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**Attachment Theory and
the Adjustment to School for Young Children with Special Needs**

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ABSTRACT

There is increasing evidence that a positive start to school sets the child up for continued positive educational experiences and future life opportunities (Dockett & Perry, 2007). In an inclusive era, it is important to investigate the processes that promote the success of inclusion. This study set out, first, to explore the factors associated with the transition to school for a heterogeneous sample of young children with special needs. Second, it aimed to examine the association between children's relationships with parents and their relationships at school as part of their longer term school adjustment. It also set out to explore the patterns of children's interactions with their chief caregivers. A mixed method design was used, employing three survey-like measures and semi-structured interviews. Additionally, the case studies of seven of the children are described. The participants were 17 children with a variety of special needs, their parents, teachers, teacher aides, and peers.

Several children were determined to be well adjusted on the basis of their relationships, while others were deemed to be less so. In the transition phase, factors that contributed to successful adjustment included high levels of communication and collaboration between families and schools before and after the child's school entry. Teachers contributed to successful adjustment by using differentiation practices. Child characteristics played a role by influencing patterns of interactions and the nature of relationships between children and other participants. Further, the nature of relationships (whether they were positive or negative) between children and other participants influenced the nature of relationships between families and schools. Finally, the nature of interactions and relationships influenced both the transition and adjustment to school.

No statistically significant associations were found between children's relationships with parents and their relationships with teachers, teacher aides, or peers. It is likely that the lack of statistically significant associations between the three sets of relationships was due to the insufficient statistical power resulting from the small sample size, rather than to any lack of linkages between these relationships.

These results are discussed in terms of implications for educational practice and for future research directions. Recommendations for practice include high levels of ongoing

communication and collaboration between families, schools, and other professionals before and after school entry. Other suggestions include the drawing up of a national, mandatory policy for the school transition of young atypical children, incorporating the assembling of a collaborative team of personnel, holding transition meetings to which all the stakeholders in the child's life are invited, and allowing multiple opportunities for the child and their family to visit their new school setting prior to starting. Recommendations for future research include interviewing the target children about their own transition, and making direct observations of the interactions of young children with special needs.

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CHAPTER ONE

INTRODUCTION

This study examines three inter-related areas of the transition and adjustment to school for young children with special needs. First, it assesses the attachment security of these children at home with parents and how this may affect their relationships at school with teachers, teacher aides, and with peers. Second, it examines how the patterns of interactions of these children and their caregivers may contribute to their attachment behaviour. Third, it focuses on examining the factors and processes that occur during the transition to school, and on how the patterns of interactions and relationships between the participants may impact on the adjustment process. This study examines both the shorter term transition phase, that is, the period before, during and immediately after the child's school entry, and the longer term adjustment period, that is, the months following the transition phase.

1.1 Rationale

Any transition that occurs in the life of a child, adolescent or adult can prove to be a time of anxiety, vulnerability, or even stress for that person, whether this transition be a normative or a non-normative one (Cowan, 1991). The transition to school at age five is a normative and yet quite significant process that every child must go through. For many children, the start to their school career can be positive and exciting while, for others, it can be both challenging and disconcerting (Dockett & Perry, 2007). However, for the families of children with special needs, starting school involves some rather more complex issues and can prove to be a time of some stress and difficulty. Thus, it is important to examine the factors and processes involved in the transition and adjustment to school for young children with special needs and their families.

There is increasing evidence that a positive start to school sets the child up for continued positive educational experiences and future life opportunities (Dockett & Perry, 2007). Other evidence suggests that children's academic and social competence are determined in the early stages of the school transition (Kupersmidt, Coie, & Dodge, 1990). Still further evidence suggests that family factors occurring prior to the transition are related to later school adjustment (Cowan, Cowan, Schultz, & Heming, 1994). The family as a social

system impacts on the child and his or her adjustment to school, but the parent-child dyadic relationship probably has the greatest influence (Barth & Parke, 1996). For this reason, it is important to examine the processes involved in children's school adjustment. In particular, it would be valuable to investigate any family factors, such as the parent-child relationship, that exist at the time of the child's entry to school and that might impact on their adaptation.

The concept of attachment relationships (Bowlby, 1969/1982) that children form with their primary caregivers has been extensively investigated, not the least in the field of high risk or atypical children. However, there appears to be a dearth of research on attachment relationships in children with certain types of special needs, particularly those with developmental delays (Al-Yagon, 2003) and those with visual impairments. Furthermore, that which has taken place has not always employed standard measures for assessing attachment security. In addition, there also appears to be a paucity of studies on attachment security in heterogeneous samples, and this will be the focus of this current study. This implies gaps in the literature, and this study will attempt to go some way to address these gaps.

Some researchers have shown that teachers' willingness to include students with special needs in their regular classes is critical for the success of the inclusion movement (for example, Hasazi, Johnston, Liggett, & Schattman, 1994). However, many studies have shown that teachers' attitudes to inclusion have traditionally been quite poor (for example, Soodak, Podell, & Lehman, 1998). On the other hand, the study of Bourke and colleagues (2002), which was a more recent study set in the New Zealand context, found that teachers' attitudes towards the inclusion of students with special needs had improved as a result of the professional development strand of *Special Education 2000* (Ministry of Education, 1996). Furthermore, many authors have discussed the poor acceptance of children with special needs by their typically-developing peers (for example, Yu, Zhang, & Yan, 2005). In addition, other authors have recognised that children with special needs have poorer social skills than their typically-developing counterparts (for example, Guralnick, Hammond, Connor, & Neville, 2006). Taken collectively, this research would suggest that an important goal for both professionals working with students with special needs and

disability researchers alike would be to improve both the attitudes of teachers and the peer relationships of children with special needs mainstreamed in regular classes.

Some research (for example, De Mulder, Denham, Schmidt, & Mitchell, 2000) has found associations between children's attachment relationships with parents and their relationships with teachers at school and preschool. Other studies (for example, Moss, Parent, Gosselin, Rousseau, & St Laurent, 1996) have indicated associations between child attachment and relationships with peers. Additional research (for example, Howes, Hamilton, & Matheson, 1994) has found associations between child-teacher and child-peer relationships. Some studies (for example, Cohn, 1990; Granot & Mayseless, 2001) have concurrently examined these three sets of relationships, that is, children's relationships with parents, with teachers, and with peers in the context of the regular classroom. Thus, these studies have examined similar issues to this current study as part of the longer term adjustment to school. However, the above studies have been conducted in samples of typically-developing children and, to date, it would appear that no similar research has been conducted in samples of children with special needs. Therefore, this current study will attempt to address this gap.

In her discussion of attachment security in atypical children, Hanson (1996a) speculated that young children with special needs, when compared with their typically-developing counterparts, may be less interactive and responsive with their caregivers, and may provide fewer or different interactional cues. Thus, these children may prove to be less competent as interactive partners. The nature of interactions between children and their primary caregivers have important implications for the formation of attachment relationships with these caregivers. Thus, one of the issues that this study will examine is the strategies that children with special needs and their caregivers use when interacting with each other.

In addition to examining children's relationships as part of their longer term adjustment to school, this study will also examine the shorter term phase of children's transition to school. Although other studies have been conducted in other countries (for example, Fowler, Schwartz, & Atwater, 1991; La Paro, Pianta, & Cox, 2000), similar research has been less common in New Zealand, and that which has taken place has tended to be somewhat smaller in nature (for example, Blundell, 1998; Bourne, 2007; Wartmann, 2000).

Thus, this study will investigate the factors and processes involved in the shorter term of the transition to school for a sample of young children with special needs.

1.2 Thesis organisation

This thesis is organised into six chapters. Following this introductory chapter, Chapter Two presents and summarises the most significant literature related to this topic. The chapter begins by describing and discussing the background theory which forms the foundation of this study. This includes a description of Bronfenbrenner's (1979) ecological systems model, as the nested systems of this model can clearly be seen in this current study. In this model, the developing person is embedded in a series of environmental systems that interact with one another and with the individual to influence development. One of the main focuses of this study is children's attachment relationships with parents and their relationships at school with teachers, teacher aides and peers and, thus, a summary of John Bowlby's (1969/1982) theory of attachment is presented. This includes a sub-section on attachment relationships in children with special needs, with a focus on children with visual impairments, with Autism Spectrum Disorder (ASD), and those with developmental delays, as these are the most frequently-occurring disability types in this current sample. A further sub-section examines the issue of the strategies used by children with special needs when interacting with their primary caregivers, and the strategies these caregivers use when interacting with their special needs children, and the implications this may have for the development of attachment security.

The next major section of the literature review discusses the literature surrounding the adjustment to school. This incorporates both the shorter term school transition phase, that is, the period immediately before and following the child's entry to school, and the longer term school adjustment phase, that is, the months following the shorter term of the transition. This includes sub-sections on school transitions for children with special needs, inter-personal relationships and family factors, relationships with teachers, and relationships with peers. A further sub-section discusses studies which examine the association between children's attachment relationships at home with parents and their relationships at school with teachers and peers. The penultimate section of this chapter

examines the role that child characteristics play in the transition and adjustment to school for children with special needs.

Chapter Three presents the methodology of this study. This explains that a mixed method design was used, thus permitting the best possible features of quantitative and qualitative methodologies. The first major section of this chapter describes the participants, including a detailed description of the characteristics of the target children. The second major section describes the instruments used in this study, and the third major section explains the procedures employed. The final section in Chapter Three explores the analysis of the data.

This is followed by two chapters which, together, both present and discuss the results of this research. Chapter Four presents the results from the surveys and interviews, and this will incorporate a discussion of the findings. These results are presented in three sections to answer the three research questions. Each of these three sections is divided into a number of sub-sections. Chapter Five also presents and discusses the results from this study, but focuses solely on the case studies of seven of the target children. These case studies were selected to represent those children who were viewed as most successfully adjusted to school and those children who were viewed as less so.

Chapter Six, the Conclusion chapter, summarises the key findings from Chapters Four and Five, and discusses the most salient points. In addition, this chapter includes a section on the implications for educational practice in the transition and adjustment to school for young children with special needs. The chapter also incorporates a section on suggestions for future research directions.

CHAPTER TWO

REVIEW OF THE LITERATURE

The focus of this research is the adjustment to school for young children with special needs. This study examines both the factors and processes involved in the shorter term transition phase, and the relationships formed with parents, teachers, teacher aides, and peers as part of the longer term adjustment period. As this study can be seen to be embedded within Bronfenbrenner's (1979) ecological systems model, this chapter will begin by discussing Bronfenbrenner's theory. The chapter will then move on to discuss Bowlby's (1969/1982) theory of attachment as part of the theoretical framework underpinning the relationships formed by the children of this study. Following the presentation of the background theory, the chapter will then move on to examine how attachment theory can be applied to children with special needs.

This will be followed by a discussion of the processes involved in the shorter term transition to school, including a section on school transitions for young children with special needs. The chapter will then move on to examine the processes and factors involved in the longer term adjustment phase. This will include a discussion of child relationships with teachers, including a section on teachers' attitudes to the inclusion of children with special needs in regular classes. Next comes a section on child relationships with peers, and this will include a section on the peer relationships of children with special needs. The section on school adjustment will conclude by reviewing studies which examined all three sets of relationships, that is, children's relationships with parents, teachers and peers, particularly in the context of school adjustment. Finally, this review will discuss the impact of child characteristics on the relationships children form and on their adjustment to school, and the chapter will conclude with a summary of the main points presented in this review.

2.1 Background theory

Bronfenbrenner's (1979) ecological systems model provides a useful theoretical framework from which to view this study, as the nested systems of this model can clearly be seen in this current study. In this model, the developing person is embedded in a series of environmental systems that interact with one another and with the individual to influence

development. This theory provides a detailed examination of environmental influences, and explains how a person's biological characteristics interact with environmental forces to shape development. In Bronfenbrenner's model, the environment is represented as a set of nested structures, each inside the next, with the developing individual (for example, the child) at the centre of and embedded in these environmental systems, ranging from immediate settings to more remote contexts. Each of these systems interacts with the others and with the individual to influence development in important ways.

At the centre of these overlapping systems is the microsystem, which is the activities and interactions that occur in the child's immediate surroundings. This includes the family, early childhood settings and, eventually, school. Children's biological and social characteristics, habits, and temperament influence those around them, as well as being influenced by those around them. Next comes the mesosystem, which is the connections or inter-relationships among the child's various microsystems, such as home, preschool or school, and peer groups. Bronfenbrenner (1986) suggests that development is likely to be optimised by strong, supportive links between microsystems. These two systems have the most relevance for this current study.

Third comes exosystems, which include settings that children seldom enter, but are contexts in which their parents live their lives, such as the parents' workplaces and their social networks. Thus, exosystems may not impact directly on children, but have the potential to indirectly influence their lives. Fourth, the macrosystem is the cultural, sub-cultural, or social class contexts in which microsystems, mesosystems, and exosystems are embedded. This is really the broad, over-arching ideology that dictates values, such as how children should be treated and what they should be taught, among other things (Shaffer, 1999). These values differ across cultures, sub-cultures, and social classes, and may affect them directly or indirectly. Finally, the chronosystem is a temporal dimension, emphasising the changes within the child or in any of the ecological contexts of development, affecting the direction development is likely to take. The chronosystem examines the transitions that occur over the individual's lifespan.

Bronfenbrenner's (1979) ecological systems theory provides a useful theoretical foundation for this current study. First, this study examines children's development in the naturalistic

settings of two of the child's microsystems, that is, the home and the school. Second, it involves the mesosystem connections and inter-relationships between the children's microsystems of home and school. Third, it examines the transition to school, one of many transitions of the chronosystem that the individual encounters across the lifespan.

In addition, this study will examine the children's relationships in two of their microsystems; their attachment relationships at home with parents, and their relationships at school with teachers, teacher aides and peers. On this basis, it is important, in considering the background theory of this study, to look more closely at attachment theory.

