child-centered parent attribution since the parent is relating their child's misbehaviour to something about their child (Carpentier, Mullins, Wolfe-Christensen & Chaney, 2008). It appears as though when parents view their children as responsible for their misbehavior (child-centered attributions), they are more likely to respond negatively than if they view themselves as responsible for it (Carpentier, Mullins, Wolfe-Christensen & Chaney, 2008).

Differences in parent attributions for their children's behaviours has also been linked to varying parenting styles (Coplan, Hastings, Lagacé-Séguin & Moulton, 2002). For example, authoritarian mothers have been found to make internal attributions for their children's disobedience and aggression. This being said, there has been limited research about the kinds of attributions authoritarian and authoritative parents make for their children's positive or shy behaviours (Coplan, Hastings, Lagacé-Séguin & Moulton, 2002).

Overall, the types of attributions parents make about the causes of their children's behaviour are linked to important child outcomes such as parent-child relationship satisfaction and child health (Carpentier, Mullins, Wolfe-Christensen & Chaney, 2008). As noted in an article by Snarr, Slep & Grande (2009), many studies that have linked parental attributions to child outcome have been entirely correlational; however, these authors highlight that several longitudinal studies and at least one experiment have been conducted with the results suggesting that there are causal connections between parent attributional style, inept parenting and problem behaviour in children.

More recently, researchers have also yielded important findings on teacher and parent perceptions of childhood symptoms of Attention-Deficit/Hyperactivity Disorder (ADHD). For example, Coles, Pelham and Gnagy (2010) found that if parents make internal and stable attributions about their child's ADHD, they may be less likely to seek out behavioral treatment as an effective approach. Conversely, when parents use behavioral techniques, they are more likely to attribute their success to the tools that they are using with their children (Coles, Pelham and Gnagy, 2010). Parents who have used behaviour modification successfully tend to attribute the success of the intervention to themselves (internal attribution) and gain a sense of parenting control. Therefore, encouraging parents to use behaviour modification in children with ADHD not only is effective in managing the child's behaviour, but also increases parents' sense of self-efficacy, which can decrease stress and improve the parent-child relationship (Coles, Pelham & Gnagy, 2010). Ultimately, parental attribution styles influence parents' response towards their child's behaviour. Another important and rather stable factor that influences the ways parents raise their children and is in turn linked to child outcome is parent personality.

Parent personality

Surprisingly, the parent personality and parenting attribution link has been examined in relatively few studies given the extent to which both dimensions interact with one another. In fact, parental personality has been thought of as one of the most important determinants of parenting behaviour (Browne, Meunier, O'Connor & Jenkins, 2012). Prinzie, Stams, Deković, Reijntjes & Belsky (2009) further this point by adding that "...[p]arent personality affects the way in which the parent generally feels (e.g. parents proneness to positive or negative mood), thinks (e.g. parents' attributions for child behavior), and acts (e.g. the degree of parents' expressivity)" (p. 352). Therefore, dimensions of personality have an impact on parenting behaviour. Even though the research is limited, researchers have shown that in terms of child-rearing environment, parents higher on dimensions of Extraversion, Agreeableness and Emotional stability seem to provide the most positive and least negative environments (Browne, Meunier, O'Connor & Jenkins, 2012).

Personality is typically described as a group of psychological characteristics that lead an individual to behave in meaningfully consistent ways (Costa & McCrae, 1985). The multitude of personality descriptors has been captured by a smaller set of broad domains known as the Big Five dimensions. The Big Five include the dimensions of Neuroticism, Extraversion, Agreeableness, Openness to Experience and Conscientiousness and together, they make up the Five Factor Model of Personality, the most widely accepted framework for studying personality (McCrae & Costa, 2008). The Big Five has been widely supported in the literature having been replicated in diverse samples, across cultures and across multiple informants (John & Srivastava, 1999). In addition, the Big Five traits are quite stable with some tendencies such as Emotional

Instability, Extraversion and Openness decreasing after college and others such as Agreeableness and Conscientiousness showing the opposite trend (McCrae & al., 1999). There has been some disagreement on the exact labels for each dimension and yet, their descriptions remain fairly consistent (Digman, 1990).

First, Neuroticism refers to emotional stability with individuals high in this trait experiencing greater amounts of anxiety, irritability, sadness and guilt. As discussed in a meta-analysis of relations between parent personality and parenting by Prinzie et al. (2009), a disposition for this negative emotionality may affect a parent's willingness to respond adequately to their child's signals as well as their ability to initiate and maintain positive affective interactions. These authors add that attributions for behaviour, a dimension previously touched upon, may also be affected with parents high in Neuroticism being more likely to attribute negative intentions to their children when they misbehave. As a result, these parents may be more likely to use harsh parenting or conversely, distance themselves from their relationship with the child which overall, may result in unpredictable and inconsistent parenting (Prinzie et al., 2009). Indeed, researchers have supported this notion in that parents with higher levels of Neuroticism are related to less active and involved parenting as well as more negative, intrusive and overcontrolling parenting (Smith & al., 2007).

The second dimension, Extraversion, tends to include characteristics such as sociability, gregariousness, assertiveness and high amounts of emotional expressiveness (Prinzie et al., 2009). Therefore, a parent high in Extraversion may display more positive affect and use more assertive discipline during their interaction with their child. Indeed, some studies have provided evidence that Extraversion is positively associated with responsive, engaged and stimulating

parenting (e.g., Belsky, Crnic & Woodworth, 1995); however, these findings have not been consistently found (Kochanska et al., 2004).

The dimension of Agreeableness refers to attributes such as trust, altruism, kindness, cooperation and other prosocial behaviors. Parents high in this trait likely tend to have more positive attributions regarding the child's behaviour. Furthermore, with Agreeableness being linked to empathy, it seems reasonable that parents high in this trait would be better able to identify and respond to their child's needs and be more responsive, nurturing and respectful of their child's autonomy (Prinze & al., 2009). Once again, researchers have supported this assumption in the sense that parents who score high in this trait and low in Neuroticism are more supportive of their child's autonomy than other parents with the opposite traits (low Agreeableness and high Neuroticism) being more likely to attribute negative intentions to their young children when they misbehave.

Individuals high in Openness to Experience typically have a broad range of interests, have a need for variety and change and have good imagination and insight. These parents are probably more likely to be actively involved with the child providing a variety of new experiences and a level of high stimulation (Prinzie & al., 2009). In addition, higher levels of Openness in combination with higher levels of Agreeableness and low levels of Neuroticism have been significantly related to autonomy support (Prinzie & al., 2009). This being said, some researchers have posited that Openness is a multidimensional construct that may be related to certain aspects of maladjustment. For example, Wolfenstein and Trull (1997) found that currently and formerly depressed individuals were higher on dimensions of Openness compared to nondepressed controls. They also noted that overall, Openness alone was a better predictor of

individuals' depression ratings over indices of Neuroticism. Other researchers have supported this link between Openness and depression given that depressed mothers tend to provide more differential treatment (Browne, Meunier, O'Connor & Jenkins, 2012).

Lastly, common features of Conscientiousness include of goal-directed behaviour, good impulse control and high aspiration levels (McCrae & Costa, 2008). Parents high in this dimension are thought to place the same high standards on their parenting behaviour providing a more structured and consistent environment for their child (Prinzle & al., 2009). Overall, the last two dimensions have been shown to be significant in that parents who manifest higher levels of these traits along with higher levels of Extraversion, Agreeableness and lower levels of Neuroticism engage in more warm and structured parenting. It should be noted that the associations between each of the Big Five dimension and parenting are fairly modest. Along with other contributors, variations in parenting may be due, at least in part, to differences in personality.

Parent personality has been linked to child outcomes in both direct and indirect ways. Direct links have been shown through modeling behaviours as well as through genetic factors (Oliver, Guerin & Coffman, 2009). Studies on the genetic influence on personality have yielded evidence for a hereditary effect on Extraversion, Conscientiousness, and Neuroticism (Henderson, 1982). A complex interplay arises between parent and child interactions in that they are linked to child behaviour both directly through personality genetics being passed and indirectly through personality genetics influencing parenting (Prinzle & al., 2005). Links between personality and parenting, especially with regard to child outcome, may be of particular significance. To date, much of the research on parent personality factors and child outcomes has

focused on the dimension of Neuroticism which has been linked to externalizing problems in children from toddler through to elementary school aged children (Oliver, Guerin & Coffman, 2009). Few studies have examined the other four dimensions of personality although some have shown that children whose parents report higher levels of Extraversion and Conscientiousness have lower levels of behaviour problems (Oliver, Guerin & Coffman, 2009). Of overall significance is that parenting practices and parents personality characteristics appear to operate together to predict children's externalizing problem behaviour (Prinz et al., 2004). One other area, which has yet to be thoroughly explored, is the link between parent personality and child play behaviours. Given the importance of play in the development of social competence, this link is certainly one worth investigating.

Child Play Behaviours

Developmental theorists have identified children's play as the primary context for which young children acquire and express key social competencies such as problem solving, communication and empathy (Mendez & Fogle, 2002). Theorists have posited that play experiences are essential in stimulating developmental progress and adaptation. Whereas infants and toddlers use their ability to symbolize in solitary play, preschoolers use their expanded cognitive and social abilities to play with their peers (Coplan & Rubin, 1998). Social play can include playing 'make-believe', engaging in pretend play and talking to other children during play (Coplan & Rubin, 1998). The perspective taking that is required during play as well as cooperation and socialization are all likely to be related to the development of social competency (Mendez & Fogle, 2002). While some researchers argue that pretend play is particularly associated with socially competent behaviour, others argue that all complex social peer play is

important for the development of social skills. Ultimately, the development of effective and competent social skills in young children has been shown to contribute to long-lasting positive developmental consequences. Children's use of positive social skills as well as the ability to have successful interactions with peers in social situations has been linked to a reduced risk for behavioural and emotional problems in later phases of development (Newton & Jenvey, 2011).

In addition to social play, 'rough-and-tumble' is another form of play that consists of contact forms of play such as play fighting, non-contact forms such as chasing and other rough-and-tumble play activities (Lagacé-Séguin & d'Entremont, 2006). This type of play has been linked to externalizing problems and has been found to be more common in boys (Coplan & Rubin, 1998).