2.2 Attachment theory

2.2.1 Development of attachment theory and attachment classifications

Attachment can be defined as the affectional bond or tie that an infant forms between himself or herself and his or her primary caregivers (Ainsworth, Blehar, Waters, & Wall, 1978). Attachment theory was originally conceptualised by John Bowlby (1969/1982) who suggested that, during the first year of life, infants display a range of behaviours with respect to their caregivers, and these responses, such as sucking, clinging, crying, smiling, and following, are all innate instincts which are part of the infant's goal to keep the primary caregiver nearby. He saw these behaviour patterns as an adaptation for survival that are enriched and developed by the responses encountered in the environment. He argued that attachment is a reciprocal process in that not only does the child become attached to the parent, but also the parent becomes attached to the child.

Bowlby (1969/1982) claimed that attachment really begins to develop when a child first learns to recognise his or her mother around four months of age. For this to occur, perceptual discrimination is necessary, and this usually proceeds through sensory input, particularly through the discrimination of visual and auditory stimuli. With this recognition of the familiar caregiver, the infant begins to track the mother both visually and aurally. The attachment behavioural system becomes gradually integrated and directed towards a single person, known as the attachment figure. The child's primary attachment figure is usually, but not always, the mother.

At the core of attachment for human infants is the regulation of emotional experiences (Carlson, 1998), including the experiences of fear, fatigue, illness, threat, or stress. Bowlby (1969/1982) saw attachment as complementary to exploration, with exploratory behaviours ceasing when attachment behaviours are activated through one of the above emotional experiences. When attachment is achieved through proximity or felt security, attachment behaviours cease and exploration begins again. The child uses the attachment figure as a secure base from which to explore, occasionally returning to 'touch base' with that attachment figure. So, when a parent is supportive, encouraging and cooperative, a child feels securely attached and confident to explore his or her environment.

Bowlby (1973) asserted that there is a cognitive aspect to his theory of attachment, and that is the notion of internal working models. These are expectations of the world, of relationships, and of people that are based on early experiences in the child's first relationships with attachment figures, and these influence perception and behaviour in subsequent situations (Chinitz, 1995). Securely-attached children build inner working models of parents as emotionally available, responsive and respectful of the child's need for independent exploration, and this leads to a complementary internal model for the child of self as worthy and competent. On the other hand, insecurely-attached children are likely to develop an inner working model of parents as rejecting or interfering with exploration, and this is likely to lead to an internal model of self as devalued and incompetent (Bretherton, 1995). Bowlby also argued that the attachment models of anxious or insecure children become rigidified or distorted. The older securely-attached child is able to recognise that some people are unwilling to befriend him or her, but insecurely-attached children may not be able to recognise that another person is available to them or to love them. This rigid internal working model means that the child who expects to be rejected can be mistrustful, ignoring friendly advances, and appears stand-offish, causing others to remove themselves from him or her.

Bowlby's (1969/1982) concept of attachment was validated by the empirical work of Mary Ainsworth and her associates (Ainsworth et al, 1978). In the 1960s, in order to assess individual differences in the quality of infants' attachment relationships, Ainsworth and her colleagues devised a laboratory procedure known as the Strange Situation (SS). This

procedure comprised eight three-minute episodes of separation and reunion involving not only the mother and infant, but also the presence of a stranger during some of these episodes. The laboratory setting of the SS has been criticised as an unnatural context in which to observe children's attachment behaviours (see Main & Solomon, 1986), but these laboratory assessments were strengthened by extensive observations in the homes of the mother-child dyads of Ainsworth's sample during the first year of the infant's life. As a result of combining her home observations with her observations in the SS, Ainsworth discovered three categories of attachment security, one secure and two insecure or anxious (see Ainsworth et al, 1978). The securely-attached child (Type B) actively explores, is visibly upset by separation, warmly greets the mother upon reunion and may seek physical contact with her, but is easily comforted, and is outgoing with strangers. The insecure avoidant child (Type A) shows little distress when separated from the mother, upon reunion with the mother will turn away and continue to ignore her, even when she tries to gain his or her attention, and is quite sociable with strangers, although sometimes also ignores or avoids them. The insecure ambivalent/resistant child (Type C) stays close to the mother while exploring very little, becomes very distressed upon separation, is ambivalent when she returns, will remain near her but also seems angry at her for having left them, will resist physical contact with her, and is quite wary of strangers, even in the presence of the mother.

While Ainsworth's three original categories are recognised as varying in degrees of security, they are, nevertheless, all regarded as organised in their strategies for managing stressful circumstances, and should really be regarded as individual differences within the normal range (Main & Solomon, 1990). Since the mid-1980s, attachment researchers have increasingly focused on high-risk families, finding that the behaviour of many infants did not fit any of the three traditional organised patterns of attachment. This led to the development of a new category, that of disorganised/disoriented attachment (Type D) (Main & Solomon, 1986, 1990). In these two studies, Main and her colleagues analysed the video-taped Strange Situations of 200 infants whose behaviour had previously been unclassifiable according to the three-category system, but who would, nevertheless, normally have been forced into one of the three original categories. Children were placed in the Type D category when they responded to caregivers in contradictory, disorganised

ways, or were disoriented with respect to their environment. At the same time, there may be evidence of one of the other patterns of attachment underlying this. The authors concluded that their findings confirmed the need for this category of attachment, not only in high-risk samples, but also in middle-class samples. A meta-analysis by Van Ijzendoorn and his colleagues (Van Ijzendoorn, Dijkstra, & Bus, 1995) showed that, in normal populations, 55 percent of children could be classified as secure, 23 percent as avoidant, eight percent as ambivalent, and 15 percent as disorganised.

Studies of attachment security in maltreated children have shown that Type D (disorganised) attachment is highly correlated with maltreatment in these children at the hands of their primary attachment figures (Cicchetti & Barnett, 1991; Lynch & Cicchetti, 1992; Van Ijzendoorn, Schuengel, & Bakermans-Kranenburg, 1999). However, attachment security is thought to be relationship-specific, and if a child displays a disorganised pattern of attachment with one parent, he or she is not likely to exhibit Type D attachment with the other (Main & Solomon, 1990; Van Ijzendoorn et al., 1999). A study by Main and Hesse (1990), using the Adult Attachment Interview (AAI), examined the attachment histories of adults with their own parents, and the attachment relationships of these adults with their children. The results revealed a link between the unresolved loss of an attachment figure or other attachment-related trauma, as experienced by the adults, and the disorganised pattern of attachment in their children. This finding, along with the findings surrounding maltreated children, led Main and Hesse to proclaim that many parents may behave in either a frightened or a frightening manner towards their children. Since the caregiver is usually the solution to the child's stress or alarm but is, at the same time, manifesting frightened or frightening behaviour themselves, the attachment figure becomes at once the source of, and the solution to, the child's alarm (Main & Hesse).

The meta-analysis of Van Ijzendoorn and associates (1999) provided an extensive summary and overview of 80 studies of the disorganised pattern of attachment. Their results showed that, in normal, middle-class populations, about 15 percent of children develop this pattern of attachment, while in other socio-economic status (SES) samples and in clinical groups, this percentage may be two or even three times higher. In an earlier meta-analysis which included studies with and without the Type D attachment classification, Van Ijzendoorn

and his colleagues (Van Ijzendoorn, Goldberg, Kroonenberg, & Frenkel, 1992) examined 34 studies which had used clinical samples. These researchers first established a baseline of 21 North American studies of normative groups against which their clinical studies could be evaluated. The clinical samples were characterised by either maternal problems, that is, conditions which interfered with adult responsiveness to their child, such as mental illness, or child problems, that is, conditions which limited, impaired or distorted the child's behaviour, such as autism. Results showed that those groups with maternal problems displayed attachment classification distributions which were highly divergent from normal distribution patterns, while those groups with a primary identification of child problems showed distributions very similar to those of normative samples. The authors concluded that the mother plays a more significant role than does the child in moulding the quality of the mother-child attachment relationship.

2.2.2 Attachment in older children (three to five year olds)

Bowlby (1969/1982) saw attachment as developing through several phases during the preschool years. During this time, the child becomes more autonomous and self-reliant, and makes increasingly distant forays from the attachment figure as he or she explores the environment, but is still vulnerable (Marvin & Britner, 1999). Some three- and four-year-olds may still become mildly distressed when separated from the attachment figure, but are more willing to be left with friendly adults for brief periods. Bowlby (1969/1982) believed that, around the age of four years, children enter the final phase of the development of attachment. By age four, children and attachment figures enter a "goal-corrected partnership" where they are able to negotiate and make plans together, particularly in relation to separation. Children are now much less dependent on physical proximity and contact with their attachment figures to maintain a sense of security. They are also increasingly comfortable spending time with peers and adults outside the family (Marvin & Britner).

Additionally, by age four, children are able to think and converse about the feelings, plans and goals of others with whom they are interacting. Children of this age have more accurate and sophisticated internal working models of both their own and others' behaviour, and of implicit and explicit rules for social behaviour and interaction (Marvin & Britner, 1999).

By this age, most children have an awareness of their own and others' perspectives. In conjunction with their more fully-developed communication and information-processing skills, children of this age will maintain a close tie to the attachment figure, while increasingly moving away and spending more time with peers, teachers and others. However, under conditions of distress, threat or fear, even much older children will return to their attachment figures as a haven of safety, and this will continue into middle childhood (Marvin & Britner).

The next few sub-sections will focus on discussing the literature surrounding attachment security in special populations. These sub-sections are particularly pertinent to this current study, and priority will be given to the types of disability most commonly occurring in the children of this current study.

2.2.3 Attachment in children with special needs

This section will focus on some of the more general aspects of the literature surrounding attachment in children with special needs. There appears to be a paucity of studies on attachment security in heterogeneous samples. Therefore, this review will discuss the literature on attachment in the disability groups most frequently occurring in this current study, that is, visual impairments, Autism Spectrum Disorder, and developmental delays.

There are a number of factors that place infants at risk for atypical development, and these include genetic and chromosomal abnormalities, biological factors such as prenatal complications, teratogens and birth complications, and environmental factors such as poverty or maltreatment (Hanson, 1996b). Some children are at multiple risk for genetic, biological and environmental factors. The number and magnitude of these risk factors may have a significant influence on developmental outcomes. Some factors have a direct impact on the child's development and may be either quite damaging, as in the case of teratogens, or may act as a protective buffer, as in the case of supportive caregiving. Other factors have a more indirect influence, for example, support from a partner or friend for the primary caregiver (Hanson).

Main and Hesse's (1990) findings on unresolved attachment-related loss or trauma in parents and the link with the disorganised pattern of attachment in their children have

implications for the study of attachment security in children with special needs. A few studies (for example, Button, Pianta, & Marvin, 2001; Marvin & Pianta, 1996; Pianta, Marvin, & Morog, 1999) have examined the effects on parents of the diagnosis of their child's disability and on their attachment relationship with that child. The receiving of their child's diagnosis of a disability can often be a point of crisis for most or all parents (Marvin & Pianta, 1996), and this diagnosis may often be followed by a period of grieving. However, Marvin and Pianta suggest that it is the lack of resolution of this traumatic experience, rather than the trauma itself, that is most closely related to any subsequent problems in the attachment relationship. These authors examined attachment security and resolution of diagnosis in 70 mothers of children with cerebral palsy, and the results showed that the parents' resolution versus non-resolution of their child's diagnosis was strongly associated with security versus insecurity of attachment. Furthermore, Button et al (2001) showed that the longer the time since the diagnosis, the greater the pain for the mothers in their representations of their relationships with their children with special needs. Unresolved attachment-related loss or trauma may impact on the quality of the caregiving of the primary attachment figure, so fostering an insecure type of attachment with their children. Researchers have found a strong association between unresolved trauma in parents and Type D attachment in their children (see Ainsworth & Eichberg, 1991; Main & Hesse, 1990).

In an early review of the literature on attachment in children at risk, Goldberg (1990) found few differences in attachment security when compared with studies of typically-developing (TD) children. In many of the studies reviewed by Goldberg, scoring had been adapted or was difficult due to the children's special needs or behavioural differences. The distribution of attachment patterns was shown to be similar to that of normative groups, although some did find a greater degree of insecurity of attachment. As discussed earlier, a meta-analysis by Van Ijzendoorn and his colleagues (Van Ijzendoorn et al., 1992) of attachment security in clinical samples of children, including those with autism, revealed that the distribution of patterns of attachment was very similar to that of normative samples. On the other hand, there are a number of studies of attachment security in children with special needs which have found a greater proportion of attachment insecurity, particularly the Type D (disorganised) pattern (for example, Ganiban, Barnett, & Cicchetti, 2000; Goldberg, 1997;

Moran, Pederson, Pettit, & Krupka, 1992; Munson, McMahon, & Spieker, 2001; Vaughn et al., 1994).

Attachment in children with visual impairments

Sensory impairments include both hearing loss and visual impairment. There appears to have been little research on attachment security in children with sensory impairments (see also Hadadian, 1995), and much of what has been conducted to date has not always used traditional measures for assessing attachment security. Bowlby (1969/1982) believed that attachment begins to develop when a child first learns to recognise his or her mother around four months of age and, for this to occur, perceptual discrimination is necessary and usually proceeds through sensory input, particularly through the discrimination of visual and auditory stimuli.

When examining the attachment relationships of visually-impaired infants, it seems that these children are capable of achieving the normal attachment milestones, albeit through a different route (Fraiberg, 1975, 1977). For sighted children, the development of attachment relationships occurs with the mediation of vision and, in particular, with the development of affective cues that the child is able to see, such as differential smiling and the discrimination of the mother from strangers. For blind children, these affective visual cues are missing, and they learn to recognise familiar people through the sound of their voice or a familiar embrace (Fraiberg, 1977). Tactile preference in the blind infant begins in the first few months of age. The blind infant progressively adapts his or her hand as an organ for maintaining contact with interactional partners and, later, for fine discriminations and greater intimacy with attachment figures. Fraiberg intensively observed a sample of blind children, and these blind infants all showed evidence of recognising their mothers through this method at ages ranging from five to eight months, corresponding to sighted babies' visual recognition of mothers around the middle of the first year of life (Fraiberg, 1977).

Stranger avoidance and fear emerged in this blind sample in the age range seven to 15 months for nine out of the ten infants. Separation protest and distress first occurred in this sample in the age period ten to 19 months, that is, almost six months later than onset of separation anxiety in sighted babies. Fraiberg suggested that, for both sighted and visually-

impaired infants, separation anxiety occurs with the development of object permanence (Fraiberg, 1975). In Fraiberg's sample, nine out of the ten infants displayed evidence of secure attachments, and this author concluded that visually-impaired children are just as capable as sighted children of forming attachment relationships with caregivers, albeit somewhat later in age than TD children (Fraiberg, 1977). As this very early work of Fraiberg's preceded the designing of most of the traditional attachment assessment procedures, such as the SS (Ainsworth et al, 1978) or the Attachment Q-Sort (AQS) (Waters & Deane, 1985), assessment of attachment security in this blind sample was based on naturalistic observations in the home. This makes it difficult to compare these results with those of studies of TD samples.

In an unpublished doctoral dissertation, Friedman (1986) assessed the attachment relationships of a sample of 15 infants with visual impairments with their mothers. This author found that a high proportion of her sample ($N = 8$) could be classified as disorganised or Type D in their attachment relationships with their mothers. She also found that mothers adapted to the sensory limitations of their children, with the mothers of the more severely visually-impaired children being more responsive to their children's initiations. Additionally, she found that mothers' representations of their attachment histories with their own parents, rather than the severity of the children's visual impairments, were most significantly associated with the children's security of attachment with their mothers. This author concluded that it is maternal, rather than child, factors that determine the quality of children's attachments with mothers.

In a second doctoral dissertation, Gerra (1992) compared the attachment behaviours of a younger visually-impaired (VI) sample with those of matched sighted comparisons of the same age, and with the attachment behaviours of an older VI sample. The author found significant differences between the attachment behaviours of the younger VI and sighted children, with the sighted children displaying significantly more attachment behaviours than their VI comparisons. There were also significant differences between the attachment behaviours of the younger and older VI groups, and the author put this down to the maturity of the older children. This author concluded that children with visual impairments are quite capable of forming attachment relationships with mothers, although this may occur at a

somewhat later age, and this finding is in line with Fraiberg (1977). Finally, children with visual impairments may display adaptive behaviours that can be misinterpreted by attachment figures, such as remaining quiet to better hear sound cues (Hatton, McWilliam, & Winton, 2002).

In sum, it would appear from these studies that children with visual impairments are quite capable of forming secure attachments with their primary caregivers, but the development of these attachment relationships may be delayed in comparison with TD children.

Attachment in children with Autism Spectrum Disorder

Some authors have claimed that autism is primarily an attachment disorder, and that children with Autism Spectrum Disorder (ASD) are generally unattached to their caregivers (Rogers, Ozonoff, & Maslin-Cole, 1991). On the other hand, the parents of children with ASD have often described them as “affectionate in their own way” or as “upset when mother leaves” (Shapiro, Sherman, Calamari, & Koch, 1987). Some early studies have found evidence of attachment security in young children with ASD, and have shown that the attachment behaviour of these children closely resembles that of children with intellectual disabilities and language delays in clinical comparison groups (for example, Sigman & Mundy, 1989; Sigman & Ungerer, 1984). Thus, some studies (Rutgers, Bakermans-Kranenburg, Van Ijzendoorn, & Van Berckelaer-Onnes, 2004; Willemsen-Swinkels, Bakermans-Kranenburg, Buitelaar, Van Ijzendoorn, & Van Engeland, 2000) have set out to determine whether these children are capable of forming attachment relationships with their primary caregivers.

The study of Willemsen-Swinkels and associates (2000) examined attachment security, social interactions and heart rates in a sample of 32 children with Pervasive Developmental Disorder (PDD), a condition within the autism spectrum. Also, in this sample were 22 children with a developmental language disorder (described as the clinical comparison group) and 28 TD children (described as the normal comparison group). The results indicated that the distribution of attachment patterns in this autistic group did not differ significantly from those of either the clinical or the normal comparison groups. The PDD children were not found to have higher rates of Type D (disorganised) attachment than did

matched comparisons unless the PDD was accompanied by an intellectual disability. These authors concluded that autistic children are able to form secure attachment relationships with their primary caregivers, and the disorganised pattern of attachment can be validly assessed in children with ASD.

The meta-analysis of Rutgers and others (2004) examined attachment security in samples with ASD. The results showed that the autistic children were significantly less securely attached than were the TD comparison children. However, the differences between children with ASD and TD children disappeared in those samples where the autistic children had higher levels of mental functioning, or where the children had less severe symptoms of autism. The authors concluded that attachment security is compatible with autism, that is, it can be validly assessed in children with ASD. They also concluded that the co-morbidity of ASD and intellectual disability seem to be significantly associated with attachment security.

In sum, it seems from these studies that children with ASD are just as capable as TD children of developing attachment relationships with caregivers, although the proportions of securely-attached versus insecurely-attached may be affected by the presence of an intellectual disability in these children.

Attachment in children with developmental delays

In reviewing the literature on this topic, there appears to be some variation in defining children with developmental delays. Some studies of children with developmental delays include children with intellectual disabilities, for example, Moran's (Moran et al., 1992) sample included children with Down's Syndrome. Therefore, such studies will be omitted from this review, as they are deemed irrelevant for this current study. However, the study of Al-Yagon (2003) will be included in this review as the sample bears some resemblance to this current sample.

The study of Al-Yagon (2003) examined multiple risk factors, including attachment relationships, in the adaptive functioning of children with mild developmental (but not cognitive) delays who were regarded as being at risk for developing learning disorders. The sample was 145 children aged from 5.0 to 6.5 years at Israeli kindergartens, and their

mothers. Seventy of these children had average intelligence quotient (IQ) levels but had demonstrated delays in one or more of the areas of language, motor or perceptual (that is, visual or auditory), and the other 75 were TD children attending the same kindergartens, and the at risk sample were matched with the TD children by age and gender. One of the factors examined in this study was the mothers' memories of their child's attachment style between the ages of one and three years. The children were not classified into Types A, B, C, and D attachment, rather, they were assessed as either securely or as insecurely attached. The results indicated that, in the at risk group, both gender and temperamental characteristics contributed significantly to mothers' perceptions of their children's attachment style. Boys tended to have a higher proportion of secure attachments than did girls, while those with a difficult temperament tended to show less secure attachments than did those with better temperaments. However, girls in this sample were rated by teachers as better adjusted at school. The author concluded that attachment pattern could be seen as either a risk or a protective factor for developing maladaptive functioning among children with mild developmental delays in this age group.

2.2.4 Children's strategies for interacting with their chief caregivers

When a young child is disabled or at risk for delay, the interactions between them and their caregivers may be disrupted because the child enters the interactional process with a limited or atypical behavioural repertoire (Hanson, 1996a). This author speculates that young children with special needs, when compared with their TD peers, may be less active and responsive in their interactions with caregivers, and may provide fewer or different interactional cues. Thus, these children may prove to be less competent as interactive partners. However, Hanson also goes on to suggest that their parents may be able to adapt to these interactional differences. This author concludes that, on balance, relatively fewer differences in interactions can be observed in dyads where the child has special needs and those where the child is normally developing, and those differences that do occur do not indicate deviance or dysfunctional interactions.

The dyadic interactions of children and their primary caregivers have important implications for the formation of attachment relationships. Hanson (1996a) suggests that when the child has a disability, there is potential for disruption in the interactional

processes in the formation of attachment security between the parent and child. For example, good vision is an integral factor in the ability to smile, the ability to elicit a smile in others, and in the discrimination of familiar versus non-familiar people. Thus, if a child has a severe vision impairment, the development of attachment security and of interactions may be at risk for disruption or delay. Not only does this have the potential to impact on children's attachment security with parents, it also has the potential to affect their relationships with teachers. Thus, this current study will examine the strategies that children with special needs and their caregivers use when interacting with each other.

Some research has indicated that children with sensory impairments may experience difficulties in their one-on-one interactions due to their sensory limitations. For example, Compton and Niemeyer (1994) showed that children with sensory impairments may experience difficulties in both receiving and expressing affection. Children with hearing impairments may not perceive auditory-based affection, such as affectionate words, and may miss the fact that a partner may want to initiate an affectionate exchange (Compton & Niemeyer). Children with visual impairments (VI) may be able to recognise auditory cues, such as an affectionate tone of voice, but may be unable to observe affectionate facial expressions or gestures, such as smiling, in others. Furthermore, they may not themselves understand how to appropriately exhibit these behaviours. Additionally, Fraiberg (1977) argued that the caregivers of children with VI have difficulty reading their children's signals. Because child-caregiver affection is a precursor of child-child affection and interaction, it could be suggested that young children with sensory impairments are at greater risk of negative patterns of child-peer interactions (Compton & Niemeyer, 1994). Moreover, Nagel (2005) asserted that, because most social skills are learned through observations and visual modelling, children with VI are at risk of missing many of the non-verbal cues, such as facial expressions and body language, that feature in many of people's day-to-day interactions. Thus, it would be important for this current study to examine these aspects of child-caregiver interactions.

2.2.5 Summary

There would appear to be a paucity of studies on attachment in certain disability groups, for example, sensory impairments (Hadadian, 1995), and developmental delays (Al-Yagon,

2003). In addition, those which have taken place have not always employed traditional measures for assessing attachment security, such as the SS or the AQS, making it difficult to compare results with those of TD samples. Furthermore, there also appears to be a paucity of studies on attachment relationships in heterogeneous samples, as with this current study. Nevertheless, it would appear from the studies reviewed here that children with special needs are just as capable as TD children of forming attachment relationships with primary caregivers, although this may occur at a somewhat later age than in TD children.

2.3 The adjustment to school

For most children, starting school marks a major milestone in their short lives (Newman, 1996). It is an important transition in the lives of children, families, educators, and communities (Dockett & Perry, 2004). The transition to school reflects no developmental stage in the child's life but, rather, is marked merely by the attaining of a certain age (Ladd, 1996) and, in New Zealand, this occurs on the child's fifth birthday. It can be a time of pleasurable anticipation and yet also of overwhelming anxiety and uncertainty for both child and parents and, for some parents, the presence of special needs in their child could place additional pressure on this adjustment process. There is increasing evidence that a positive start to school sets the child up for continued positive educational experiences and future life opportunities (Dockett & Perry, 2006, 2007). Children who experience academic and social difficulties early in their school lives are likely to continue having problems throughout their school careers and even throughout their adult lives (Birch & Ladd, 1997). Some families remain resilient through such transition processes and adjust well to their child's entry to school, while other families may prove to be quite vulnerable. What are the factors and processes that aid the adjustment to school for children with special needs, and how do prior relationships with parents affect the relationships they build with teachers, teacher aides and peers once they have started school?

Ladd (1996) argued that, in the past, the term 'school adjustment' had been used too loosely, and that little effort had been made to link school adjustment to processes that occur before and during the transition to school. This author goes on to say that this would be helped by defining school adjustment in terms of the child's successes in coping with

specific challenges or demands that he or she encounters during the transition. Sameroff and Haith (1996) asserted that the definition has expanded from a focus solely on academic achievement to greater attention on the child's ability to understand and function in complex social systems, such as the classroom, and his or her ability to negotiate new social relationships with teachers and peers. On this basis, school adjustment is defined, for the purposes of this current study, as the degree to which children become interested, engaged, comfortable, and successful in the school environment (Ladd, 1996), and school adjustment will be viewed in terms of the relationships children form with teachers, teacher aides, and with peers. School adjustment will be studied over the longer term, that is, the months of the child's first year at school. However, embedded within this adjustment period is the shorter term process of the child's transition, that is, the period immediately before and following the child's first day, and this transition phase will also be examined as part of the longer-term adjustment process. This review will first focus on the factors and processes associated with the shorter term transition period, and will then move on to discuss the longer term adjustment to school in terms of the relationships children form with teachers, teacher aides and peers.

2.3.1 The transition to school

Transitions are processes that unfold over time with outcomes that depend on the nature of the processes (Cowan, 1991). It seems clear that all individuals make transitions from one stage to another throughout the life span. Transitions are a normal part of life, with some representing major milestones, while others pass virtually unnoticed (Fowler et al., 1991). Many transitions can be viewed as normative, such as the transition to school for young children, while others can be viewed as non-normative, such as a death or divorce in the family (Bronfenbrenner, 1986; Cowan, 1991).

Ladd (1996) described the transition to school as a significant ecological shift and a major qualitative environmental discontinuity. This author argued that this transition does not occur gradually in a series of steps when children are ready for school, nor does it correspond to each individual child's developmental achievements. Rather, it is determined solely by chronological age. The move to school sees a substantial change in the child's physical environment. He or she moves from smaller settings with higher adult-child ratios,

such as the home or the early childhood centre, to the larger setting of the primary school, with lower adult-child ratios. Prior to the transition, parents may try to anticipate any difficulties and prepare their children for these challenges before they arise (Ladd).

For most New Zealand children, entry to school marks the time when they move from a primarily home environment to one where they are separated from the family for a large part of the day (Renwick, 1984). Age five becomes the time when the teacher takes over from the parent. In some ways, the teacher becomes “in loco parentis” in the sense that, while the child is in their care, they are responsible for the child’s safety and physical well-being, and this responsibility may be greater when the child has special needs. At the same time, they cannot replace the parent for their child’s emotional support and love (Renwick). Although the study of Renwick is now somewhat dated, it reported on the transition to school from the perspectives of children, parents, early childhood teachers, and first year primary teachers, and is particularly pertinent to the New Zealand scene. The parents of Renwick’s study reported having some ambivalent feelings as their children started school. On the one hand, they are reluctant to give up their protective, possessive relationship with their child and, for these parents, there is also the desire to retain some control (Renwick). This protective possessiveness on the part of the parent and the inability to relinquish such a role may be more accentuated when their child experiences some form of disability. On the other hand, parents know that their child’s success at school may depend partly on his or her independence and autonomy from the family and, at the same time, the teacher is attempting to assert their authority (Renwick).