Non-social play is another form of play behaviour in which the child engages in solitary play. Children who engage in non-social play have traditionally been viewed as socially withdrawn and are at a greater risk for peer rejection, aggression and social adjustment difficulties later on in life (Newton & Jenvey, 2010). These children have also been found to be at a higher risk for maladjustment issues later in childhood and are more likely to have negative self-perception, dependency and internalizing difficulties (Rubin, Coplan, Fox & Calkins, 1995). Recently however, researchers have investigated the possibility of solitary play being a heterogeneous construct and that certain categories of nonsocial play are not associated with maladaptation. Three subcategories of non-social play behaviour have been identified in preschool children; namely, solitary-passive behaviour, reticent behaviour and solitary-active behaviour, each with its own psychological underpinnings and associated outcomes in relation to social competence (Coplan & Rubin, 1998).

First, solitary-passive play involves docile exploration of objects and/or constructive activity while playing alone. Some researchers argue that teachers and parents often reinforce this type of play behaviour and that its display is linked to peer acceptance and competent problem solving (Rubin, 1982). It has been proposed that these children tend to be disinterested in social interaction having both low approach and low avoidance tendencies in social interactions during play and is not associated with any indices of maladaptation in early childhood (Coplan, Rubin, Fox, Calkins & Stewart, 1994). That being said, it has been proposed that the psychological meaning attached to this construct changes with increasing child age. For example, some researchers have posited that this solitary constructive and exploratory play is typically reinforced by preschool teachers and parents and is linked to peer acceptance and competent problem-solving (Rubin, 1982). However, demonstration of a higher frequency of solitary passivity in mid-childhood is more deviant from social behavioural norms and associated with markers of social anxiety and peer rejection, similar to the outcomes associated with reticent play behaviours (Rubin & Mills, 1988). For the purpose of the current study, solitary-passive play will be deemed adaptive in order to be consistent with the research on *preschool* children's play behaviours.

A second form of non-social play is reticent play. Such behaviours involve onlooking of other children playing while making no attempts to join in. Reticent behaviours can also look like aimless wandering and staring into space (Coplan & Rubin, 1998). Although a small amount of reticent behaviours has been shown to be present in preschool children's free play, researchers have shown that this type of play could be a precursor for social fear, anxiety and internalizing problems and have also been linked to extreme shyness and negative affect (Coplan & Rubin, 1998).

Solitary-active play is a third form of unsocial play characterized by “repeated sensorimotor actions with or without objects and/or by solitary dramatizing (in the presence of a social group)” (Coplan & Rubin, 1998, p. 73). This group of behaviours has been associated with maternal ratings of impulsivity in preschool children and has been shown to correlate with peer rejection, externalizing problems such as aggression and immaturity in early childhood (Rubin & Mills, 1988). Overall, three forms of play, rough-and-tumble play, solitary-active and reticent play can be viewed as maladaptive forms of preschool play as they have been associated with indications of maladjustment in children.

Hypotheses

This study had several main objectives. The first objective was to examine how parent personality dimensions relate to preschool play behaviours. The second objective was to investigate the relationship between parent attributions and play behaviour in their preschool aged children. The final objective was to examine the interaction between attribution style and parent personality in preschool children’s play behaviour.

To date, much of the research on parent personality factors and child outcomes has focused on the dimension of Neuroticism which has been linked to externalizing problems in children from toddler through to elementary school aged children (Oliver, Guerin & Coffman, 2009). Given these findings, it was anticipated that parents high in this dimension would also be more likely to have children who engage in maladaptive and/or non-social play behaviours. Conversely, parental warmth and responsiveness has been shown to positively predict a host of indicators of positive development including adaptive social skills (Baumrind, Larzelere & Owens, 2010; Davidov & Grusec, 2006). Parents who manifest higher levels of Extraversion, Agreeableness and/or Conscientiousness and lower levels of Neuroticism tend to be more likely

to engage in this warm and structured parenting and have children who display lower levels of behaviour problems (Oliver, Guerin & Coffman, 2009). Therefore, it would be reasonable to predict that these parents would be more likely to have children who display social and/or adaptive play behaviours and that parents with higher levels of Neuroticism and lower levels of Agreeableness, Extraversion and/ Conscientiousness will be more likely to have children who tend to display primarily non-social and/or maladaptive social play behaviours. In addition, higher levels of Openness in combination with higher levels of Agreeableness and low levels of Neuroticism have been significantly related to autonomy support (Prinzle & al., 2009).

Therefore, it is expected that parents with higher levels of both dimensions would have children who engage in more social and/or adaptive play behaviours and children of parents with lower levels in these dimensions being more likely to display more maladaptive play behaviours.

Due to the lack of research on the link between parent attributions and social play behaviours, some of the predictions made in the current study were based on that of past researchers who have examined the relationship between parent attributions and child problem behaviour. Specifically, researchers have shown that mothers of children who do not tend to display problem behaviours tend to view prosocial behaviour as internal and stable characteristics of the child and see deviant behaviour as situational and temporary (see Freeman, Johnston & Barth, 1997). However, parents of children who have significant behaviour issues have been found to display an opposite pattern (i.e. view their child's misbehaviours as stable and internal to the child) thus downplaying the effect of their parenting practices (Corcoran & Ivery, 2004). Consistent with these findings, it was hypothesized that children who engage in more social and/or adaptive play would be significantly related to parents' more external and unstable attributions for less favourable behaviours and/or internal and stable attributions for

prosocial behaviours. Conversely, it was anticipated that children engaging in more maladaptive forms of play would be significantly related to parents' more internal and stable attributions for these children's predominantly 'problem' behaviours.

In terms of interactions between parent personality and attribution style, it was hypothesized that for parents with higher levels of Extraversion, Agreeableness and/or Conscientiousness or higher levels of Openness and Agreeableness and both combinations having lower levels of Neuroticism, their child's increased social and/or adaptive play behaviours would be related to their more internal or stable attributions for prosocial behaviour and/or external or unstable attributions for less favorable behaviour. Conversely, it was expected that for parents with higher levels of Neuroticism and lower levels Extraversion, Agreeableness and/or Conscientiousness or lower levels of Openness and Agreeableness, their child's non-social and/or maladaptive play would be related to internal and stable attributions of 'problem' behaviour and/or external or unstable attributions of prosocial behaviour.

The results of this study have important practical implications for intervention. Significant findings would allow for a better understanding of the parent personality types that tend to be associated with adaptive and/or social play behaviour in children while also identifying those that could be a potential risk factor for poor social outcome in children. In addition, the current study examines the kinds of parent attributions that may act as buffers for more positive social play and development and those that may contribute to poor social outcome, particularly in combination with certain personality types. In determining which combinations of parent personality types and attribution style are most often linked to problematic social play behaviour, intervention initiatives can be prioritized for these children their families.

Methodology

Participants

This current study included information from 38 children ranging in ages from 2 to 4 years old enrolled in a licensed preschool or daycare on a part-time or full-time basis from the city of Ottawa. Participants included one parent of each child as well as their a corresponding childcare provider who has worked with the child for a minimum of one month in order to ensure consistent and reliable observations of the child's typical play behaviour. Total number of participants included 37 parents and 23 childcare providers. Substitute childcare providers were excluded from participating as they are not consistently with the same children and have likely not had the opportunity to make reliable observations of the child in care.

Measures

Demographic questionnaire. Parents first completed a brief demographic questionnaire where they were asked questions about themselves such as their sex, age and level of education as well as whether they were the biological, adoptive or step parent to the child. Parents were also asked to identify the name of one of their child's teachers who knows their child well as well as the name of their child in order to ensure proper matching of parents' questionnaires to that of their respective daycare provider (see Appendix A). This questionnaire also included questions on the sex and age of their child as well as the number of siblings the child has. This information allowed us to determine any potential sex differences in child social interactions as well as sex differences in parent attribution of child social behaviour. Teachers were not provided with a separate demographic questionnaire but were asked to respond to a few questions prior to completing the Preschool Play Behaviour Scale. They were asked to indicate the child's name, which again allowed for more effective matching to the parent's questionnaire,

as well as their age, sex, the numbers of years they have taught and the length of time, in months, that they have worked with that particular child (refer to Appendix D).

Child behaviour vignettes and attribution scale. To assess parent attributions of child behaviour, five brief vignettes describing children engaging in various behaviours were employed. These vignettes were taken from a study by Hastings and Grusec (1998) that examined causes and consequences of parent goals on parent-child disagreements with attributions of intentionality and dispositional causation of child behaviour as possible mediators of the link between power assertion and type of parent goal (parent-centered or child-centered). For the purposes of this study, solely the portion on attributions was examined eliminating questions on parent goals and emotional response linked to child behaviour. Each of the five vignettes describes a fairly common situation for a preschool aged child. The instructions page for parents asked that they imagine that this is their child being described. Each vignette is followed by four questions. For example, one vignette describes a scenario in which parents were asked to imagine that their child is playing “tag” outside with a few other children when one child injures themselves, begins to cry and their child goes over to help him/her and sits beside the other child until he/she stops crying. The parent was then asked to assess the likely causes of the child’s behaviour by making two attribution ratings on 5-point likert-type scales. Each parent was first asked to evaluate the extent to which the child’s behaviour was determined by personality (1, completely; 2, mostly), situation (4, mostly; 5, completely) or equally due to both (3). Second, the parent was asked to determine if the child’s behaviour was on purpose (1, definitely; 2, probably), or unintentional (4, probably did not mean to do this; 5, definitely did not mean to do this) or it could be either way (3). Third, the parent rated whether they believed the child is going through a stage (1, definitely; 2, probably), if the child will act this way in the

future (4, probably; 5, definitely) or it could be either way (3). Finally, the fourth question asked if this scenario is typical of their child (1, this sounds just like how my child behaves; 2, sometimes) or not (4, this does not sound like my child; 5, my child never acts this way) or alternatively, my child could act this way (3). The purpose of these questions was to determine the extent to which parents view their child's behaviours as dispositional or situational, stable or unstable and controllable or uncontrollable. The vignettes were found to be psychometrically valid and reliable. See Appendix B for a copy of the scale.