2.3.2 The transition to school for children with special needs

If the transition to school is a time of nervous anticipation and uncertainty for normally-developing children and their parents, it can be a stressful and daunting time for the families of children with special needs (Wartmann, 2000). Starting formal schooling for the first time can be a significant transition for the families of children with special needs, and can be both complex and emotionally charged for those involved (Render, Yoches, & Coleman, 1994). Many families will face rejection and a confusion of events as they look for a school that will accept and educate their child (Wartmann, 2000). Families need not only to relinquish ties with the familiar early childhood setting, but also to adjust to fewer

opportunities for family involvement in the new school setting, and to more complex academic and social demands placed on the child (Fowler et al, 1991). In addition, parents face new demands, such as adjusting family routines and helping their child make the transition a successful one. Part of the transition process involves families adjusting to outside forces, such as a change in service providers (Rice & O'Brien, 1990) and, in New Zealand, this means quitting the Early Intervention service and accessing new special education services in the compulsory sector, implying additional pressures for these families. While children are adjusting to their new environments, their families are learning to interact with new teachers, new service personnel, and new institutions (La Paro et al., 2000).

Some studies (for example, Chandler, 1993) have recommended providing families with social support as they make the transition to school. Other studies (for example, Bourke et al., 2002; Fowler et al., 1991; La Paro et al., 2000; Newman, 1996) have recommended maintaining continuity and liaison as these children make the transition. In their preschools, children already possess certain skills, routines, behaviours, friends, and a sense of belonging. The transition to primary school may disrupt many of these patterns established in the preschool (Fowler et al). Continuity between the service they are departing from and that which they are entering is crucial for these children, and ensures successful adaptation to the new environment (Fowler et al., 1991; Newman, 1996). Maintaining continuity between the sending programmes, that is, the child's preschool, and the receiving programme, that is, the New Entrant (first year primary) classroom, ensures that families experience the least disruption in their lives and allows children to function more effectively in their new environment. An Australian study of the transition from preschool to school (Newman, 1996) found a lack of communication and continuity between early childhood and school settings.

In New Zealand, the passing of the 1989 Education Act meant that all children in New Zealand aged from five to 19 years are entitled to a free education at any State school. In addition, the *Special Education 2000* (SE 2000) policy (Ministry of Education, 1996) is based on the inclusive model. The aim of this policy is to achieve a world-class inclusive education system that provides learning opportunities of equal quality to all children and

school students (O'Brien & Ryba, 2005). The inclusive model focuses on the contribution of the environment to the learning and behaviour difficulties experienced by individuals (Moore et al., 1999). In an inclusive model, both the individual and the environment are scrutinised for 'goodness of fit' that exists between the individual's instructional needs and the instruction offered. The function of educators is to alter, adapt and improve the environment to meet the needs of all students, rather than to diagnose deficiencies in the individual, as in the medical model (Moore et al.). This inclusive model underpins much of the SE 2000 policy currently being delivered in New Zealand State schools. In addition, the children chosen for this current study were a heterogeneous sample with a wide range of special needs, and were being inclusively educated in regular classes. The heterogeneous nature of this current sample is directly related to what teachers might expect to encounter in their regular classrooms in the inclusive model currently being offered in New Zealand State schools.

In 2002, Bourke and her associates (Bourke et al., 2002) submitted to the New Zealand Government an evaluation and review of New Zealand's SE 2000 policy. They found that some parents and teachers expressed concern about the transition between early childhood settings and primary schools for children with special needs, and these concerns included the liaison between the two types of setting, the exchange of information, and the lack of continuity of assistance. As there was no national strategy for this transition to occur, it was up to teachers, both preschool and primary school, to initiate it. In those instances where liaison and continuity had taken place, there had been positive benefits in the transition process for the children, their parents, and their teachers.

Some studies have recommended careful preparation and planning for the transition (for example, Conn-Powers, Ross-Allen, & Holburn, 1990). Other authors have suggested that the transition involve the collaboration, cooperation and coordination of a team of personnel (for example, Chandler, 1993; Conn-Powers et al., 1990; Fowler et al., 1991; W. L. Fox & Ross-Allen, 2001; Kleinhammer-Tramil & Rosenkoetter, 1994; La Paro et al., 2000; Newman, 1996; Render et al., 1994). Planning for the transition should occur for several reasons, including to ensure continuity between educational settings, to minimise disruptions to families, and to ensure that children are able to function in their New Entrant

classroom. This planning should involve setting goals and identifying problems, and some authors have even recommended developing written transition procedures or a national strategy for the transition (for example, Bourke et al., 2002; Conn-Powers et al., 1990). Some authors have stressed the need for clear communication and information-sharing amongst all the parties involved in the transition process (for example, Fowler et al., 1991; Kleinhammer-Tramil & Rosenkoetter, 1994; Newman, 1996). Conn-Powers and associates (1990) go on to suggest that the planning process should begin with the assembling of a collaborative team of personnel which should include staff from both the child's early childhood centre and the primary school, as well as the family of the child concerned. Cooperation between the preschool and the school is essential (Fowler et al, 1991) and is a particularly integral part of this planning and collaboration process.

Several studies (for example, Chandler, 1993; Conn-Powers et al., 1990; Fowler et al., 1991; W. L. Fox & Ross-Allen, 2001; Hamblin-Wilson & Thurman, 1990; Kleinhammer-Tramil & Rosenkoetter, 1994) have recognised the need for parental involvement and participation in the transition to school for young children with special needs. Parental involvement can be helpful in the six months or so immediately prior to the child entering school, particularly if individualised procedures are used (Chandler, 1993). Enabling families to participate in the process should be both a goal and best practice for professionals to adopt (Conn-Powers et al, 1990). In some cases, it may be the parent who assumes the role of key worker in planning the transition to school for their child. A study by Wolery (1989) suggested involving families in any decision-making. This author also recommended that the child and family be allowed to make visits to the New Entrant classroom they are entering prior to the child starting school. A survey by Hamblin-Wilson and Thurman (1990) of 91 parents of their preparation for, involvement in, and satisfaction with the transition process, found that parents received more support for the transition from early intervention teachers than from the school their child was transitioning into. Satisfaction was greatest for the most educated parents, and for those who were the best prepared for the transition.

Several New Zealand studies (Blundell, 1998; Bourne, 2007; Wartmann, 2000) on school transitions for children with special needs, although mostly small in size, have made similar

findings. For example, some of the most important transition practices recognised by these authors included preparation and planning for the transition that began well beforehand. This planning should include special transition meetings that involve the child and their family, their preschool teachers, their New Entrant teacher or new school principal, and all the other professionals involved in the child's life. The preparation should involve working in collaboration with all the various stakeholders, including the whanau (extended family) (Bourne, 2007) and should include families in the decision-making about the child's transition (Wartmann, 2000). Pre-entry visits to the new primary school were seen as valuable, and these visits should involve familiarising the child with the classroom routines, as well as with the school environment, for example, introducing the child to facilities such as the toilets (Blundell, 1998). In addition, these visits should begin well in advance and take place at different times of the day, including playtimes and lunchtimes. It is recognised by some authors (for example, Wartmann, 2000) that the child with special needs may need a longer period to become familiar with the classroom routines and school environment before they start. On this basis, Bourne (2007) recommended that children with special needs be allowed more of these pre-entry visits than was usually granted to other children.

Another practice that was valued was the fostering of communication links between the early childhood centre and the primary school (Wartmann, 2000). This included inviting the child's New Entrant teacher to visit him or her in their preschool prior to the start of school. The degree of continuity between the home, the early childhood centre, and the New Entrant class serves to facilitate a smooth transition practice (Bronfenbrenner, 1979). Parents expressed a need for teachers to share with them how their child's school day had gone, and a need for teachers to be available to answer their concerns. These authors conclude by stressing the need for good, ongoing communication and collaboration between the family, the preschool, the school, and the various professionals involved (Blundell, 1998; Bourne, 2007).

In sum, the studies discussed here reveal several common themes in the transition to school for young children with special needs. Several authors have recognised the need for good planning and preparation of the transition process, and that this should begin well in advance of the transition. Discussions about the transition should involve the families as

much as possible. Many of these authors have also suggested the need to hold transition meetings involving all the stakeholders in the child's life as part of the planning and preparation process. This process should also involve multiple visits to the child's new primary school prior to school entry, and these visits should also begin well in advance. Some of these studies have also recommended the need for continuity and liaison between the child's preschool and primary school settings. Finally, many of these studies have recognised the need for good, ongoing communication and collaboration between the family, the preschool, the school, and the various professionals involved in the child's life. This concludes the section on school transitions, and the next few sub-sections will address the factors and processes involved in the longer term period of the adjustment to school.

2.3.3 Inter-personal relationships, family factors and the adjustment to school

Children bring to school a background of biological factors and experiences, and these influences will combine to produce variations in behaviour and in cognitive and social development (Barth & Parke, 1996; Ladd, 1996). The ways in which children adjust to school may be partly a function of personal, social, and behavioural attributes. As well as biological factors, such as age and gender, there is children's behaviour, such as the way they respond to new challenges (Ladd, 1996). For example, all children have different ways of coping. Coping behaviours can be viewed as adaptive if they produce positive outcomes, such as parent or teacher approval, and minimise negative outcomes, such as punishment or academic failure. Thus, children's personal and behavioural attributes are related to school adjustment (Ladd).

Children's inter-personal relationships may serve a number of functions that will either enhance or impede their adaptation to new environments (Ladd, 1996). Pianta and Walsh (1996) named the early school years as a sensitive period, defined as a period when the window of opportunity for influencing later outcomes is open, and in which experiences will have disproportionate influence. During the process of transition, children's relationships may act as either supports or stressors, or both, and may exert an influence on their ability to cope. A close relationship with the teacher or with friends may provide them with resources in difficult times. On the other hand, the absence of such relationships may

interfere with their adaptation to new environments, such as when bullying from peers occurs (Ladd).

Evidence suggests that children's social and academic competence are determined in the early stages of the transition to school (for example, Kupersmidt et al., 1990). Other evidence suggests that family factors occurring prior to the transition are related to later school adjustment (for example, Cowan et al., 1994). The family as a social system impacts on the child and his or her adjustment to school, but the parent-child dyadic relationship probably has the greatest influence (Barth & Parke, 1996). There are three family influence roles in the child's school adjustment, social skill development, social support, and direct involvement by parents in the school setting. An example of social skill development is that, through children's interactions with other family members, they learn to share, negotiate with and influence peers and teachers at school. Social support from the family acts as a buffer if school should become a source of stress, such as when teasing or bullying occurs (Barth & Parke). Parents may also be directly involved through school programmes.

The child enters school with expectations based on previous experiences in school-like settings, for example, they will often expect the primary school experience to be the same as the preschool experience (Sameroff & Haith, 1996). On the other hand, Ladd (1996) argued that children with school-like experiences prior to the transition, such as considerable time spent at preschool, adjust better once they have made the transition. If parents arrange opportunities for their children to meet and play with peers while still at preschool, this can help their children develop the inter-personal skills needed once they move to primary school and encounter unfamiliar age-mates. As primary school classes are segregated by age, young children in their first year at school must learn to succeed in forming relationships with age peers and, at the same time, compete with them for resources and recognition (Ladd, 1996).

At school, the child has a number of dyadic relationships with both teachers and peers. Peer interactions provide opportunities for both cognitive and social development (Barth & Parke, 1996). The school as a social system includes not only relationships with teachers and peers, but also with the more complex classroom system and with the larger school institution. Adjustment at the classroom level overlaps to a certain extent with adjustment

to teachers, because of the major role teachers play in setting the classroom environment (Barth & Parke). The child's readiness for school may depend not only on the demands of the new school situation, but also on how well the school is equipped to adapt to the individual child's needs (Haith & Sameroff, 1996).

Longitudinal studies on the influence of family factors on children's school adjustment (for example, Cowan et al., 1994) have shown that both mother-child and father-child interactions prior to the start of school are predictive of children's social adjustment following the transition. Cowan et al studied parents during the pre-birth period, at preschool, and during the children's first year at school. They also assessed children's academic competence and social relationships with peers in this New Entrant year. Their results indicated that ineffective parenting during the preschool period, characterised by low warmth, was predictive of aggression two years later in the New Entrant classroom.

Relating attachment theory to school adjustment, Atwool (1999) suggested that children's learning and behaviour are influenced by their attachment experiences. Children begin primary school with a range of expectations about relationships, adults and peers that have been moulded by their experiences during the preceding years, and it is likely that any primary school classroom will have children from the full range of attachment classifications. Children strive to form attachments in the face of some quite adverse experiences (Atwool). Thus, even after experiencing early negative relationship patterns, the child is still potentially able to form significant relationships in other areas of their lives, such as in their new school setting, and this can serve as a protective buffer. Atwool (1999) suggested that if children are provided with the opportunity to establish meaningful attachments within the school setting, this will enhance their ability to learn, facilitate appropriate behaviour, and may counteract any difficulties in the home.

2.3.4 Relationships with teachers

Relationships between and among children, families, schools, and communities provide children with resources as they start school (Dockett & Perry, 2007). Mashburn and Pianta (2006) stress the importance of the relationships made as children start school. It is recognised that the child's relationship with his or her teacher is an especially important

component of the school experience and related to child adjustment (Birch & Ladd, 1997; Hamre & Pianta, 2001; Mashburn & Pianta, 2006; Pianta, 1994; Pianta & Steinberg, 1992), and the relationship between families and schools affects children's competencies (Mashburn & Pianta). Relationships between adults and children play an important role in the development of competencies in the preschool and early school years (Pianta & Walsh, 1996). Like the parent-child relationship, the teacher-child relationship may vary in nature and quality (Pianta, 1997). A teacher's style of relating to children, for example, if a teacher is aloof, business-like and emotionally distant, may trigger a different response depending on a child's history of relationships with parents (Lynch & Cicchetti, 1992; Pianta, 1994).

Bowlby (1969/1982) asserted that one of the primary tasks for the child, beginning in the preschool years, is to form goal-corrected partnerships with his or her attachment figures. "The task of successfully negotiating relationships with teachers is important for children and it may promote the attainment of competence in other school-related developmental domains" (Lynch & Cicchetti, 1992, p82). It is possible that teachers may operate as alternative or secondary attachment figures for some children. The study of Howes (1991, April) showed that children who form close attachments with teachers appear to develop better inter-personal skills. Birch and Ladd (1997) argued, on the basis of attachment theory, that children who have a close relationship with their teacher have a secure base from which to explore the school environment.

For the child with special needs, his or her performance in school seems to be related to their sense of closeness and security with their teacher (Pianta, 1992). The development of attachment relationships may be particularly important for children from stressful home backgrounds, such as a history of maltreatment (Lynch & Cicchetti, 1992). For maltreated children, their primary attachment figures may provide little security or support in times of distress, and this points to the importance of forming good relationships with teachers. However, the concept of internal working models of mothers as available and supportive would suggest that maltreated children are likely to have negative expectations of their relations with teachers (Lynch & Cicchetti). Difficult life circumstances for children may be associated with withdrawal from or aggression towards adults (Howes & Ritchie, 1999). Such behaviour patterns mean that these children do not adapt easily to classroom routines,

making them challenging to teachers who may not always be very experienced. The study of Howes and Ritchie of attachment security in children from difficult life circumstances found that teachers perceived their relationships with these children as more conflictual when the children were classified as insecurely attached. Pianta (1999) argued that enhancing child-teacher relationships in high risk groups can help to elevate competence levels in these children and may attenuate failure rates that occur in public schools.

Relationships between children and adults play a prominent role in the development of competencies in the preschool, primary and middle school years (Pianta, 1999). Child-parent and child-teacher relationships have been found to play important roles in developing skills in the area of peer relations (for example, Elicker, Englund, & Sroufe, 1992; Howes, Matheson, & Hamilton, 1994), and in academic achievement (for example, Pianta & Harbers, 1996). Some research studies (for example, Birch & Ladd, 1997; Greenberg, Speltz, & Deklyen, 1993; Howes, Hamilton, et al., 1994; Pianta, Steinberg, & Rollins, 1995) have shown that, like parent-child relationships, teacher-child relationships seem to act as a regulator in children's social and emotional development and, therefore, have the ability to exert either a negative or positive influence on children's potential to succeed at school (Pianta & Stuhlman, 2004). Child-teacher relationships appear to be both contributors to and indicators of children's school adjustment, and past research has built a credible case for the salience of inter-personal processes, particularly the teacher-child relationship (Pianta & Stuhlman). Hamre and Pianta (2001) showed that negativity in the teacher-child relationship in the New Entrant classroom was related to behavioural and academic outcomes for the children from first right through to eighth grade.

Using an earlier version of the Student Teacher Relationship Scale (STRS) (Pianta, 2001), Pianta and Steinberg (1992) surveyed teachers' perceptions of their relationships with their students in New Entrant (kindergarten) classes. They found that positive relations with teachers could act as a protective buffer against retention in grade for some children. The study of Pianta, Steinberg and Rollins (1995) took this one step further by classifying the STRS items into aspects of closeness, dependency and conflict. These authors examined teacher-child relationships and deflections in child adjustment over the period from school entry to the end of second grade in 436 children. The authors concluded that their results

supported the belief that children's relationships with teachers significantly facilitate adaptation to school, and that they can play a role in deflecting the course of development in the school context.

The study of Birch and Ladd (1997) examined more closely the effects of the three sub-categories of closeness, conflict and dependency on the adjustment to school of 206 children in their New Entrant year (mean age = 5.58 years). These three sub-categories of the teacher-child relationship were all found to relate to different aspects of the children's adjustment to school. Dependency was correlated with poorer academic performance, more negative attitudes to school, and less positive engagement with the school environment. Conflict was associated with less liking for school, school avoidance, poorer self-directedness, and less cooperative participation in the classroom. Closeness was positively correlated with academic performance, self-directedness and liking for school. The authors concluded that these results confirmed the need for considering the various aspects of the teacher-child relationship when examining young children's adjustment in the early stages of starting school.

The study of Pianta and Stuhlman (2004) examined teacher-child relationships from preschool to kindergarten (New Entrant) to the first grade and, in particular, examined associations in the aspects of closeness and conflict across the three years. These authors also studied associations between these two aspects of the teacher-child relationship and children's social and academic adjustment in the first grade. Their results indicated a moderate association in the conflict subscale across the three years, and a slightly lower association in the closeness subscale, with both declining from preschool to first grade. In addition, both conflict and closeness were related to the children's social and academic achievement at first grade. The authors concluded that child-teacher relationships have a role to play in the ability of children to acquire the skills necessary for success at primary school.

Hamre and Pianta (2005) investigated ways in which strong emotional and instructional support from teachers could be used to moderate school failure for children at risk. Children had been identified in their New Entrant year as being at risk on the basis of either demographic characteristics, or on the basis of multiple functional problems, such as

attentional, behavioural, academic or social problems, and were then placed in first grade classrooms with either greater or less teacher support. Those children who were placed in first grade classrooms which offered strong emotional and instructional support had, at the end of their first grade year, achievement scores and relationships with their teachers that were similar to those of their low risk peers. Those who were placed in less supportive classrooms displayed lower achievement scores and more conflict with teachers. Thus, in two important domains, that is, academic achievement and relationships with teachers, instructional and emotional support from teachers moderated the risk of early school failure.

2.3.5 Teachers' attitudes to the inclusion of children with special needs

Teachers' attitudes are seen as one of the most important factors contributing to the success of inclusion (Thomas, 1988), and some researchers have suggested that the peer acceptance of children with special needs may be at least partially teacher-mediated (for example, Larrivee & Horne, 1991). Some researchers have shown that teachers' willingness to include students with special needs in their regular classes is critical for the success of the inclusion movement (for example, Hasazi et al., 1994). However, many studies have shown that teachers' attitudes to inclusion have traditionally been quite poor (for example, Antonak & Larrivee, 1995; Mamlin, 1999; Minke, Bear, Deemer, & Griffin, 1996; Putnam, Spiegel, & Bruininks, 1995; Scruggs & Mastropieri, 1996; Semmel, Abernathy, Butera, & Lesar, 1991; Soodak et al., 1998). The study of Soodak and colleagues (1998) found that teachers' receptivity towards inclusion was associated with higher teacher efficacy, the use of differentiation teaching practices, teacher collaboration, and the inclusion of students with physical rather than intellectual or behavioural disabilities. This study also found that teachers became more hostile towards inclusion with experience, and lower anxiety about inclusion was associated with class size.

Scruggs and Mastropieri (1996) conducted a research synthesis of studies published over nearly four decades on teachers' perceptions of inclusion. Their results indicated that 65% of teachers supported the concept of inclusion, but only 53% were actually willing to include students with special needs in their classes, although responses varied according to the disabling condition of the child and the implicit obligations of the teacher. About 54%

believed that inclusion had the potential to benefit both the children with special needs and their TD classmates, although special educators were more positive about this than were regular class teachers. A substantial minority of teachers felt that the mainstreamed students would take up more of their time and attention, and only one-third felt that they had sufficient training, skills, time or resources necessary for inclusion. Over 70% of teachers agreed that classes should be reduced in size because of inclusion. The authors concluded that teachers' willingness to mainstream was influenced more by procedural classroom concerns than by affective feelings about working with students with special needs. However, the most salient finding of this study was that teachers' attitudes to inclusion had not improved over the course of the four decades of this study.

On the other hand, the study of Bourke and associates (2002) was a more recent study set in the New Zealand context. This study evaluated the SE 2000 policy at a time when inclusion had become more widely practised in New Zealand State schools. In this study, the authors surveyed the opinions of principals, teachers and teacher aides, and found that the professional development strand of SE 2000 had had a significant impact on the attitudes and behaviour of all three groups. A majority (56%) of classroom teachers believed that their attitudes towards teaching students with special needs had changed positively as a result of SE 2000. More specifically, this change was an improvement in their feelings of confidence about teaching children with special needs. However, a significant minority (40%) of teachers reported no change in their belief in their capacity to accommodate for students with special needs (Bourke et al, 2002). The improvement in attitude resulted from the professional development received by classroom teachers through SE 2000, and for those teachers who had received no professional development, the effect was minimal.

2.3.6 Relationships with peers

At school, children have a number of dyadic relationships with both teachers and peers. Interactions with peers provide opportunities for both social and cognitive development (Barth & Parke, 1996). The transition to school may magnify processes that exist at other times in the child's school life, for example, social skills, such as initiating peer interactions, will be intensified as children enter school and make new friends. Supportive peer relationships assist with school avoidance (absenteeism), disruption and school failure

(Parker & Asher, 1987), and in the absence of such supportive relationships, self-esteem and achievement seem to suffer (Bukowski & Hoza, 1989).

Based on Bowlby's (1973) concept of inner working models, Cohn (1990) argued that individual differences in the quality of attachment relationships formed with parents can be related to social relationships extra-mural to the family, as the child's interactions with the parent will shape their expectations of how others will respond to them. Bowlby believed that children with secure attachments to parents have developed an inner working model of the parent as available and responsive, and of themselves as worthy of love. Therefore, these secure children will approach peers with positive expectations of good interactions. On the other hand, children with insecure attachments to parents develop inner working models of parents as either rejecting, as with the insecure avoidant children, or as inconsistently available and unpredictable, as with the insecure ambivalent children. There are other reasons why secure attachments with parents in infancy should lead to social competence with peers at primary school. By school age, the child will have learned the rules of reciprocity or give-and-take. Also, the child develops a sense of self-worth and efficacy. Therefore, relationship patterns established in infancy should lead to stable patterns of personal and social adaptation throughout childhood for the child.

Young children's perceptions of their peers' interactional styles, especially their perceptions of peers' aggressive or prosocial behaviours, have been related to their liking preferences and friendship choices in the classroom (Ladd & Mars, 1986). Ladd, Price and Hart (1988, 1990) showed that, in a new school environment, children's success in establishing new peer relationships is partly determined by the social skills they exhibited in their encounters with peers as preschoolers. Another study by these colleagues (Ladd & Price, 1987) examined children's prosocial and antisocial behaviour towards peers at preschool prior to the start of school, and then children's emerging peer relations after they started school. Results showed that children's interactional styles with peers predicted their acceptance or rejection by peers in their New Entrant class. Using prosocial behaviours with many peers at preschool achieved more supportive peer relations at school, and using more negative contacts and more antisocial behaviours predicted peer rejection at school.

Another study by the same primary author (Ladd, 1990) examined the impact of peer acceptance and friendships on school adjustment, especially on anxiety, school avoidance, and attitudes to teachers and activities. Children were classified as rejected, popular, neglected or controversial. Rejected children were actively disliked by peers, while popular children received frequent nominations as best friends and were well liked. Neglected children received few nominations as best friends, but were not disliked, while controversial children had nominations as best friends, but were also actively disliked by others. This peer sociometric status had more impact than did friendships on school involvement, school perceptions and academic performance. Rejected children had less favourable perceptions of school, greater levels of school avoidance, and lower levels of academic performance than did any of the other groups. Poor peer acceptance has been shown to be related to later personal difficulties in adolescence and adulthood, especially school drop-out, criminality, and psychopathology (Parker & Asher, 1987).

2.3.7 Peer relationships of children with special needs

Some authors have recognised that children with special needs have poorer social skills, poorer peer interactions or peer relationships than their TD counterparts (for example, Carlson et al., 2009; Guralnick et al., 2006; Kemp & Carter, 2002; Wiener, 2004; Yu et al., 2005). For social interactions to occur, young children must possess the requisite social competence to enter and sustain their interactions (Sainato, Jung, Salmon, & Axe, 2008). Familiarity with peers increases overall social interactions. A longitudinal study by Guralnick and colleagues (2006), on the peer interactions of children with mild cognitive delays, was conducted over a two year period from preschool to the early primary school grades. This study found not only that the peer interactions of these children were poorly organised and prone to conflict, but also that their peer interactions remained relatively stable over the two year period. Although there were some increases in both positive and negative interactions, these increases were very modest. Students with special needs experience a greater degree of loneliness at school (Al-Yagon & Mikulincer, 2004; Wiener, 2004; Yu et al., 2005). Kemp and Carter (2002), in their study of the social skills and social status of a sample of students with intellectual disabilities, found that these children spent less time interacting with peers and more time in isolation in the playground than their TD

counterparts. However, these authors found no difference in the social status of the two groups and, although the students with special needs were more isolated in the playground, they were not rejected.

Many authors have discussed the poor acceptance of children with special needs by their TD peers (for example, Cook & Semmel, 1999; Ochoa & Olivarez, 1995; Roberts & Zubrick, 1992; Sale & Carey, 1995; Siperstein & Leffert, 1997; Yu et al., 2005). Primary school classrooms have been described as one of the most powerful instruments for developing attitudes (Henry, 1957, cited in Horne, 1985). It is worthy of note that some of the studies cited above found children with special needs who were actually accepted by their peer group, including children with intellectual disabilities (for example, Sale & Carey, 1995; Siperstein & Leffert, 1997). However, this peer acceptance could not be confused with popularity (Siperstein & Leffert). Conversely, other studies have found no difference in either peer sociometric status or levels of peer acceptance when comparisons were made between groups with and without special needs (for example, Kemp & Carter, 2002; Nikolarazi et al., 2005). One possible explanation for this discrepancy may be that these studies are relatively recent, and the attitudes of TD children may have improved as a result of inclusion becoming more widely practised. The cross-cultural study of Nikolarazi et al in two separate countries, Greece and the United States, compared the attitudes of normally-developing students towards their classmates with special needs in inclusive and non-inclusive classrooms, and found that children were more accepting in the inclusive classrooms.

Cook and Semmel (1999) compared the peer acceptance of students with mild disabilities and those with more severe disabilities in heterogeneous and homogeneous classrooms. Their results indicated that children with severe disabilities were more accepted in homogeneous classrooms, while those with mild disabilities were more accepted in the heterogeneous classes. The authors speculated that the better peer acceptance of students with severe disabilities in homogeneous classes was because, in the heterogeneous classes, these students did not stand out as markedly different, meaning that their peers did not adjust their expectations accordingly. On the other hand, these students stood out as being very different in the homogeneous classes, meaning that their classmates had different

expectations of them (see also Kemp & Carter, 2002). Thus, an important goal for both professionals working with children with special needs and researchers alike would be to improve the peer acceptance of these children, particularly in the context of the regular classroom.