HEXACO Personality Inventory-Revised 60-item (HEXACO-60). To evaluate parent personality, parents were asked to complete the shorter version of the HEXACO Personality Inventory-Revised self-report form. This 60-item version of the instrument is recommended for use in any research context in which the researcher is interested in measuring major dimensions of personality but in which administration is time limited (Ashton & Lee, 2009). The six scales in this measure; namely, Honesty-humility, Emotionality (Neuroticism), Extraversion, Agreeableness, Conscientiousness and Openness to Experience each contain 10 items that cover a wide range of content with at least two items representing each of the four narrow traits of each scale in the longer HEXACO-PI-R. For example, one question that examines the Emotionality domain would be "When I suffer from a painful experience, I need someone to make me feel comfortable". Another example of a question, this time tapping into the Openness to Experience domain includes "I would enjoy creating a work of art, such as a novel, a song, or a painting". Parents were asked to respond using a 5-point Likert type scale, strongly agree (5), agree (4), neutral – neither agree nor disagree (3), disagree (2), strongly disagree (1). This scale has been tested on samples of college students and community adults and has shown moderately high internal-consistency reliabilities. Specifically, the scale internal consistency reliabilities ranged

from .77 to .80 in the college sample and from .73 to .80 in the community sample (Ashton & Lee, 2009). Scale intercorrelations were all below .30 comparing favorably with measures of the Big Five factors. The levels of self-observer agreement were also found to be reasonably high for all six scales, with values exceeding .45. Total completion time for each scale is estimated to be 12 minutes (Ashton & Lee, 2009). A copy of this scale can be found in Appendix C.

Preschool Play Behaviour Scale (PPBS). The Preschool Play Behaviour Scale (PPBS) was employed in this study to assess children's typical play behaviours. The scale was presented to the daycare / preschool teacher who worked regularly with that particular child. The Preschool Play Behaviour Scale is an 18-item questionnaire designed to assess five forms of free play including social play and rough-and-tumble play and three types of non-social play; namely, reticent, solitary-passive and solitary-active play (Coplan & Rubin, 1998). The paragraph introducing the questionnaire asks that for each item, the teacher make general evaluations of the child's 'everyday' behaviours during *indoor free play* comparing him or her to other children of the same age in the class. For example, teachers were presented with statement about the child such as "plays alone, building things with blocks and/or other toys" or "engages in active conversations with other children during play" to which she indicated the frequency with which the child has engaged in the described behaviours using a five-point Likert-type scale, never (1), hardly ever (2), sometimes (3), often (4) or very often (5). Total completion time of this scale is estimated to be approximately 10 minutes. Construct validity of the PPBS was assessed and yielded moderate to high correlations (between .37 and .65) between teacher-rated and observed child behaviours. Internal consistency of the five factors was also calculated for each of the subscales and found to be significant (social play .96; reticent .85; solitary-passive .79; rough-play .92 and solitary-active .76). In addition, the subscales displayed moderate to high reliability

correlation coefficients ranging from .54 ($p < .05$) to .89 ($p < .001$) for reticent-wary, social play and rough play and from .33 ($p < .05$) to .79 ($p < .01$) for the solitary-passive factor. Solitary-active behaviour was slightly less consistently reliable, ranging from .10 (n.s.) to .83 ($p < .01$) (Coplan & Rubin, 1998). A copy of this scale can be found in Appendix D.

Procedure

Supervisors of various daycare centres and preschools within the city of Ottawa were contacted and provided with an explanation and purpose of the study along with information regarding the involvement of parent and teacher participants. Those who expressed an interest were visited by the researcher and provided with a more detailed description of the study as well as informed consent sheets to distribute to teachers and parents. Parents and teachers who agreed to participate indicated so by signing the end of the form. Once consent was collected, a folder including a demographic questionnaire, attribution scale and personality scale was delivered to the centre for parents to complete. A separate folder including the preschool play behaviour scale with a few demographic questions located at the top of the scale was also delivered for participating teachers to complete (only those who worked with the children whose parents also consented to participate in the study). The order in which parent questionnaires were completed was irrelevant since one did not impact the results of the other. While this procedure was initially deemed appropriate, it was soon determined by the researcher to be flawed and lack efficiency in collecting information. Consequently, two changes were made to the procedure midway through the data collection period with approval from the ethics research committee. Firstly, teachers were provided with a consent form and questionnaire together only once the parent's questionnaire was returned. This change was made in an effort to eliminate teachers unnecessarily completing questionnaires for children whose parents did not return their

questionnaire, thus rendering their information useless. The second change to procedure was in response to parents requesting to complete the questionnaire online rather than having to complete a hard copy and returning it to the centre. As a result, parents were given the option of receiving a hard copy of the questionnaire to be returned to the supervisor or, alternatively, have a link sent to their e-mail address where they could complete it and submit it through LimeSurvey (see Appendices E and F for a copy of the updated parent and teacher consent forms). Altogether, the questionnaires reportedly took parents between 15 and 20 minutes to complete. As for the teachers, completion time varied depending on how many scales they were willing or able to complete since one teacher could have multiple parents returning questionnaire for children in their group. Once collection of participant information was complete, participating centres were provided 3-5 children's books to thank them for their participation.

Results

Demographic Characteristics

This current study consisted of 37 parents (n= 31 female; n= 6 male) and their children (n= 28 female; 10 male) along with 23 daycare providers (n= 23 female; 0= male). In terms of parent participants, parent age ranged from 24 to 44 years old with a mean age of 36.79 years old (SD= 3.88). Parent sample included 36 biological parents and 1 adoptive parent. The marital status of parents were reported as follows: married / common law (n= 33), single (n= 3), domestic partnership (n= 1). In terms of highest education achieved, most parents reported completing college or university (n= 34) and the remaining reported having completed *some* college or university (n= 3).

Age of childcare providers ranged from 24 to 65 with a mean of 40.03 years old (SD = 15.29) although nine missing data values were revealed in response to this question. Total

number of years working as a childcare provider ranged from 3 to 30 years with a mean of 15.84 years ($SD = 8.65$). The number of months working with a particular child ranged from 2 to 42 months with a mean of 9.49 months ($SD = 10.61$).

The children in the current study were enrolled in either part-time ($n = 11$) or full-time ($n = 27$) daycare. Of the children enrolled in part-time daycare, two ($n = 2$) were reported to spend the remainder of their days at school and the remaining nine children ($n = 9$) were reportedly cared for in the home. The ages of the children included in this study ranged from 18 months to 58 months with a mean age of 37.66 months ($SD = 8.89$). The number of siblings for each child ranged from 1 to 3 with a mean of 1 sibling ($SD = 1$).

Preliminary Correlational Analyses

In order to conduct preliminary correlational analyses, missing data values were replaced with the mean of each series and reverse-score items were addressed. No sex differences were found in the child sample for any of the variables. One sex difference was revealed when investigating the differences between mothers and fathers. In terms of parent attribution style, mothers ($M = 2.74$, $SD = .44$) were found to report that their children were less likely to be going through a stage and thus more likely to continue to behave this way in the future than fathers ($M = 2.43$, $SD = .15$) ($t(36) = 4.45$ $p < .05$).

A series of correlations were conducted between all variables. When examining the correlations between the five personality dimensions in parents and child play behaviours, it was found that parents' higher ratings in the Openness to Experience domain was significantly negatively correlated to child solitary active play ($r = -.35$, $p < 0.05$). In addition, two trends ($p < .10$) were revealed again with respect to parents' reported Openness to Experience. Specifically, parents' higher Openness to Experience was significantly positively correlated to

their children's rough-and-tumble play ($r = .60, p < .10$). Parents higher ratings on this dimension were also significantly positively correlated to children's social play ($r = .70, p < .10$). No other significant correlations were found between personality variables and children's play variables.

Results of correlations between parent attribution variables and children's play variables were also explored. A statistical trend revealed a negative correlation between parents' attribution of purposeful behaviour and child solitary active play ($r = -.30, p < 0.10$). In addition, a statistical trend indicating a positive correlation was noted between more situational attributions of behaviour and child solitary-passive play ($r = .30, p < .10$). Lastly, a significant positive correlation was revealed between less typical attributions and child solitary-passive play ($r = .39, p < .05$).

Regression Analyses

Overview. Several multiple regression analyses were used to explore the interactions between parent personality traits and attribution styles in relation to preschool children's play behaviours. To examine the interaction between parent personality dimensions and attribution style, one personality dimension (i.e. Extraversion, Agreeableness, Emotionality, Conscientiousness or Openness to Experience) was entered in the first step of the regression equation, one of the four types of attributions to explain behaviour (i.e. personality vs. situation, purposeful vs. unintentional, stage vs. stable, typical vs. atypical) was entered as the second step and the multiplication term (e.g. extraversion x personality versus situation attribution) was entered in the final step to predict each of the play behaviours (i.e. reticent, solitary-passive, solitary-active, social and rough-and-tumble play). This procedure was utilized to compute the equations for each combination of variables. A total of three significant interactions were found.

Rough-and-tumble play. Two significant interactions were found when predicting rough-and-tumble play. First, results from regression analyses revealed a significant interaction between parents' Openness to Experience and their attribution of stable behaviour to predict children's rough-and-tumble play behaviours [$R^2_{\text{change}} = 0.25$, $F(3, 34) = 3.69$, $p < 0.05$]. Follow-up analyses were examined by computing two regression analyses: one for participants whose total Openness to Experience ratings fell below the median (low Openness to Experience) and one for participants whose total Openness to Experience ratings fell above the median (high Openness to Experience). Similar statistical procedures have been employed by other researchers to examine simple effects and interactions (e.g. see Lagacé-Séguin & d'Entremont, 2006). Follow-up analyses revealed that for parents higher in Openness to Experience, attribution of their child's behaviour as being less of a stage (more stable) was significantly and positively associated with their children's rough-and-tumble play ($r = .27$, $p < .05$). However, the relation between attributions of stability and rough-and-tumble play for parents with lower Openness to Experience was not significant ($r = .13$, $p < .05$). In other words, in a situation where parents are higher in Openness to Experience, their children's increases in rough play are related to more stable attributions.

In addition, results from regression analyses also showed a significant interaction between parents' Openness to Experience and attribution of their child's purposeful behaviour to predict rough-and-tumble play [$R^2_{\text{change}} = 0.14$, $F(3, 34) = 3.02$, $p < 0.05$]. Follow-up analyses revealed that parents' less purposeful attributions for their child's behaviour were significantly and positively associated with their child's rough-and-tumble play for parents lower in Openness to Experience ($r = .34$, $p < .05$) but not for parents higher in Openness to Experience ($r = .08$, $p <$

.05). In other words, in a situation where parents are lower on Openness to Experience, their children's increases in rough-and-tumble play are related to less purposeful attributions.

Solitary-passive play. One significant interaction was found when predicting solitary-passive play. Results from regression analyses showed a significant interaction between parents' Conscientiousness and their attribution of their child's typical behaviour to predict solitary-passive play [$R^2_{\text{change}} = 0.18$, $F(3, 34) = 3.77$, $p < 0.05$]. Follow-up analyses revealed that parents' attributions of their child's less typical behaviour were significantly and positively associated with solitary-passive play for parents with lower Conscientiousness ($r = .29$, $p < .05$) but not for parents with higher Conscientiousness ($r = .02$, $p < .05$). That is to say, in circumstances where parents are lower in Conscientiousness, their children's increases in solitary-passive play are related to less typical attributions.