2.3.8 The association between parent-child relationships, teacher-child relationships, and peer-child relationships

Since the conceptualisation of John Bowlby's (1969/1982) theory of attachment, many studies have examined the impact of attachment security in the parent-child relationship on children's relationships with teachers, while other studies have examined the influence of attachment on children's relationships with peers, particularly in the context of child adjustment to school and preschool. There is a considerable body of evidence pointing to an association between attachment security with parents and relationships with peers in early and middle childhood (for example, Bost, Vaughn, & Heller, 2004; De Mulder et al., 2000; Elicker et al., 1992; Fagot & Kavanagh, 1990; La Freniere, Provost, & Dubeau, 1992; Lyons-Ruth, Alpern, & Repacholi, 1993; Moss et al., 1996; Suess, Grossmann, & Sroufe, 1992). The children in these studies ranged in age from two to eleven years. In many of these studies, insecurely-attached children were found to have poorer peer competence than children who were securely attached. For example, the study of Fagot and Kavanagh (1990) indicated that the avoidant pattern of attachment was associated with difficulties with peers, but only in girls. Other studies have shown that the disorganised pattern of attachment is related to aggression and hostility towards peers (for example, Lyons-Ruth et al., 1993; Moss et al., 1996). Elicker and others (1992) showed that the effects of attachment security, as assessed in infancy, on peer relations lasted right through until middle childhood. On the other hand, the study of Howes, Matheson, and Hamilton (1994) found no association between attachment relationships with mothers and relationships with peers at preschool.

In addition, some studies have also found an association between attachment security with parents and children's relationships with teachers at preschool or at school (for example, De Mulder et al., 2000). The study of De Mulder and colleagues examined attachment security at home with parents using the AQS, and children's relationships with teachers at preschool in 94 children. They found that boys who were securely attached with parents at home were

also more likely to be securely attached with teachers at preschool. The study of Morrison and colleagues (Morrison, Rimm-Kauffman, & Pianta, 2003) examined the quality of mother-child interactions at school entry age, and later academic and social competence in early adolescence. Their results suggest that early maternal behaviour that is sensitive and elicits prosocial behaviour in children of five years of age appears to be linked to adolescent academic performance and classroom behaviour seven or eight years later (Morrison et al, 2003).

The work of Howes and her associates (Howes, Hamilton, et al., 1994; Howes, Matheson, et al., 1994) assessed children's attachment relationships at home with mothers, and their relationships with teachers and peers in child care centres, and examined for associations between these three sets of relationships. They found that, although mother-child relationships were not associated with peer-child relationships, the children's relationships with their teachers were associated with their relationships with peers. The authors concluded that the mother-child relationship predicts the teacher-child relationship which, in turn, predicts the peer-child relationship.

There are some studies (for example, Cohn, 1990; Granot & Mayseless, 2001) which have examined the concurrent association between children's attachment security at home with parents, and their adaptive functioning at primary school, that is, similar issues to this current study. The study of Cohn (1990) examined the association between attachment with mothers and competence with teachers and peers at school. The sample was 89 children aged around six years of age, and their mothers. During the summer between the New Entrant year and first grade, attachment security was assessed by putting mother-child dyads in a separation-reunion procedure. In the first grade, peer sociometric measures were completed, and teachers completed liking ratings, behaviour and competence ratings. Results showed that insecurely-attached boys were less well liked by teachers and peers, were perceived as more aggressive and disruptive by classmates, and were rated by teachers as less socially competent and as having more behaviour problems than secure boys. There were no similar findings for girls. The author concluded that the quality of the mother-child attachment relationship was associated with children's behaviour with both adults and children in the school setting.

The study of Granot and Mayseless (2001) examined the concurrent association between attachment security and children's adaptive functioning at primary school. The sample was 113 children aged from nine to ten years who completed a self-report of attachment security. They were also administered a doll story completion task (see Bretherton, Ridgeway, & Cassidy, 1990), modified for children of this age, to assess their representations of their attachment relationships with their mothers. Teachers completed four school adjustment measures of children's academic achievement, social/emotional adjustment, and frequency of behaviour problems. Each participating class also completed a peer sociometric measure. The results indicated that secure children showed better adjustment to school as reflected by teacher reports, as well as in peer-rated social status. Avoidant and disorganised children showed the poorest adjustment, and were more consistently found in the 'rejected' category as nominated by peers.

2.3.9 Summary

This review has focused on both the factors involved in the shorter term school transition process and on the relationships children form at school with teachers and peers as part of the longer term school adjustment process, both of which will be examined in this current study. The transition to school is a normative and yet quite significant process that every child and their family must go through. It can be a time of pleasurable and yet nervous anticipation and uncertainty, and the presence of a child with special needs in the family may make this a frustrating, challenging, and stressful time for these families.

Several factors and processes have been identified as significant and valuable for children with special needs transitioning into school. These include good planning and preparation for the transition process that begins well in advance of the child's first day. As part of this planning and preparation process, transition meetings should occur, involving a whole team of personnel, and the participation and involvement of the family in this process is crucial. Additionally, as part of the child's preparation for school, visits should be undertaken by the child and their family to the school and New Entrant classroom to familiarise the child with classroom rules and routines, and with the school environment. Continuity and liaison between early childhood centres and schools is essential. However, arguably, the factors identified here as most salient for these children are high levels of ongoing communication

and collaboration through the transition process, particularly between families, preschools and schools, both in the period leading up to the child's first day, and in the period following school entry.

The ways in which children adjust to school may be partly a function of personal, social, and behavioural characteristics. In addition, children's interpersonal relationships may serve a number of functions that will either enhance or impede their adaptation to new environments (Ladd, 1996). During the process of transition, children's relationships may act as either supports or stressors, or both, and may exert an influence on their ability to cope. Close relationships with teachers or with peers may provide children with resources in difficult times, but when these close relationships are absent, this may interfere with children's adaptations to new environments.

At school, the child has a number of dyadic relationships with teachers and peers. The child's relationship with his or her teacher is seen as an especially important component of the school experience and related to school adjustment. Many older, overseas studies have indicated that teachers' attitudes to the inclusion of children with special needs in their regular classes have traditionally been quite poor. However, a more recent New Zealand study (Bourke et al, 2002) found that teachers' attitudes to inclusion had improved as a result of the professional development offered through SE 2000.

At school, children's interactions with peers provide opportunities for both social and cognitive development. Many studies have found that children with special needs have a lower level of peer acceptance than their TD counterparts. Some studies found that these children were actually accepted by peers, but this peer acceptance could not be confused with popularity. Townsend (1992) suggested that children with intellectual disabilities may find it difficult to form friendships at primary school.

Some studies have found an association between children's attachment relationships at home with parents and their relationships at school with teachers. Other research has indicated an association between attachment security with parents and children's relationships with peers. Still further studies have shown an association between children's relationships with teachers and their relationships with peers. There are studies which have

explored these three sets of relationships in the context of children's adjustment to school or preschool, that is, similar issues to this current study. However, these studies have all been conducted with normal populations. To date, there appears to have been no similar research carried out in samples of children with special needs and, therefore, this current study will attempt to fill this gap.

2.4 Child characteristics

The characteristics of the child may play a major role in the adjustment to school of children with special needs. As noted earlier, children bring to school a background of biological factors and experiences, and these influences will combine to produce variations in behaviour, and in social and cognitive development (Barth & Parke, 1996; Ladd, 1996). The ways in which children adjust to school may be partly a function of personal, social, and behavioural characteristics. As well as biological factors, such as age and gender, there is children's behaviour, such as the way they respond to new challenges (Ladd, 1996). In addition, all children possess certain personality traits, including their temperament. Hanson (1996a) asserts that it is likely that the characteristics of the child, such as the presence of a disability, may exert a powerful influence on the dynamics of parent-child interactions. Thus, children's personal and behavioural attributes are related to school adjustment (Ladd).

Previous studies have recognised the significance of child characteristics for both children with special needs and TD children. For example, child characteristics, such as gender and temperament, have been shown to impact on the quality of attachment security (Al-Yagon, 2003; Lyons-Ruth et al., 1993; Vaughn et al., 1992). They also impacted on their adjustment to school (Al-Yagon, 2003; Cugmas, 1998). The study of Carlson and her associates (2009) found that ease of transition for special needs populations was associated with child characteristics, such as the severity of impairment, the academic ability and the social skills of the child. Child characteristics were also found to impact on the attitudes of non-disabled children to accepting their classmates with special needs (Siperstein & Bak, 1986), and on teachers' willingness to include children with special needs in their regular classes (Soodak et al., 1998). In a sample of TD children, Cugmas (1998) showed that child

characteristics impacted on attachment security with parents which, in turn, affected their adjustment to school.

2.5 Summary and conclusion

This study will examine the transition and adjustment to school for young children with special needs. It will examine the longer term adjustment to school for these children with respect to the relationships they form with teachers, teacher aides and with peers. It will also look for associations between these relationships at school and children's relationships at home with parents. Thus, the study will begin by assessing children's attachment security with parents. The study will also examine the factors and processes involved in the shorter term period of the transition phase.

There appears to be a dearth of research on attachment relationships in children with certain types of special needs, particularly visual impairments and developmental delays. In addition, that which has taken place has not always employed standard measures for assessing attachment security, such as the SS or the AQS. However, it would appear from the studies reviewed here that children with special needs are just as capable as TD children of forming attachment relationships with primary caregivers, although this may occur at a somewhat later age, and it would also appear that the distribution of attachment patterns could be very similar to that of TD samples. Furthermore, there also appears to be a paucity of studies on attachment security in heterogeneous samples. This implies gaps in the literature, and this study will attempt to go some way to address these gaps.

Hanson (1996a) suggests that young children with special needs, when compared with their normally-developing peers, may be less interactive and responsive in their interactions with their caregivers, and may provide fewer or different interactional strategies. Thus, these children may prove to be less competent as interactive partners. However, this author also goes on to suggest their parents may be able to adjust to these interactional differences. The dyadic interactions of children and their primary caregivers have important implications for the formation of attachment relationships. Not only do they have the potential to affect children's attachment security with parents, they also have the potential to influence their relationships with teachers and teacher aides. On this basis, one of the issues that this study

will examine is the strategies that children with special needs and their caregivers use when interacting with each other.

Some studies (for example, De Mulder et al., 2000) have found associations between children's attachment security with parents and their relationships with teachers at preschool and school. Other studies (for example, Lyons-Ruth et al., 1993; Moss et al., 1996) have found associations between child attachment and relationships with peers. Still further studies (for example, Howes, Hamilton, et al., 1994) have shown an association between the child-teacher and the child-peer relationship. Some studies (for example, Cohn, 1990; Granot & Mayseless, 2001) have concurrently examined the three sets of relationships in the context of children's adjustment to school, that is, similar issues to this current study. However, these studies have been conducted with normally-developing samples and, to date, it would appear that no similar research has been conducted with special populations. Therefore, this current study will attempt to fill this gap.

This study will also examine another important part of the school adjustment process, that is, the factors and processes involved in the shorter term transition phase. The transition to school can be a time of uncertainty and anxiety for children and their parents, and can be a particularly daunting and challenging time for the families of children with special needs. Several factors emerged from the studies reviewed here as most significant in the school transition of children with special needs and their families. Therefore, this current study will examine the factors and processes involved in the period immediately before and after the child's entry into school.

The next chapter describes the methodologies used in this study, including the participants, the procedures, the instruments, and the data analysis. This will be followed by two chapters which present and discuss the results of this study.

2.6 The research questions

The research questions to be addressed by this study are:

1. What are the strategies that young children with special needs and their caregivers use when interacting with each other?

2. What is the relationship between children's attachment security at home with parents and their relationships at school with teachers, teacher aides, and peers during the first year of formal schooling in a sample of young children with special needs?

3. How was the transition to school process conducted for a sample of young children with special needs and their families?

CHAPTER THREE

METHODOLOGY

This study employed a mixed method design in which both surveys and semi-structured interviews were used to address the research questions. The main benefit of employing a mixed method design is that it permits the researcher to collect a wide variety of data which allows for a richer description of the target outcomes. The main advantage of qualitative research is that it collects data in naturalistic settings and, thus, affords a high level of ecological validity. Qualitative studies also provide the researcher with detailed, thick descriptions, in-depth enquiry, and direct quotations to support people's personal perspectives and experiences (Tuckman, 1994). Additionally, open-ended, semi-structured interviews provide the interviewer with flexibility to follow up on potentially useful and interesting answers to interview questions. However, this type of research can lack rigour, confirmability, and credibility, unless it contains some degree of structure and a defined focus (Tuckman) and, consequently, the main disadvantage of qualitative research is that it may lack reliability. On the other hand, quantitative tools such as survey instruments tend to afford the reliability that qualitative research lacks. The main disadvantage of quantitative research is that it lacks validity, in that it often forces participants to focus in on a limited array of responses which may not necessarily reflect the participants' views on the sampled topic. In summary, a mixed method design allows for an approach which can potentially maximise the reliability and validity of conclusions derived from the collected data.

The study involved assessing the target children's relationships with parents, with teachers and teacher aides, and with classmates using three standardised survey-like measures. In addition, the children's primary caregivers, their regular class teachers, and their teacher aides were individually interviewed using a semi-structured interview schedule and open-ended questions.

3.1 Participants

The heterogeneous sample selected for this study were 17 children with special needs. Ten of the children (58.8%) had a wide variety of special needs. The remaining seven (41.2%)

had low vision as their primary identifying disability, defined as “...impairment of visual functioning even after treatment and/or standard refractive correction, and a visual acuity of less than 6/18 to light perception, or a visual field of less than 10⁰ from the point of fixation” (World Health Organisation, 1993). By far, the large majority of these children had moderate needs (88%, *N*=15), while the remaining two children had high needs and were funded by the Government’s Ongoing and Reviewable Resourcing Scheme (ORRS). The mean age of this sample was five years seven months with 13 males (76.5% of the total sample) and four females (23.5% of sample). In terms of race/ethnicity, 82.35% were New Zealand Pakeha (Caucasian) (*N*=14), one was a New Zealand Maori (5.88%), and two were New Zealand-born Asian (11.76% of total sample). All the target children had started school within the previous twelve months (at the time of participating in the research) and all were mainstreamed in regular primary schools. More details on the characteristics of the children are given below in section 3.1.1.