Discussion

Overall, the current study had several main objectives. The first one was to examine the relationship between parent personality dimensions and play behaviours in preschool aged children. The second objective was to investigate the role of parent attributions of child behaviour on their preschool children's play behaviours. The final objective was to examine the interaction between parent personality dimensions, parent attribution style and preschool children's play behaviours. Based on information from measures of personality dimensions and types of attributions both completed by parents and a measure of preschool play behaviours completed by their daycare providers, a number of different trends, significant relationships and interactions were found.

Parent Sex Differences

Before examining the first goal, a significant difference was revealed between parents (mothers and fathers) with respect to attributions of child behaviour. Specifically, mothers were found to report that their children are less likely to be going through a stage than fathers.

Previous research is very limited in its examination of sex differences in parent attributions of child behaviour. While some researchers have not found any significant sex differences between parents (e.g. Johnston, Reynolds, Freeman & Geller, 1998), others have not commented on any potential sex differences within parents (e.g. Corcoran & Ivery, 2004) or have included only female parent participants (e.g. Coplan, Hastings, Lagacé-Séguin & Moulton, 2002). Therefore, it is difficult to make assumptions about this finding without further investigation. Furthermore, there are likely other variables influencing this outcome, such as parenting style. For example, previous research findings have found that authoritarian mothers attributed child aggression and misbehaviours to less external sources than authoritative parents (see Coplan, Hastings and Lagacé-Séguin and Moulton, 2002). Therefore, consistent with this research finding, it could be that mothers in the current study are also more authoritarian in their parenting style than the fathers and thus more likely to attribute their children's misbehaviours to less unstable sources (i.e. less likely to be going through a stage).

Parent personality and child play behaviours

In order to address the first goal, all five parent personality dimensions (Agreeableness, Extraversion, Conscientiousness, Neuroticism and Openness to Experience) were examined in relation to the various play behaviours preschool children engage in (social, rough-and-tumble, reticent, solitary-passive and solitary-active). Given previous findings on personality dimensions and child outcome, it was anticipated that parents higher in Agreeableness, Extraversion and/or

Conscientiousness and low Neuroticism or higher Openness and Agreeableness and low Neuroticism would be more likely to predict social and/or adaptive play in children with the opposite pattern being more likely as well (Prinzle & al., 2009).

Interestingly, one significant correlation and two trends were revealed in the current study all in relation to the Openness to Experience domain. The trends revealed that parents' higher rates of Openness to Experience were related to children's adaptive social play as well as children's rough-and-tumble play. Conversely, parents with lower reported Openness to Experience were found to have children who engage in solitary-active play. There are several possible explanations for these findings, based on commonalities between play behaviours. As previously mentioned, individuals who are higher in the Openness to Experience domain tend to demonstrate more curiosity, active imaginations and tend to enjoy new experiences (McCrae & Costa, 2008). Elevated levels in this domain have been linked to greater autonomy support in children and with parents high in this domain being more likely to provide a variety of new experiences and high stimulation (Prinzle & al., 2009). Given the characteristics associated with individuals higher in this domain, this finding could reflect the phenomenon that children of such parents are more likely to demonstrate a higher approach and tendency to engage in play interactions whether adaptive (social play) or maladaptive (rough-and-tumble play) with other children. These findings also coincide with the mixed research findings in relation to Openness to experience and parental adjustment. As noted by Snarr, Slep & Grande (2009), some researchers have suggested that this domain associated with positive parenting and child-rearing environments while others have found a link between this domain and instances of maladjustment including the finding that mothers' higher indices of Openness predicted individuals' depression ratings over and above indices of Neuroticism. Therefore, these findings

of higher rates of both adaptive (social) and maladaptive (rough-and-tumble and solitary-active) play behaviours could possibly speak to the heterogeneity of this construct along with other possible extraneous variables (e.g. maternal depression) impacting the types of play their children engage in.

Parent attributions and child play behaviours

The second goal of the current study was to examine the relation between parent attributions and child play behaviours. Consistent with the research findings, it was hypothesized that children who engage in more social and/or adaptive play would be linked to more internal or stable parent attributions of prosocial behaviour and external or unstable attributions of less favorable behaviours with the opposite pattern being revealed in children who engage in maladaptive play (Corcoran & Ivery, 2004). However, results from the current study revealed that for children who engage in more solitary-passive (adaptive) play, parents depict their child's behaviour as less typical and more situational and therefore more external to the child. On a surface level, this finding appears to contradict the hypothesis and research studies supporting positive child behaviour being linked to more internal parental attributions (Freeman, Johnston & Barth, 1997; Corcoran & Ivery, 2004). However, in examining the vignettes parents were asked to rate, it was determined that only one scenario depicts a child engaging in empathic, prosocial behaviour and the four remaining scenarios depict a child engaging in less favorable or 'deviant' behaviour. Therefore, significant findings linked to external attributions are based on a higher proportion of scenarios depicting less favorable child behaviours and significant findings linked to internal or stable attributions are based on scenarios of more problematic child behaviour. As such, the finding that children engaging in solitary-passive play have parents who are more likely to make external attributions for 'deviant' behaviour is in fact, consistent with the hypothesis that

parents of children who engage in primarily adaptive play are more likely to make external or unstable attributions for problematic behaviour (Corcoran & Ivery, 2004). More specifically, the finding indicates that parents of children who engage in more solitary-passive play (e.g. plays alone, drawing, painting or doing puzzles or exploring objects) have parents who view less favorable behaviour as less typical of their child and more likely due to the situation rather than due to personality. These results are positive since we know that the way parents attribute their child's behaviours influences the way in which they respond to their child's behaviours (Carpentier, Mullins, Wolfe-Christensen & Chaney, 2008). Since these parents are viewing misbehaviours as less child-centered, it may be that these parents are more likely to view their parenting practices as influential in their child's adjustment leading to more involved parenting and presumably, more adaptive play skills.

This leads us to another significant finding in the current study which revealed that for children engaging in less solitary-active play, parents are more likely to make less purposeful attributions for children's more problematic behaviours. Presumably, it could be that these children are more likely engaging in a variety or combination of different types of play behaviours. Either way, this finding is positive since these external attributions parents are making for more deviant behaviour may serve as buffers protecting against future social maladjustment. Consequently, these parents may be less likely to engage in power-assertive or inept parenting typically associated with child-centered attributions for negative behaviour (see Snarr, Slep & Grande, 2009).

Parent personality, attributions and child play behaviours

The third and final goal of this study was to examine the interplay between parent personality dimensions, attributions of behaviour and children's play behaviours. It was

hypothesized that for parents with higher levels of Extraversion, Agreeableness and/or Conscientiousness or higher levels of Openness and Agreeableness and both combinations having lower levels of Neuroticism, their child's increased social and/or adaptive play behaviours would be related to their more internal or stable attributions for prosocial behaviour and/or external or unstable attributions for less favorable behaviour. However, the results of the current study yielded mixed findings.

The first finding was that for parents higher in Openness to Experience, their children's increases in rough-and-tumble play were related to more stable attributions of behaviour (i.e. will likely act this way in the future). While previous researchers (e.g., Prinzie & al., 2009) have shown that higher Openness to Experience has been linked to autonomy support in children, this was presumed in combination with higher levels of Agreeableness. In fact, higher Openness to Experience alone has yielded mixed findings with some related aspects being linked to maladjustment (Browne, Meunier, O'Connor & Jenkins, 2012). It is interesting that these parents were also more likely to make more stable attributions for behaviour. This finding appears to be consistent with earlier explanations of parents being more likely to make internal attributions for children with behaviour problems. However, this explanation fails to capture the complexity of this interaction. It may be that in promoting autonomy in their children, these parents are less likely to establish constraints and rules for their children's play behaviours, providing these children with more freedom and less guidance with respect to socially appropriate behaviours and as a result, making them more likely to engage in impulsive rough-and-tumble play. As a result, these parents may also view this behaviour as more stable over time due to the lack of established parameters or reinforcement of more socially acceptable play.

Another significant interaction revealed in the current study was in relation to parents' *lower* Openness to Experience. Specifically, in a situation where parents were lower on Openness to Experience, their children's increases in rough-and-tumble play were related to less purposeful attributions of behaviour. Given the previous finding that parents higher in this domain have been linked to greater autonomy support and a more stimulating environment for their children (see Prinzie & al., 2009), it could be that parents with lower levels of Openness are fostering less stimulating environments and have children who are more insecure in their social approach. In addition, since Openness reflects the extent to which an individual enjoys new experiences, has broad interests, is imaginative and is intellectually curious, parents lower in this domain may tend to foster a more restricted environment, with less exposure to varied and creative opportunities for exploration. As such, their children may be less likely to engage in prosocial and/or imaginary play and opt for more brute rudimentary rough play behaviours. That being said, the finding that these parents are also viewing their child's more deviant behaviours as less intentional may in turn promote a more positive parent-child relationship and as a result, act as a buffer against later maladjustment or poor social competence.

The last significant interaction revealed in the current study was that in circumstances where parents are lower on Conscientiousness, their children's increases in solitary-passive play were related to less typical attributions of behaviour. Researchers have shown that common features of Conscientiousness have been shown to include higher aspiration levels, goal-directed behaviour and impulse control (McCrae & Costa, 2008). Parents high in this domain have been proposed to likely place similar standards on their parenting practices, providing a more structured and consistence environment for their children (Prinzie & al., 2009). Therefore, presumably, parents with low Conscientiousness may provide a less structured and more

inconsistent environment for their children. In addition, these parents may likely have a tendency to be more easy-going and careless as opposed to efficient and organized in their approach to parenting. As a result, it is possible that the children of such parents are more often left to entertain themselves and thus engage in more solitary passive play. Seeing as though these behaviours are encouraged by teachers and parents and linked to social acceptance by peers in early childhood, these children may have learned to engage in this type of play through reinforcement. Furthermore, these 'laissez-faire' parents may be more likely to have less concrete interpretations for their children's behaviours, viewing them as more fluid, ever-changing and therefore less typical.

Overall, the current study has yielded several interesting findings. Given that no known researcher has ever examined the relationship between parent personality, attribution style and child play behaviours, many of the findings in this thesis were novel and not anticipated. Many of the predictions made were based in previous research centered on both variables separately in relation to child problem behaviour. The mixed results are most likely a reflection of the many other possible factors that could be contributing along with some limitations of the study itself, some of which are discussed below.

Limitations and future directions

There are several methodological and theoretical limitations to the current study that would need to be addressed in future studies. The first limitation is with respect to Hasting and Grusec's attribution scale (2008). While it has been determined to be psychometrically valid and reliable, this scale depicts children engaging in predominantly negative or 'deviant' behaviours. Specifically, four vignettes describe children engaging in less than favourable behaviour and only one depicts a child engaging in prosocial behaviour, making the findings difficult to

interpret. Furthermore, it is possible that the findings are somewhat skewed given the inclusion of this outlying vignette creating a potential confound. This issue could be addressed in future studies in several different ways. For example, one could eliminate the confounding vignette by depicting a child only engaging in less favourable behaviours allowing for a more meaningful interpretation of parents' attributions of their children's misbehaviours. Another solution would be to use a more equal number of vignettes depicting children engaging in socially endorsed behaviours as well as in more deviant behaviour and running two separate analyses (although this method would require establishing validity and reliability of this new measure beforehand). Further investigation of various already established attribution scales would also be warranted.

Another limitation to this study is with respect to its small sample size. Further examination of the association between the variables with a larger sample size would be beneficial to provide greater power in analysis. Similarly, the current study involved a higher representation of mother respondents ($n = 32$) than father respondents ($n = 6$). A larger sample of fathers would allow for a better representation of both sexes thus a more meaningful comparison between the sexes. Alternatively, it may be interesting to replicate this study asking both parents of the same child to complete the parent personality scale and attribution scale in order to examine any possible sex differences or even commonalities between these variables when predicting children's play behaviours.

Another limitation of the current study is the lack of specificity of personality variables, specifically with respect to the Openness to Experience domain. Results of the current study were consistent with previous findings linking this domain to both positive and negative outcomes in children, speaking to the heterogeneity of this construct (see Snarr, Slep & Grande, 2009). It may be interesting to conduct further analyses in order to determine which (if any)

specific traits within this dimension are more likely to predict adaptive versus maladaptive play behaviours.

Another limitation of the current study was thought to be with respect to the two types of environments children are immersed in. Specifically, the child sample included children registered in both daycare as well as preschool settings. It may be that both settings are qualitatively different in that a daycare environment would involve less structure and provide more free play behaviours opportunities for children. As such, future studies may wish to draw participants from one particular setting or alternatively, make a comparison between play behaviours of children from both environments.

Furthermore, in interpreting the results of this study, several assumptions were made based on previous findings suggesting certain personality dimensions being related to particular parenting practices to predict both positive and negative outcomes in children (Prinzle & al., 2009). Given that this link still remains understudied particularly with respect to children's play behaviours, future studies may wish to include parenting style as another variable of interest.

Lastly, although important demographic information was sought from parents (e.g. marital status, age, level of education), the current study did not include questions with respect to socioeconomic status, ethnicity or cultural background. Future studies may wish to investigate these variables in order to examine any possible similarities, differences or particular relationships between these demographic variables and parent personality, attributions and/or child play behaviours.

Implications for clinical intervention

The current study has multiple implications for clinical intervention with the first being with respect to parent personality. Although parent personality has been shown to both directly

and indirectly (e.g. through parenting practices) play a role in child adjustment and social behaviours in children (Belsky & Barends, 2002; Oliver, Guerin & Coffman, 2009; Prinzie & al., 2009), intervention would not be best targeted at this level given how stable and consistent personality traits are known to be (McCrae & al., 1999; Digman, 1990). That being said, continued exploration of these domains as they relate to attributions of behaviour is crucial in determining possible ‘red flag’ combinations and thus prioritizing interventions for children at risk for poor social development.

Previous research has yielded important findings with respect to the parent attribution style and child outcome in that it affects the ways parents respond to their children, the parent-child relationship as well as the level of engagement and adherence to the use of strategies or interventions targeting problem behaviours (Coles, Pelham and Gnagy, 2010; Carpentier, Mullins, Wolfe-Christensen & Chaney, 2008). Consistent with these findings, the external attributions parents made for children’s misbehaviours in the current study were thought to act as a potential buffer against poor social development in these children or at the very least, indicated a positive predictor for improved social outcomes. Conversely, situations where parents are making more internal attributions for misbehaviours may signal important areas of intervention. This may be of particular importance for parents with children who are engaging in maladaptive play behaviours. As noted by Snarr, Slep & Grande (2009), with mounting evidence that parent attributions play an important role in parenting, and consequently child outcomes, interventions targeting attributional style are becoming increasingly important.

On a ‘grass roots’ level of intervention, researchers such as Corcoran and Ivery (2004) have also suggested clinicians to use the technique of reframing parents’ attributions. This technique has long been used in various theoretical models such as in cognitive-behavioural

therapy and family systems therapy and involves making a statement that shows previously viewed behaviour in a positive light (Berg, 1994). Corcoran and Ivery (2004) offer multiple suggestions in an attempt to shift parents' attribution of child problem behaviour from internal and dispositional sources to more external or specific explanations. For example, in a situation where a parent is making internal and stable attributions to explain a child's misbehaviour (e.g. "that is so typical of her to do that, she is so bad"), a clinician can use this opportunity to offer another perspective that attributes a more external or situational explanation of the child's behaviour (e.g. "I wonder if something has happened today to make her upset or maybe she is tired from not getting enough sleep last night"). These researchers also suggest an alternative way of handling parents blaming their children's characteristics for problem behaviour by asking them to describe the behaviour itself to help move away from negative characterizations of their children to more specific descriptions of behaviour (Corcoran & Ivery, 2004). This shift from emphasizing unchangeable dispositional qualities to more specific concrete behaviours is critical since, as previously explained, parental attributions may affect engagement and involvement in treatment, as well as the benefits families ultimately draw from intervention.

Another area of intervention is with respect to children's play behaviours. Researchers have shown that rough-and-tumble, solitary-active and reticent play behaviours have all been linked to increased risk for poorer social competence (Coplan & Rubin, 1998). Indeed, play has been described as the primary context for which young children acquire and express key social competencies (Mendez & Fogle, 2002). Although solitary-passive play is considered an adaptive form on play in early childhood, some researchers have found a link to social difficulties if still present in later childhood (Rubin & Mills, 1988). The importance of social interaction during play in relation to social competence development has been highlighted with

research findings indicating that children who played alone had poorer social skills and presented more problem behaviours (Newton and Jenvey, 2011). These findings point to a role for early intervention programs using a play context to improve children's social skills. By identifying children who are engaging in predominantly non-social, maladaptive play at an early age, interventions can be implemented prior to the development of more serious antisocial behavioural problems or peer withdrawal. As previously highlighted, it would be important to address parent attributions towards their child's play behaviour in order to maximize parent involvement and thus increase the efficacy of the intervention.

Overall, despite the limitations of the current study, the findings have important implications for practice and point to the need for further investigation of the interaction between parent personality, attribution of behaviour and how they relate to child play behaviours and future social competency in children. As such, continued research in this area is both warranted and necessary in order to further determine best practice interventions for these children and their families.

References

- Ashton, M. C., & Lee, K. (2009). The HEXACO-60: A short measure of the major dimensions of personality. *Journal of Personality Assessment*, *91*(4), 340-345. doi: 10.1080/00223890902935878
- Aunola, K., & Nurmi, J. (2005). The role of parenting styles in children's problem behavior. *Child Development*, *76*(6), 1144-1159. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=psyh&AN=2005-14583-002&site=ehost-live&scope=site>
- Baumrind, D. (1967). Child care practices anteceding three patterns of preschool behavior. *Genetic Psychology Monographs*, *75*(1), 43-88. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=psyh&AN=1967-05780-001&site=ehost-live&scope=site>
- Baumrind, D. (1971). Current patterns of parental authority. *Developmental Psychology*, *4*(1), 1-103. doi: 10.1037/h0030372
- Baumrind, D., Larzelere, R. E., & Owens, E. B. (2010). Effects of preschool parents' power assertive patterns and practices on adolescent development. *Parenting: Science and Practice*, *10*(3), 157-201. doi: 10.1080/15295190903290790
- Belsky, J. (1984). The determinants of parenting: A process model. *Child Development*, *55*(1), 83-96. doi: 10.2307/1129836
- Belsky, J., & Barends, N. (2002). Personality and parenting. In M. Bornstein (Ed.), *Handbook of*

Parenting, (2nd ed., pp. 415-438). Mahwah, NJ: Erlbaum.

Belsky, J., Crnic, K., & Woodworth, S. (1995). Personality and parenting: Exploring the mediating role of transient mood and daily hassles. *Journal of Personality*, 63(4), 905-929.

doi: 10.1111/j.1467-6494.1995.tb00320.x

Berg, I. K. (1994). *Family-based services: A solution-focused approach*. New York: Norton.

Bornstein, M. H. (1995). Parenting infants. In M. H. Bornstein (Ed.), *Handbook of parenting* ().

Hillsdale, NJ: Erlbaum.

Brady, K., & Woolfson, L. (2008). What teacher factors influence their attributions for children's difficulties in learning? *British Journal of Educational Psychology*, 78(4), 527-544. doi:

10.1348/000709907X268570

Browne, D. T., Meunier, J. C., O'Connor, T. G., & Jenkins, J. M. (2012). The role of parental personality traits in differential parenting. *Journal of Family Psychology*, 26(4), 542-553.

doi: 10.1037/a0028515

Campbell, W. K., & Sedikides, C. (1999). Self-threat magnifies the self-serving bias: A meta-analytic integration. *Review of General Psychology*, 3(1), 23-43. doi: 10.1037/1089-

2680.3.1.23

Carpentier, M. Y., Mullins, L. L., Wolfe-Christensen, C., & Chaney, J. M. (2008). The relationship of parent self-focused negative attributions to ratings of parental overprotection, perceived child vulnerability, and parenting stress. *Families, Systems, & Health*, 26(2), 147-