For each target child, the study also involved the child’s family and school (teachers, teacher aides, and peers). Family participation in the research involved one parent, which was usually but not always the mother (*N*=16, 94%). Two of the families were single-parent families (11.76% of sample). Eleven of the families lived in urban localities (64.7%), five were situated in rural areas (29.4%), while the remaining family was urban with their child attending a rural school.

School participation in the research involved the target child’s regular class teacher, their teacher aide if there was one working with the child, and their classmates. Seventeen teachers participated and all were female. Nine of the target children had teacher aides (53%) and two of these had two aides working on a part-time basis with the target child, meaning a total of eleven teacher aides participated in this study. All teacher aides were female. In the majority of cases, teachers and aides (when used in this context, ‘aides’ will always refer to teacher aides) gave their race/ethnicity as Pakeha or Caucasian, although in a couple of cases, the participants did not provide their ethnicity.

This study also involved the target child’s classmates completing a peer sociometric measure. In order for them to participate, consent was sought from the parents of every child in that class, including the target child themselves. Only those children whose parents

signed consent forms participated in this measure although, in some instances, children who had returned signed consents were absent on the day the researcher visited the school and were therefore omitted from the study. Participation rates in the peer sociometric measure ranged from 50% to 95% ($M=66.98\%$).

3.1.1 Characteristics of sample

This section outlines the characteristics of each target child, and includes information on their age, gender, ethnicity, and place in the family. It also includes some details about their family, their parents' type of work, the school they are attending, and their special needs. These characteristics have been summarised in Table 3.1. All seventeen target children have been given gender-appropriate pseudonyms to protect their identities and henceforth will always be referred to by their pseudonyms.

1) Seth is a Caucasian male aged five years six months. He is the younger of two children with an eight-year-old sister, living in an intact nuclear family. His parents are professionals with both parents working, and the family lives in an urban area. Seth has now been at school for approximately two terms, attending his local State primary school, and has a teacher aide. His special needs are low vision, his sight is at risk so he is learning Braille, and he wears glasses with corrective, photo-chromatic lenses.

2) Sasha is a Caucasian female aged five years three months. She is the elder of two children with a baby brother, living in an intact nuclear family in a rural area. Both parents work running their own rural business. She has been at school for two terms, attends an independent school with the full range of grade levels from preschool through to Year 13 (along the lines of an area school), and this school is located in a rural district. Sasha has a teacher aide, and her special needs are albinism and low vision. She wears sunglasses both inside and outside to protect her eyes from the glare.

3) Jacob is a Caucasian male aged six years exactly. He is the younger of two children with an older sister living in an intact nuclear family. Jacob's father is retired with grown-up children from a former relationship. His mother is a blue collar worker and they live in a small rural town. He attends an independent Christian school in another rural town some 40

minutes' drive away from their home, and he has been at school for nearly a year. He has no teacher aide and his special needs are low vision.

4) Hollie is a Caucasian female aged five years three months. She is one of identical twins with a baby sister. She lives in an intact nuclear family with both parents working as semi-professionals, and they live in an urban area. Hollie has been at school for three months, attends an integrated Catholic school, is fully mainstreamed but does not yet attend a full week because of tiredness, and has a teacher aide. Hollie's special needs are cerebral palsy with right-side spastic hemiplegia which causes paralysis in her right arm and leg, meaning she wears a brace in her right shoe and walks with a noticeable limp, and low vision. This physical disability causes some tiredness and she often still needs an afternoon nap, hence limiting her current hours of attendance at school.

5) Marcus is a Caucasian male aged five years nine months who is the eldest of three children, the younger two both being girls. He lives in an intact nuclear family in a rural district with only his father working as a farmer. Marcus has been at school for three and a half terms, attends his closest school which is a rural State primary school, and has no teacher aide. His special needs are low vision in that he is mono-optic, meaning limited sight in one eye with his good eye patched for some (out-of-school) hours a day.

6) Sophie is a Caucasian female aged five years four months. She is the elder of two children with a baby sister. She lives in an intact nuclear family in a small rural village with only her father working as a blue collar worker. Sophie has been at school for one and a half terms, attends her local school which is a rural State area school, and has no teacher aide. Her special needs are low vision due to prematurity which has also resulted in poorly-formed lungs, leading to some breathing difficulties, and she wears glasses with corrective lenses.

Table 3.1

Characteristics of target participants, Including Demographic Details and School Information.

Child	Age		Gender	Ethnic group	Special needs ^a	Family type ^b	Parents' work ^c	Teacher aide	School type ^d	School decile ratings ^e
	yrs	mths								
Seth	5	6	M	Caucasian	Low vision	Intact	Prof.	Yes	SP	7
Sasha	5	3	F	Caucasian	Low vision	Intact	Bus.	Yes	IA	10
Jacob	6	0	M	Caucasian	Low vision	Intact	BCW	No	ICC	8
Hollie	5	3	F	Caucasian	CP	Intact	Semi-prof.	Yes	Integ.	4
Marcus	5	9	M	Caucasian	Low vision	Intact	Farmer	No	SP	6
Sophie	5	4	F	Caucasian	Low vision	Intact	BCW	No	SA	5
Duane	5	10	M	Maori	CN	SP	Unemployed	Yes	SP	2
Flynn	5	3	M	Caucasian	Low vision	Intact	Prof.	No	SP	10
Chelsea	5	3	F	Caucasian	Low vision	Intact	Prof.	Yes	SP	10
Adam	5	9	M	Caucasian	SD/HI	Intact	Unemployed	No	SP	5
Gene	5	7	M	Caucasian	DD	Intact	Bus.	Yes	SFP	10
Tyler	5	9	M	Caucasian	Dyspraxia	Intact	Prof.	No	SP	10
Callum	6	2	M	Asian	ASD	Intact	Prof.	Yes	SFP	10
Liam	5	6	M	Caucasian	ASD	Intact	BCW	No	SP	8
Stefan	5	11	M	Caucasian	ASD	SP	Unemployed	Yes	SP	5
Riley	5	3	M	Caucasian	L & B	IB	Semi-prof.	No	SP	10
Damien	6	0	M	Asian	ASD	Intact	BCW	Yes	Integ.	9

Note: ^aCP = cerebral palsy, CN = complex needs, SD = speech delay, HI = hearing impairment, DD = developmental delays, ASD = Autism Spectrum Disorder, L&B = learning and behaviour difficulties. ^bSP = single parent, IB = intact blended. ^cProf. = professional, Bus. = business, BCW = blue collar worker, Semi-prof. = semi-professional. ^dSP = State primary, IA = independent area, ICC = independent Christian college, integ. = integrated Catholic, SA = State area, SFP = State full primary. ^eDecile ratings range from 1 to 10 and are determined by the socio-economic status of the surrounding community (1 = lowest rating; 10 = highest rating). This information is obtained from the most recent census and is used to determine school funding from central government.

7) Duane is a Maori male aged five years ten months who is the youngest of three boys. He lives in a single parent family, his mother is an unemployed beneficiary, and they live in an urban area. He has been at school for about three and a half terms and attends his local State primary school. As Duane is ORRS-funded, he has teacher aide hours allocated on a full-time basis plus a .1 special teacher (five hours a week) providing physiotherapy and occupational therapy. Duane's special needs are complex, with cerebral palsy/spastic quadraplegia, is in a wheelchair, he has no speech/language, and no toilet-training. He has low vision which has recently been diagnosed as far-sightedness. Duane is fully mainstreamed with no suggestion of ever learning to read, is on a separate programme from his classmates, and is mainstreamed for the purposes of socialisation.

8) Flynn is a Caucasian boy aged five years three months. He lives in an intact nuclear family with a seven-year-old sister, both parents work as professionals, and this is an urban family. Flynn attends his local State primary school, has been at school about one term, and has no teacher aide. His special needs are low vision and he wears glasses with corrective lenses which are also photo-chromatic.

9) Chelsea is a Caucasian girl aged five years three months, with an older sister who is seven years of age. She lives in an intact nuclear family with both parents working as professionals, and they live in an urban area. She has been attending her local State primary school for one term, is ORRS-funded and thus has full-time teacher aide hours allocated to her, with two teacher aides fulfilling this position each on a part-time basis. Chelsea's special needs are that retinoblastoma was diagnosed as an infant, meaning that one eye has been removed and the remaining eye has only limited vision in it, with some suggestion that her remaining sight is also at risk and she may eventually need to learn Braille. She has suffered some ongoing effects from cancer, with chemotherapy, radiation, and a bone marrow transplant to cope with during her preschool years.

10) Adam is a Caucasian male aged five years nine months. He is the middle of three boys, he lives in an intact nuclear family in an urban area, and both parents are unemployed beneficiaries. Adam has been at school for two and a half terms, attends a State primary school which is not his local school but is in the same suburb, and he has no teacher aide.

His special needs are a speech/language delay and a recently-diagnosed mild hearing loss, although no decision has been made yet on the fitting of hearing aids.

11) Gene is a Caucasian male aged five years seven months, who is the elder of two boys. Gene lives in an intact nuclear family in an urban area with only his father working as a businessman. He has been at school for two terms, attends his local State school which is a full primary, and there is a teacher aide present in the classroom working a proportion of the time with him. Gene's special needs are a congenital knee deformity causing minor difficulties with gross motor skills, and some mild developmental delays (due to prematurity) in the areas of speech/language, social skills, and fine motor skills, although this does not include cognitive delays.

12) Tyler is a Caucasian male aged five years nine months, being the middle of three children with the other two both being girls. He comes from an intact nuclear family living in an urban area, with both parents working as professionals. He has been at school for about two and a half terms, attends his local State primary school, and has no teacher aide. Tyler's special needs are dyspraxia which means problems with visual perception, poor concentration and a speech stutter, plus he has mild Pervasive Developmental Disorder (PDD).

13) Callum is a New Zealand-born Asian male aged six years two months. He is the younger of two boys, lives in an intact nuclear family in an urban area, and only his father works as a professional. Callum did not start school until the age of five and a half years as he was not toilet-trained at the time of his fifth birthday. He has now been at school two and a half terms, attends his local State full primary school, is fully mainstreamed but only attends school five mornings a week while the teacher aide is present. His hours of school attendance are gradually being increased. Callum's special needs are Asperger's Syndrome/Autism Spectrum Disorder (ASD) with a speech/language delay.

14) Liam is a Caucasian boy aged five years six months and is the elder of two boys. He lives in an intact nuclear family with only his father employed as a blue collar worker. Although this is an urban family, Liam does not attend his local school, rather, he attends a

rural State primary school some ten minutes' drive away. He has been at school about two and a half terms and has no teacher aide. His special needs are Asperger's syndrome/ASD.

15) Stefan is a Caucasian male aged five years eleven months who is the elder of two boys. This is a single parent family although father lives in the vicinity with some family input, Stefan's mother is an unemployed beneficiary, and they live in a rural district. This child attends his local State primary school which is rural. He did not start attending properly on his fifth birthday, instead, he visited his new classroom one day a week for one term and has now been attending properly for three terms. There is a teacher aide working in this classroom who gives part of her attention to this child. Stefan's special needs are ASD with a speech/language delay, Global Developmental Delay (GDD), a hearing loss in one ear, and he is only partly toilet-trained.

16) Riley is a Caucasian male aged five years three months. He is the youngest of three children in an intact blended family, the others being an older brother and a step-sister, both aged seven years. Both Riley's mother and step-father work in semi-professional capacities, and this is an urban family. Riley has been at school for one term, attends his local State primary school, and has no teacher aide. His special needs are a severe speech/language disorder, non-toilet trained, unspecified/undiagnosed behaviour problems with autistic-like tendencies, poor concentration and some hyperactivity.

17) Damien is a New Zealand-born Asian male aged six years exactly. He is the youngest of three boys living in an intact nuclear family in an urban area, with both parents working in blue collar jobs. Damien attends a local integrated Catholic school, is in his fourth term of attendance but did not start immediately on his fifth birthday, rather, he made one-day visits for a couple of months prior to entering school properly at the beginning of the following term. He has two teacher aides each working with him about five hours a week. Damien's special needs are ASD with some delays in speech/language and social skills.

Note: An area school takes students from Year 1 to Year 13 and is usually located in a rural area. A full primary takes students from Year 0 to Year 8. An independent school is

otherwise known as a private school. An integrated school is generally a church school which has been integrated into the State system and now receives its funding from the New Zealand Government.

3.2 Procedure

The study began by first seeking and obtaining approval from the University of Auckland Human Participants Ethics Committee. Once this approval was gained, agencies were approached in order to gain access to the required population of families of young children with special needs, and these agencies were used to identify children suitable for this study. These agencies were the Early Intervention (EI) section of the Ministry of Education – Special Education (MOE – SE) and the Vision Education Agency (VEA). The assistance of these agencies was enlisted through a thorough and rigorous negotiation process.

The researcher was not granted direct access to the confidential records of these two agencies, rather, once the agencies had consented to assist, a set of criteria was sent to the two agencies to help identify suitable participants. These criteria included the requirement of being in mainstream placements and fifth birthdays falling within a specific timeframe. These agencies then carried out searches of their records and identified suitable children on the basis of these criteria. Once suitable children were identified, the agencies prepared spreadsheets indicating some basic information about the children, such as their expected educational placement and their special needs (without revealing any of the private details of the children or their families).

These spreadsheet details were viewed and given the okay by the researcher and letters were sent out to parents by the agencies on the researcher's behalf. In the case of VEA, these letters included copies of the parental participant information sheet (see Appendix A) and of the parental consent form (see Appendix B), plus stamped addressed envelopes. In the case of EI, access was only granted by the Ministry of Education on the condition that the letters to parents included only the parental participant information sheets. It was felt that, once parents had voluntarily opted to take part, they could then contact the researcher with their names and contact details, and would then be provided with consent forms and stamped addressed envelopes. In all cases, parents read the participant information sheets

before they made the decision to participate and then signed the consent forms and returned them to the researcher in the envelopes provided.