163. doi: 10.1037/1091-7527.26.2.147

- Coles, E. K., Pelham, W. E., & Gnagy, E. M. (2010). Parental attributions for success in managing the behavior of children with ADHD. *Journal of Attention Disorders, 14*(2), 138-146. doi: 10.1177/1087054709347171
- Coplan, R. J., Hastings, P. D., Lagacé-Séguin, D. G., & Moulton, C. E. (2002). Authoritative and authoritarian mothers' parenting goals, attributions, and emotions across different childrearing contexts. *Parenting: Science and Practice, 2*(1), 1-26. doi: 10.1207/S15327922PAR0201_1
- Coplan, R. J., & Rubin, K. H. (1998). Exploring and assessing nonsocial play in the preschool: The development and validation of the preschool play behavior scale. *Social Development, 7*(1), 72-91. doi: 10.1111/1467-9507.00052
- Coplan, R. J., Rubin, K. H., Fox, N. A., Calkins, S. D., & Stewart, S. L. (1994). Being alone, playing alone, and acting alone: Distinguishing among reticence and passive and active solitude in young children. *Child Development, 65*(1), 129-137. doi: 10.2307/1131370
- Corcoran, J., & Ivery, J. (2004). Parent and child attributions for child behavior: Distinguishing factors for engagement and outcome. *Families in Society, 85*(1), 101-106. Retrieved from <http://search.proquest.com/docview/230171685?accountid=12617>
- Costa, P. T., Zonderman, A. B., McCrae, R. R., & Williams, R. B. (1985). Content and comprehensiveness in the MMPI: An item factor analysis in a normal adult sample. *Journal of Personality and Social Psychology, 48*(4), 925-933. doi: 10.1037/0022-3514.48.4.925

Davidov, M., & Grusec, J. E. (2006). Untangling the links of parental responsiveness to distress and warmth to child outcomes. *Child Development*, 77(1), 44-58. doi: 10.1111/j.1467-

8624.2006.00855.x

Digman, J. M. (1990). Personality structure: Emergence of the five-factor model. *Annual Review of Psychology*, 41, 417-440. doi: 10.1146/annurev.ps.41.020190.002221

Freeman, W. S., Johnston, C., & Barth, F. M. (1997). Parent attributions for inattentive-overactive, oppositional-defiant, and prosocial behaviours in children with attention deficit hyperactivity disorder. *Canadian Journal of Behavioural Science/Revue Canadienne Des Sciences Du Comportement*, 29(4), 239-248. doi: 10.1037/0008-400X.29.4.239

Galambos, N. L., Barker, E. T., & Almeida, D. M. (2003). Parents do matter: Trajectories of change in externalizing and internalizing problems in early adolescence. *Child Development*, 74(2), 578-594. doi: 10.1111/1467-8624.7402017

Hastings, P. D., & Grusec, J. E. (1998). Parenting goals as organizers of responses to parent-child disagreement. *Developmental Psychology*, 34(3), 465-479. doi: 10.1037/0012-1649.34.3.465

Henderson, N. D. (1982). Human behavior genetics. *Annual Review of Psychology*, 33, 403-440. doi: 10.1146/annurev.ps.33.020182.002155

Hoeve, M., Dubas, J. S., Eichelsheim, V. I., van, d. L., Smeenk, W., & Gerris, J. R. M. (2009). The relationship between parenting and delinquency: A meta-analysis. *Journal of Abnormal Child Psychology*, 37(6), 749-775. doi: 10.1007/s10802-009-9310-8

- John, O. P., & Srivastava, S. (1999). The big five trait taxonomy: History, measurement, and theoretical perspectives. In L. A. Pervin, & O. P. John (Eds.), (pp. 102-138). New York, NY US: Guilford Press. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=psyh&AN=1999-04371-004&site=ehost-live&scope=site>
- Johnston, C., Reynolds, S., Freeman, W. S., & Geller, J. (1998). Assessing parent attributions for child behavior using open-ended questions. *Journal of Clinical Child Psychology*, 27(1), 87-97. doi: 10.1207/s15374424jccp2701_10
- Joiner, T. E. J., & Wagner, K. D. (1996). Parental, child-centered attributions and outcome: A meta-analytic review with conceptual and methodological implications. *Journal of Abnormal Child Psychology*, 24(1), 37-52. doi: 10.1007/BF01448372
- Kendler, K. S., Sham, P. C., & MacLean, C. J. (1997). The determinants of parenting: An epidemiological, multi-informant, retrospective study. *Psychological Medicine*, 27(3), 549-563. doi: 10.1017/S0033291797004704
- Kochanska, G., Friesenborg, A. E., Lange, L. A., & Martel, M. M. (2004). Parents' personality and infants' temperament as contributors to their emerging relationship. *Journal of Personality and Social Psychology*, 86(5), 744-759. doi: 10.1037/0022-3514.86.5.744
- Lagacé-Séguin, D. G., & d'Entremont, M. L. (2006). The role of child negative affect in the relations between parenting styles and play. *Early Child Development and Care*, 176(5), 461-477. doi: 10.1080/03004430500039960

- Maccoby, E., & Martin, J. (1983). Socialization in the context of the family: Parent-child interaction. In P. H. Mussen (Ed.), *Handbook of child psychology. vol. 4: Socialization, personality and social development*. New York: Wiley.
- Mavropoulou, S., & Padeliadu, S. (2002). Teachers' causal attributions for behaviour problems in relation to perceptions of control. *Educational Psychology, 22*(2), 191-202. doi: 10.1080/01443410120115256
- McCrae, R. R., Costa, P. T., de Lima, M. P., Simões, A., Ostendorf, F., Angleitner, A., . . . Piedmont, R. L. (1999). Age differences in personality across the adult life span: Parallels in five cultures. *Developmental Psychology, 35*(2), 466-477. doi: 10.1037/0012-1649.35.2.466
- McCrae, R. R., & Costa, P. T. J. (2008). The five-factor theory of personality. In O. P. John, R. W. Robins & L. A. Pervin (Eds.), (pp. 159-181). New York, NY US: Guilford Press.
Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=psych&AN=2008-11667-005&site=ehost-live&scope=site>
- Mendez, J. L., & Fogle, L. M. (2002). Parental reports of preschool children's social behavior: Relations among peer play, language competence, and problem behavior. *Journal of Psychoeducational Assessment, 20*(4), 370-385. doi: 10.1177/073428290202000405
- Newton, E., & Jenvey, V. (2011). Play and theory of mind: Associations with social competence in young children. *Early Child Development and Care, 181*(6), 761-773. doi: 10.1080/03004430.2010.486898

Oliver, P. H., Guerin, D. W., & Coffman, J. K. (2009). Big five parental personality traits, parenting behaviors, and adolescent behavior problems: A mediation model. *Personality and Individual Differences, 47*(6), 631-636. doi: 10.1016/j.paid.2009.05.026

Pelligrini, A. D., & Smith, P. K. (1998). Physical activity play: The nature and function of a neglected aspect of play. *Child Development, 69*(3), 577-598. doi: 10.2307/1132187

Pettit, G. S., Bates, J. E., & Dodge, K. A. (1997). Supportive parenting, ecological context, and children's adjustment: A seven-year longitudinal study. *Child Development, 68*(5), 908-923. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=psyh&AN=1997-43389-012&site=ehost-live&scope=site>

Prinz, P., Onghena, P., Hellinckx, W., Grietens, H., Ghesquière, P., & Colpin, H. (2004). Parent and child personality characteristics as predictors of negative discipline and externalizing problem behaviour in children. *European Journal of Personality, 18*(2), 73-102. doi: 10.1002/per.501

Prinz, P., Onghena, P., Hellinckx, W., Grietens, H., Ghesquière, P., & Colpin, H. (2005). Direct and indirect relationships between parental personality and externalising behaviour: The role of negative parenting. *Psychologica Belgica, 45*(2), 123-145. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=psyh&AN=2005-15338-002&site=ehost-live&scope=site>

Prinz, P., Stams, G. J. J. M., Deković, M., Reijntjes, A. H. A., & Belsky, J. (2009). The relations between parents' big five personality factors and parenting: A meta-analytic review. *Journal of Personality and Social Psychology, 97*(2), 351-362. doi: 10.1037/a0015823

- Rinaldi, C. M., & Howe, N. (2012). Mothers' and fathers' parenting styles and associations with toddlers' externalizing, internalizing, and adaptive behaviors. *Early Childhood Quarterly*, 27(2), 266-273. doi: 10.1016/j.ecresq.2011.08.001
- Rubin, K. H. (1982). Nonsocial play in preschoolers: Necessarily evil? *Child Development*, 53(3), 651-657. doi: 10.2307/1129376
- Rubin, K. H., Coplan, R. J., Fox, N. A., & Calkins, S. D. (1995). Emotionality, emotion regulation, and preschoolers' social adaptation. *Development and Psychopathology*, 7(1), 49-62. doi: 10.1017/S0954579400006337
- Rubin, K. H., & Mills, R. S. (1988). The many faces of social isolation in childhood. *Journal of Consulting and Clinical Psychology*, 56(6), 916-924. doi: 10.1037/0022-006X.56.6.916
- Schary, D. P., Cardinal, B. J., & Loprinzi, P. D. (2012). Parental support exceeds parenting style for promoting active play in preschool children. *Early Child Development and Care*, 182(8), 1057-1069. doi: 10.1080/03004430.2012.685622
- Schofield, T. J., Conger, R. D., Donnellan, M. B., Jochem, R., Widaman, K. F., & Conger, K. J. (2012). Parent personality and positive parenting as predictors of positive adolescent personality development over time. *Merrill-Palmer Quarterly*, 58(2), 255-283. doi: 10.1353/mpq.2012.0008
- Shaffer, D. R. (2009). Theories of achievement motivation and achievement behavior. *Social and personality development* (6th ed.). Belmont, CA: Wadsworth Cengage Learning.

- Skinner, E., Johnson, S., & Snyder, T. (2005). Six dimensions of parenting: A motivational model. *Parenting: Science and Practice, 5*(2), 175-235. doi: 10.1207/s15327922par0502_3
- Smith, C. L., Spinrad, T. L., Eisenberg, N., Gaertner, B. M., Popp, T. K., & Maxon, E. (2007). Maternal personality: Longitudinal associations to parenting behavior and maternal emotional expressions toward toddlers. *Parenting: Science and Practice, 7*(3), 305-329. doi: 10.1080/15295190701498710
- Snarr, J. D., Slep, A. M. S., & Grande, V. P. (2009). Validation of a new self-report measure of parental attributions. *Psychological Assessment, 21*(3), 390-401. doi: 10.1037/a0016331
- Steinberg, L. (2001). We know some things: Parent–adolescent relationships in retrospect and prospect. *Journal of Research on Adolescence, 11*(1), 1-19. doi: 10.1111/1532-7795.00001
- Vasta, R., Miller, S., Ellis, S., Younger, A., & Gosselin, P. (2006). Socialization with the family. *Child psychology* (Canadian ed.). Toronto, ON: John Wiley & Sons Canada, Ltd.
- Weiner, B. (1985). An attributional theory of achievement motivation and emotion. *Psychological Review, 92*(4), 548-573. doi: 10.1037/0033-295X.92.4.548
- White, C., & Barrowclough, C. (1998). Depressed and non-depressed mothers with problematic preschoolers: Attributions for child behaviours. *British Journal of Clinical Psychology, 37*(4), 385-398. doi: 10.1111/j.2044-8260.1998.tb01396.x
- Wolfenstein, M., & Trull, T. (1997). Depression and Openness to experience. *Journal of Personality Assessment, 69*, 614– 632. doi: 10.1207/s15327752jpa6903_14

Appendix A

Parent Demographic Questionnaire

Please provide the following information.

1. Sex of child: (circle): Female Male
2. Age of child: _____ months
3. Number of siblings living with child at home: _____
4. Sex of parent (circle): Female Male
5. Nature of the parent (circle): Biological Adoptive Stepparent
6. Age of parent: _____ years
7. Highest level of education (circle): Elementary High School Some college/ University
College/ University

Appendix B

Child Behaviour Vignettes

© Rachel Lathrop 2014

Instructions:

There are five brief stories in this part of the questionnaire. Each story describes a child engaging in some type of behaviour. As you read each story, please imagine that it is your child being described. Maybe something like this has happened before, and you can remember how you felt and what you did. If nothing like what is described in a story has happened before, please imagine what it is like to be in that situation and see your child behaving that way.

After each story there are 4 questions. Each of these describes a thought or emotion you may have if you saw your child behaving that way. With each one, there is a 5 point rating scale.

After you read an item, please use the scale to rate how much you agree with that item. Please try to answer every question. If you are not sure about any of the items, just take your best guess.

Also, we are interested in what you think so please do not talk about the stories and questions with other people until after you have given us your answers.

Story One

Your child is out front of your home, playing with a few other children. You are watching them from of your windows. They are having fun, playing a game like “tag” and your child seems to

© Rachel Lathrop 2014

be one of the leaders. One of the children trips over something, and starts crying. Your child goes to the crying child, helps him/her to sit up and sits together with the other child until he/she stops crying. Your child has done this kind of thing before.

The following four items describe reasons why you think our child may have behaved in the way described in this story. Please rate each one from 1 to 5.

1. My child might have acted this way before it was in his/her nature or personality to act this way, or it might have been due to the situation.

1	2	3	4	5
completely due to personality	mostly due to personality	equally due to both	mostly due to situation	completely due to situation

2. My child might have acted this way on purpose, or my child might not have meant to act this way.

1	2	3	4	5
definitely did this on purpose	probably did this on purpose	it could be either way	probably did not mean to do this	definitely did not mean to do this

3. My child might be going through a phase or stage that will end soon, or my child might keep on acting this way.

1	2	3	4	5
definitely a stage that	probably a stage that	it could be either way	probably will act this	definitely will act this

4. This behaviour is typical of my child or my child never acts this way.

1	2	3	4	5
this is just like how my child behaves	my child act this way sometimes	my child could act this way	this does not sound much like my child	my child never acts this way

Story Two

One afternoon you go to pick up your child from his/her daycare centre or preschool. When you get there, your child is in the playground with some other children. One of the other children has

© Rachel Lathrop 2014

a toy your child wants, and you see your child grab the toy and push the other child down. You have seen your child do this a few times before.

The following four items describe reasons why you think our child may have behaved in the way described in this story. Please rate each one from 1 to 5.

1. My child might have acted this way before it was in his/her nature or personality to act this way, or it might have been due to the situation.

1	2	3	4	5
completely due to personality	mostly due to personality	equally due to both	mostly due to situation	completely due to situation

2. My child might have acted this way on purpose, or my child might not have meant to act this way.

1	2	3	4	5
definitely did this on purpose	probably did this on purpose	it could be either way	probably did not mean to do this	definitely did not mean to do this

3. My child might be going through a phase or stage that will end soon, or my child might keep on acting this way.

1	2	3	4	5
definitely a stage that will pass	probably a stage that will pass	it could be either way	probably will act this way in the future	definitely will act this way in the future

4. This behaviour is typical of my child or my child never acts this way.

1	2	3	4	5
this is just like how my child behaves	my child act this way sometimes	my child could act this way	this does not sound much like my child	my child never acts this way

Story Three

© Rachel Lathrop 2014

One morning, you have dropped your child off at his/her daycare centre or preschool. After you say goodbye, you decide to stay and watch the children for a little while, and find a spot where you can see your child, but he/she doesn't know you're watching. You see your child standing against the wall, watching some of the other children playing with a fun toy. Your child looks interested, but stays against the wall and keeps his/her chin down. You have seen your child act like this at other times.

The following four items describe reasons why you think our child may have behaved in the way described in this story. Please rate each one from 1 to 5.

1. My child might have acted this way before it was in his/her nature or personality to act this way, or it might have been due to the situation.

1	2	3	4	5
completely	mostly	equally	mostly	completely
due to	due to	due to	due to	due to
personality	personality	both	situation	situation

2. My child might have acted this way on purpose, or my child might not have meant to act this way.

1	2	3	4	5
definitely	probably	it could be	probably	definitely
did this on	did this on	either way	did not mean	did not mean
purpose	purpose		to do this	to do this

3. My child might be going through a phase or stage that will end soon, or my child might keep on acting this way.

1	2	3	4	5
definitely	probably	it could be	probably	definitely
a stage that	a stage that	either way	will act this	will act this

4. This behaviour is typical of my child or my child never acts this way.

1	2	3	4	5
this is just	my child	my child	this does not	my child never
like how my	act this way	could act	sound much	acts this way
child behaves	sometimes	this way	like my child	

Story Four

© Rachel Lathrop 2014

You and your child are in the local grocery store. Your child asks for a very sugary cereal. You tell him/her it's not very good for him/her. Then, your child sees some stuffed animals and says he/she wants one. You tell him/her that he/she has toys at home, and you can't buy another one today. Then, your child grabs a candy bar, and when you try to put it on the shelf, your child screams "I want it!" People turn and look.

The following four items describe reasons why you think our child may have behaved in the way described in this story. Please rate each one from 1 to 5.

1. My child might have acted this way before it was in his/her nature or personality to act this way, or it might have been due to the situation.

1	2	3	4	5
completely due to personality	mostly due to personality	equally due to both	mostly due to situation	completely due to situation

2. My child might have acted this way on purpose, or my child might not have meant to act this way.

1	2	3	4	5
definitely did this on purpose	probably did this on purpose	it could be either way	probably did not mean to do this	definitely did not mean to do this

3. My child might be going through a phase or stage that will end soon, or my child might keep on acting this way.

1	2	3	4	5
definitely a stage that	probably a stage that	it could be either way	probably will act this	definitely will act this

4. This behaviour is typical of my child or my child never acts this way.

1	2	3	4	5
this is just like how my child behaves	my child act this way sometimes	my child could act this way	this does not sound much like my child	my child never acts this way

Story Five

© Rachel Lathrop 2014

One day, you and your child are at home and you are expecting some friends to drop by soon. You look in the front room of your home, and your child's toys are all over the floor. Your child is watching TV. You ask your child to pick up his/her toys, and your child says "Later, when this show is over." You ask your child to pick his/her toys up now, and your child says "You're not being fair."

The following four items describe reasons why you think our child may have behaved in the way described in this story. Please rate each one from 1 to 5.

1. My child might have acted this way before it was in his/her nature or personality to act this way, or it might have been due to the situation.

1	2	3	4	5
completely	mostly	equally	mostly	completely
due to	due to	due to	due to	due to
personality	personality	both	situation	situation

2. My child might have acted this way on purpose, or my child might not have meant to act this way.

1	2	3	4	5
definitely	probably	it could be	probably	definitely
did this on	did this on	either way	did not mean	did not mean
purpose	purpose		to do this	to do this

3. My child might be going through a phase or stage that will end soon, or my child might keep on acting this way.

1	2	3	4	5
definitely	probably	it could be	probably	definitely
a stage that	a stage that	either way	will act this	will act this

4. This behaviour is typical of my child or my child never acts this way.

1	2	3	4	5
this is just	my child	my child	this does not	my child never
like how my	act this way	could act	sound much	acts this way
child behaves	sometimes	this way	like my child	

HEXACO-PI-R
(SELF REPORT FORM)

© Kibeom Lee, Ph.D., & Michael C. Ashton, Ph.D.

- 1 _____ I would be quite bored by a visit to an art gallery.
- 2 _____ I plan ahead and organize things, to avoid scrambling at the last minute.
- 3 _____ I rarely hold a grudge, even against people who have badly wronged me.
- 4 _____ I feel reasonably satisfied with myself overall.
- 5 _____ I would feel afraid if I had to travel in bad weather conditions.
- 6 _____ I wouldn't use flattery to get a raise or promotion at work, even if I thought it would succeed.
- 7 _____ I'm interested in learning about the history and politics of other countries.
- 8 _____ I often push myself very hard when trying to achieve a goal.
- 9 _____ People sometimes tell me that I am too critical of others.
- 10 _____ I rarely express my opinions in group meetings.
- 11 _____ I sometimes can't help worrying about little things.
- 12 _____ If I knew that I could never get caught, I would be willing to steal a million dollars.
- 13 _____ I would enjoy creating a work of art, such as a novel, a song, or a painting.
- 14 _____ When working on something, I don't pay much attention to small details.
- 15 _____ People sometimes tell me that I'm too stubborn.
- 16 _____ I prefer jobs that involve active social interaction to those that involve working alone.
- 17 _____ When I suffer from a painful experience, I need someone to make me feel comfortable.
- 18 _____ Having a lot of money is not especially important to me.
- 19 _____ I think that paying attention to radical ideas is a waste of time.
- 20 _____ I make decisions based on the feeling of the moment rather than on careful thought.
- 21 _____ People think of me as someone who has a quick temper.
- 22 _____ On most days, I feel cheerful and optimistic.
- 23 _____ I feel like crying when I see other people crying.
- 24 _____ I think that I am entitled to more respect than the average person is.
- 25 _____ If I had the opportunity, I would like to attend a classical music concert.
- 26 _____ When working, I sometimes have difficulties due to being disorganized.
- 27 _____ My attitude toward people who have treated me badly is "forgive and forget".
- 28 _____ I feel that I am an unpopular person.
- 29 _____ When it comes to physical danger, I am very fearful.
- 30 _____ If I want something from someone, I will laugh at that person's worst jokes.

Continued...

- 31 _____ I've never really enjoyed looking through an encyclopedia.
- 32 _____ I do only the minimum amount of work needed to get by.
- 33 _____ I tend to be lenient in judging other people.
- 34 _____ In social situations, I'm usually the one who makes the first move.
- 35 _____ I worry a lot less than most people do.
- 36 _____ I would never accept a bribe, even if it were very large.
- 37 _____ People have often told me that I have a good imagination.
- 38 _____ I always try to be accurate in my work, even at the expense of time.
- 39 _____ I am usually quite flexible in my opinions when people disagree with me.
- 40 _____ The first thing that I always do in a new place is to make friends.
- 41 _____ I can handle difficult situations without needing emotional support from anyone else.
- 42 _____ I would get a lot of pleasure from owning expensive luxury goods.
- 43 _____ I like people who have unconventional views.
- 44 _____ I make a lot of mistakes because I don't think before I act.
- 45 _____ Most people tend to get angry more quickly than I do.
- 46 _____ Most people are more upbeat and dynamic than I generally am.
- 47 _____ I feel strong emotions when someone close to me is going away for a long time.
- 48 _____ I want people to know that I am an important person of high status.
- 49 _____ I don't think of myself as the artistic or creative type.
- 50 _____ People often call me a perfectionist.
- 51 _____ Even when people make a lot of mistakes, I rarely say anything negative.
- 52 _____ I sometimes feel that I am a worthless person.
- 53 _____ Even in an emergency I wouldn't feel like panicking.
- 54 _____ I wouldn't pretend to like someone just to get that person to do favors for me.
- 55 _____ I find it boring to discuss philosophy.
- 56 _____ I prefer to do whatever comes to mind, rather than stick to a plan.
- 57 _____ When people tell me that I'm wrong, my first reaction is to argue with them.
- 58 _____ When I'm in a group of people, I'm often the one who speaks on behalf of the group.
- 59 _____ I remain unemotional even in situations where most people get very sentimental.
- 60 _____ I'd be tempted to use counterfeit money, if I were sure I could get away with it.

Appendix D

Please answer the following questions prior to completing the questionnaire below.

1. Your age: _____
2. Total number of years teaching: _____
3. Name of child: _____
4. Number of months (approximately) working with child: _____

The Preschool Play Behavior Scale

This questionnaire should be completed by a teacher at the preschool/daycare.

The following scale examines various behaviours that children may engage in during *indoor free play*. Please rate the child on each item and COMPARE HIM/HER TO OTHER CHILDREN OF THE SAME AGE IN THE CLASS. Although it is true that children's behaviours may be quite variable, please try to make general evaluations of the child's 'everyday' behaviours.

1. Talks to other children during play.

1	2	3	4	5
never	hardly ever	sometimes	often	very often

2. Plays by himself/herself, examining an object or toy.

1	2	3	4	5
never	hardly ever	sometimes	often	very often

3. Plays 'rough-and-tumble' with other children.

1	2	3	4	5
never	hardly ever	sometimes	often	very often

4. Takes on the role of onlooker or spectator.

1	2	3	4	5
never	hardly ever	sometimes	often	very often

5. Plays 'make-believe' with other children.

1	2	3	4	5
never	hardly ever	sometimes	often	very often

6. Engages in group play.

1	2	3	4	5
never	hardly ever	sometimes	often	very often

7. Engages in pretend play by himself/herself.

1	2	3	4	5
never	hardly ever	sometimes	often	very often

8. Plays alone, building things with blocks and/or other toys.

1	2	3	4	5
never	hardly ever	sometimes	often	very often

9. Wanders around aimlessly.

1	2	3	4	5
never	hardly ever	sometimes	often	very often

10. Plays in groups *with* (not just beside) other children.

1	2	3	4	5
never	hardly ever	sometimes	often	very often

11. Plays 'make-believe', but not with other children.

1	2	3	4	5
never	hardly ever	sometimes	often	very often

12. Watches, or listens to other children without trying to join in.

1	2	3	4	5
never	hardly ever	sometimes	often	very often

13. Engages in playful/mock fighting with other children.

1	2	3	4	5
never	hardly ever	sometimes	often	very often

14. Plays by himself/herself, drawing, painting pictures or doing puzzles.

1	2	3	4	5
never	hardly ever	sometimes	often	very often

15. Engages in active conversations with other children during play.

1	2	3	4	5
never	hardly ever	sometimes	often	very often

16. Engages in pretend play with other children.

1	2	3	4	5
never	hardly ever	sometimes	often	very often

17. Plays alone, exploring toys or objects, trying to figure out how they work.

1	2	3	4	5
never	hardly ever	sometimes	often	very often

18. Remains alone and unoccupied, perhaps staring off into space.

1	2	3	4	5
never	hardly ever	sometimes	often	very often

Appendix E

Parent Informed Consent



Title of Study: The role of parent personality and attribution style on preschool children's play behaviour
Institutional Affiliation: Mount Saint Vincent University
Name of Supervisor: Dr. Daniel Séguin
Name of Researcher: Rachel Lathrop

This consent form provides an overview of what the current research is about and what participation in this study entails. Further detail about this study can be provided by contacting the supervising researcher, Dr. Daniel Séguin at 902-457-6460 or via e-mail at daniel.seguin@msvu.ca or the Master's research student at rachel.lathrop@msvu.ca. Please read the following information carefully.

The aim of this study is to examine parent personality type and attribution style and how these two factors interact to predict child social play behaviour. In this study, you will be asked to complete a 3-part document. You will first be asked to fill out a brief demographics questionnaire followed by a personality inventory questionnaire assessing your personality type. The last questionnaire will examine how you attribute hypothetical child behaviour imagining each scenario as if it were talking about your own child.

You may find that the questions you will be presented with are of a personal nature and if at any point you are uncomfortable, you are free to opt-out from answering. The data from this study will remain confidential with a code being attached to your responses. The research material from this study will be kept on a password-protected computer. The results of this study will be included in a thesis paper written by the Master's student and presented at a thesis defense in the spring of 2014. At no point in time will any one parent's results be reported. Only average scores across parent responses will be presented.

By taking part in this study you are enhancing knowledge in current areas of study of psychology at Mount Saint Vincent University. After completing the study if you have any questions or concerns as to how this study is being conducted you may contact the Supervisor of this research, Dr. Daniel Séguin at 902-457-6460 or via e-mail at daniel.seguin@msvu.ca. If you wish to speak with someone not involved in the study, you may contact the Vice-Chair of the University Research Ethics Board c/o MSVU Research office at 902-457-6350 or via e-mail at research@msvu.ca.

Signing below indicates that you have read the informed consent and understand what is required of you as a participant in this study. In no way does this waive your legal rights nor release the investigators, sponsors or involved institutions from their legal and professional responsibilities. You are free to not answer specific items or questions. You are free to withdraw from the study at any time. If you decide to withdraw but still consent to your partial data being used, the data deemed useful to the study will be retained and stored on an electronic drive, available only to the researcher. If you withdraw and do not want your information to be used then all of your data will be destroyed. Your continued participation should be as informed as your initial consent.

Please Note:

You may choose to complete a paper copy of the questionnaire and return it at your earliest convenience OR alternatively, you may choose to have an electronic copy of the questionnaire sent to your e-mail address for you to complete using LimeSurvey, a web application hosted by Mount Saint Vincent University. In either case, your information will be kept confidential and will only be seen by the researcher.

I give my consent:

Name (printed) of Study Participant

Signature of Study Participant

Name of my child: _____

Name of my child's daycare teacher: _____

Please check one box:

- I would like to be provided with a hard copy of the questionnaire.

OR

- I would like to complete the questionnaire online. The link to the questionnaire can be sent to me at the following e-mail address:

Please check box if applicable:

- I would like to receive a summary of the results of this research study (provide your e-mail address below if you have not already done so above)

E-mail address: _____

Appendix F

Childcare Provider / Teacher Informed Consent



Title of Study: The role of parent personality and attribution style on preschool children's play behaviour

Institutional Affiliation: Mount Saint Vincent University

Name of Supervisor: Dr. Daniel Séguin

Name of Researcher: Rachel Lathrop

This consent form provides an overview of what the current research is about and what participation in this study entails. Further detail about this study can be obtained by contacting the supervising researcher, Dr. Daniel Séguin at 902-457-6460 or via e-mail at daniel.seguin@msvu.ca or the Master's research student at rachel.lathrop@msvu.ca. Please read the following information carefully.

The purpose of this study is to examine parent personality type and attribution style and how these two factors interact to predict child social play behaviour. In this study you will be asked to complete one document. You will be asked to fill out preschool play behaviour scale for a particular child or children. At the top of this scale, you will be asked to complete a couple of demographic questions about yourself.

At any point, you are free to opt-out from answering any of the questions asked. The data from this study will remain confidential with a code being attached to your responses. The research material from this study will be kept on a password-protected computer. The results of this study will be included in a thesis paper written by the Master's student and presented at a thesis defense in the spring of 2014. At no point in time will any one teacher's responses be reported. Only average scores across teacher responses will be presented.

By taking part in this study you are enhancing knowledge in current areas of study of psychology at Mount Saint Vincent University. After completing the study if you have any questions or concerns as to how this study is being conducted you may contact the Supervisor of this research, Dr. Daniel Séguin at 902-457-6460 or via e-mail at daniel.seguin@msvu.ca. If you wish to speak with someone not involved in the study, you may contact the Vice-Chair of the University Research Ethics Board c/o MSVU Research office at 902-457-6350 or via e-mail at research@msvu.ca.

Signing below indicates that you have read the informed consent and understand what is required of you as a participant in this study. In no way does this waive your legal rights nor release the investigators, sponsors or involved institutions from their legal and professional responsibilities. You are free to not answer specific items or questions. You are free to withdraw from the study at any time. If you decide to withdraw but still consent to your partial data being used, the data deemed useful to the study will be retained and stored on an electronic drive, available only to the researcher. If you withdraw and do not want your information to be used then all of your data will be destroyed. Your continued participation should be as informed as your initial consent.

Please Note:

You may choose to complete a paper copy of the questionnaire and return it at your earliest convenience OR alternatively, you may choose to have an electronic copy of the questionnaire sent to your e-mail address for you to complete through LimeSurvey, a web application hosted by Mount Saint Vincent University. In either case, your information will be kept confidential and will only be seen by the researcher.

I give my consent:

Name (printed) of Study Participant

Signature of Study Participant

Please check one box:

I would like to be provided with a hard copy of the questionnaire.

OR

I would like to complete the questionnaire online. The link to the questionnaire can be sent to me at the following e-mail address:

Please check box if applicable:

I would like to receive a summary of the results of this research study (provide your e-mail address below if you have not already done so above)

E-mail address: _____