The majority of families (76.4%, $N = 13$) was identified through this process, although additional families were found through other means. One family was found after an article describing the research was published in a quarterly magazine for the parents of children with visual impairments and the parents contacting the researcher. Additionally, one family was found through the researcher contacting (either in person or by phone) several Resource Teachers – Vision (RTV) located in Sensory Resource Centres around the country, and these RTV approaching parents on the researcher's behalf. Also, a number of approaches were made to primary schools, either to principals or to Resource Teachers – Learning and Behaviour (RTLB), each of whom serves a cluster of primary schools. Families were then approached by these principals or RTLB and invited to participate, and two extra families were identified through this process.

Once families had returned their signed consent forms, the researcher contacted them to establish where their child was attending or going to attend school. After the child had had a settling-in period, the school was then written to with participant information sheets and consent forms for the principal and school board of trustees (see Appendices C and D) and for the child's teacher (see Appendices E and F). Additional participant information sheets and consent forms were included if the child should have a teacher aide working with him or her (see Appendices G and H). Also included were stamped addressed envelopes for the school to return their signed consent forms. In some cases, these letters were followed up with phone contact to ask if the school had reached a decision about participating. After the school's written consent had been received, the school was then phoned to discuss a convenient time to visit and carry out the data collection. The target child's family was also consulted about the suitability of the timing of this visit.

As many of the participating families and schools were located out of town (in some instances, some distance away from the researcher), this necessitated travelling. Because of travel constraints, the data collection for each out-of-town target child was conducted in one trip as a discrete set. Two visits were made to the child's family about two to four days apart, each visit lasting about one to one and a half hours. In some cases, the family's part

of the research was conducted in the family home, although in some instances, it was conducted in the researcher's motel accommodation at the parent's convenience. In the majority of cases (94%, $N = 16$), it was the target child's mother who took part in the research, in the remaining case, it was the child's father who performed this duty.

At the first visit to the family, the parent was interviewed about their child's transition to school using a cassette audio recorder. The interview was followed by the parent performing the first stage of the Attachment Q-Sort (AQS) (Waters & Deane, 1985). A date was then negotiated with the parent to return to the home for the second stage of the AQS, and parents were asked to observe their child's behaviour on the basis of the AQS items over the intervening period. On the second visit, the second stage of the AQS was performed. The parents were fully supported by the researcher during both stages of the AQS procedure, that is, the researcher sat with the parents at all times during sorting, and they were encouraged to ask questions and to discuss problems as they undertook the Q-sort.

The school's part of the research was conducted in one visit over the course of a day. Teachers and teacher aides performed their part at a time that was convenient for them, either during their lunch break, or at the end of the school day. Their part of the research was conducted in a quiet, vacant room, such as an office or resource room, to ensure privacy. First, each teacher or aide was asked to complete the Student Teacher Relationship Scale (STRS) (Pianta, 2001) which assessed their relationship with the target child from their own perspective. As soon as this had been completed, the teacher or aide was immediately interviewed about the target child's adjustment to school using an audio-recorder. This entire process took the teachers no more than about forty minutes to perform and, in the case of the teacher aides, it took no longer than thirty minutes.

The children's part of the research involved participating in a peer sociometric measure (PSM) which was conducted during class time fitting around the children's breaks for morning interval and lunchtime. In most cases, this measure commenced at the beginning of the school day, although in a few instances, it was conducted during the afternoon. The class teacher had earlier been provided with participant information sheets and consent forms (see Appendices I and J) for every child in the class, including the target child, and

had been asked to send one home with each child for the parents to sign. Only those children who returned forms signed by parents participated in the PSM. In order not to single out the target child and to protect his or her anonymity, this measure was administered to every child in the class whose parents gave their consent, including the target children themselves if they were capable of engaging in this procedure.

Each participating child was removed from the classroom and taken to a small nearby vacant room, such as a resource room, annex or office to perform the PSM. This measure combined a positive nomination technique with a Liking Rating Scale (as per Asher & Dodge, 1986). The children's answers were recorded in a book or by audio recorder. Once each participating child had performed both parts of the PSM, they were then given a small page of stickers to thank them for their participation and returned to their classroom. This entire process took each child no longer than five to ten minutes to perform.

Prior to undertaking the data-gathering with the families and schools, the researcher piloted the AQS with two families. The purpose of this was to provide the researcher with practice in the procedures of administering the AQS.

The participants of this study were chosen by purposive sampling. In purposive sampling, subjects are selected because of some characteristic (Patton, 1990). In this present study, the participant children were selected on the basis of the criteria which had been sent to the two agencies.

3.3 Instruments

3.3.1 Assessing children's attachment relationships with parents

Each child's attachment relationship with his or her primary caregiver was assessed using the Attachment Q-Set (AQS) (Waters & Deane, 1985). For the purpose of this study, Version 3.0 of the AQS (Waters, 1987) was used. This is a Q-sort methodology incorporating items from all three domains of affect, cognition and behaviour. It is a flexible methodology in that it can be used for children of a broad range of ages, and produces both quantitative and qualitative data. This instrument can be used with extremely

disturbed groups, for example, autistic children (Van Ijzendoorn, Vereijken, Bakermans-Kranenburg, & Riksen-Walraven, 2004). It is based on observations in the naturalistic environment of the child's home and can be administered by either the child's primary caregiver or by trained observers.

The AQS focuses on the interplay between exploratory and proximity-seeking behaviours in the naturalistic setting of the home and on the child's expectations of parental guidance in normal situations (Van Ijzendoorn et al., 2004). A meta-analysis was conducted by Van Ijzendoorn and his colleagues to determine the validity and reliability of the AQS (Van Ijzendoorn et al., 2004). Their results showed that the AQS has convergent, predictive, and discriminant validity when administered by trained observers, but is somewhat less valid when administered by parents. On the other hand, Teti and McGourty (1996) compared the security scores derived from a parent-administered AQS with those derived from an observer-administered AQS on the same sample of children, and found a strong inter-correlation between these security scores. In terms of reliability, the AQS has exhibited a modest stability over time, but there seems to be little information available on test re-test reliability.

The AQS is a standard Q-set containing 90 items, each printed on individual cards, and these cards were laminated. Each item makes specific reference to behaviour, and many of the items specify a particular context for that behaviour. The AQS covers a broad range of secure base and exploratory behaviour, affective response, social referencing, and other aspects of social cognition (Waters & Deane, 1985). Each item consists of a title, and examples of items include 'child readily shares with mother or lets her hold things if she asks to' and 'when child is upset by mother's leaving, he continues to cry or even gets angry after she is gone'. In this current study, as parents themselves were to carry out the AQS sorting, the wording of all the items was adapted accordingly (see Appendix K). For example, the above items became 'my child readily shares with me or lets me hold things if I ask to' and 'when my child is upset by me leaving, he continues to cry or even gets angry after I have gone'.

The AQS is a forced distribution, and the items are rank ordered by the parent or trained observer from least characteristic to most characteristic of the child. This is achieved in

several steps. First, the parent or observer sorts the items into three piles on or after the first visit to the family home. The three piles are then labelled with their pile numbers and secured with rubber bands.

On the second visit, the three piles are re-distributed into nine piles, again from least to most descriptive of the child. The items are then adjusted from the outside in towards the middle, as there must ultimately be specific numbers in each pile, that is, four, six, ten, fifteen, twenty, fifteen, ten, six, and four items in the piles respectively from Pile One to Pile Nine. The parents were assisted in this process with a strip card informing them of the required numbers in each pile. Once again, the piles are numbered and secured with rubber bands. Thus, the final sort conforms to a symmetrical, uni-modal distribution (Waters & Deane, 1985). To score the AQS, items in pile one 'least characteristic' receive scores of one and so on up to items in Pile Nine 'most characteristic' which receive scores of nine.

3.3.2 Assessing children's relationships with teachers/teacher aides

The Student-Teacher Relationship Scale (STRS) (Pianta, 2001) is a teacher self-report form and was used to assess each child's relationship with his or her teacher and with their teacher aide if there should be one working with that child. This scale is a standardised and validated measure used for assessing teachers' perceptions of their relationships with individual students in their class. It sets the context for understanding development and school adjustment, and combines theory on adult-child attachment with research on children's early school experiences. The STRS has been normed on over 1500 children and over 270 teachers in classrooms across the United States, in a sample similar in race/ethnicity to the U.S. Census, and diverse in terms of socioeconomic status. This rating scale is suitable for children aged from four to eight years, and has been extensively used in studies of preschool and primary age children (for example, Howes & Ritchie, 1999; Page & Bretherton, 2001).

More specifically, the STRS is designed to assess a teacher's feelings and beliefs about his or her relationship with a particular child, and his or her feelings and beliefs about the student's behaviour towards him or her. The STRS is a 28-item Likert-type rating scale with three subscales: Conflict, Closeness, and Dependency, with responses ranging from

‘definitely does not apply’ (1) to ‘definitely applies’ (5). The items are derived from attachment theory, the AQS and a review of the literature on teacher-child interactions. In addition to the three subscale scores, an overall total STRS score was generated.

The Conflict subscale measures the degree to which a teacher perceives his or her relationship with a particular child as conflictual or negative (Pianta, 2001), with items such as ‘This child and I always seem to be struggling with each other’. The Closeness subscale measures the extent to which a teacher or aide experiences open communication, warmth, and affection in the relationship. It has items such as ‘I share an affectionate, warm relationship with this student’. The Dependency subscale assesses the extent to which a teacher perceives his or her relationship with a child as inappropriately dependent, and includes items such as ‘This child is overly dependent on me’.

The STRS has demonstrated adequate validity and reliability in respect to criterion variables (Pianta et al., 1995). Test re-test reliability for the three subscales and for the total score respectively are .92, .88, .76, and .89 (all significant at $p < .05$). Internal consistency reliability for the three subscales and for the total scale are $\alpha = .92, .86, .64, \text{ and } .89$, respectively. In terms of concurrent validity, the STRS correlates in predictable ways with concurrent measures of behaviour problems and competencies in primary classrooms (for example, Pianta, 1994; Pianta et al., 1995) with studies of peer relationships (Birch & Ladd, 1997) and with other studies.

3.3.3 Assessing children’s relationships with peers

A peer sociometric measure was used to assess the relationships of each target child with his or her peers in that child’s class. The peer sociometric measure used for this study was based on Asher and Dodge (1986). The purpose of this measure was to assess the sociometric status of every child in a particular class via the combination of a positive nomination technique (PNT) with a liking rating scale (LRS). In the past, many peer sociometric measures have incorporated both a positive and a negative nomination process. However, as many classroom teachers have expressed concern about the harmful effects of a negative nomination technique on their children (Asher & Dodge, 1986), these authors substituted the LRS for the negative nomination technique.

The sample studied by Asher and Dodge (1986) were students in middle childhood who were considerably older than the sample in this current study and, therefore, this measure was modified to suit the younger age of this current sample (see details below). Also, the purpose of Asher and Dodge's measure was to assess the peer sociometric status of all the students in any given class and thereby to place all the children in that class into categories of social acceptance. However, the purpose of this current study was not to categorise whole classes of children as 'popular', 'rejected', etc, but rather, to assess each target child's relationships with his or her classmates. Thus, although this current study employed a similar procedure of positive nominations combined with an LRS, the purpose of the PNT was to ascertain how frequently the target child was nominated as 'most liked' by those classmates who participated in this measure, while the purpose of the LRS was to determine how much other children liked to play with the target child in relation to the rest of the class.

For the PNT, each child was asked to give the names of the three children in their class they liked the most. For positive nominations, children were allowed to nominate classmates of either sex, as per Asher and Dodge (1986). As children show a strong tendency to nominate opposite-sex peers for negative items, and given the low frequencies of negative items, using only same-sex nominations would jeopardise the reliability of the data (Asher & Dodge, 1986). Also, some of the classes involved in this current study contained quite small numbers of students enrolled in them. This measure has proved to be highly stable over time (Asher & Dodge) and has been validated by other research (for example, Granot & Mayseless, 2001).

For the positive nominations, the child was asked "could you think about all the children in your class, just the children in your class? Can you tell me the names of the children you like the most?" If the child seemed to be having difficulty with this process, they were prompted to think about whom their best friends in their class were. Each child was allowed to name just three classmates, and although the number 'three' was never specified, they were stopped after providing three names if they gave the appearance of wanting to offer more.

For the LRS, each participating child was asked to rate every other student in his or her class on a Likert-type scale as to how much they liked to play with that classmate. Asher and Dodge's (1986) study employed a five-point rating scale which was modified to four points as it was felt that a five point rating scale was too complex for the younger age of this sample.

When administering the LRS, the researcher read out aloud (from the class register) to the child the names of each other student in the class and asked "Can you think about Matthew for a minute? Some children like to play with Matthew; some children don't like to play with him. What about you?" If the child gave a positive response, they were then asked "Do you like to play with him a little bit or do you like to play with him a lot?" If the child answered "a little bit" or "sometimes" the number '3' was recorded against that child's name in a book, and if the child answered "I like to play with him a lot" the number '4' was recorded in the book. If the child gave a negative response to the first question indicating they did not like to play with that child, they were then asked "You don't like to play with him a little bit? Or you don't like to play with him a lot?" If the child answered "a little bit" or "not really", the number '2' was recorded against that child's name. If the child replied "a lot" then the number '1' was recorded against that child's name. In this manner, the child gave a 'like to play with' rating for every other student in their class.

3.3.4 Parental/teacher/teacher aide interviews

Interviews were conducted with each child's primary caregiver and with each child's class teacher and teacher aide. These interviews were conducted in an open-ended, semi-structured manner. Interview questions were designed for the specific purpose of this study by the researcher. To some extent, questions were pre-planned and standardised, while others followed on from and built on previous responses from the interviewees. The interview questions for both teachers/aides and for parents were designed, firstly, to aid in the answering of the research questions and, secondly, to supplement and enrich the quantitative data.

Interviews with parents (see Appendix L) focused on the following subject areas: (a) Their perceptions of their child's relationships with significant people at school, namely, their

teacher, teacher aide, and their classmates, (b) their perceptions of their child's attachment-related behaviour, (c) their perceptions of their child's transition to school and how well the adjustment process was currently working, (d) the strategies they used for interacting with their child (and vice versa) on a one-to-one basis, and (e) some initial questions used at the beginning of the interview as 'ice-breakers'.

Interviews with teachers (see Appendix M) focused on the following subject areas: (a) the teacher's perceptions of the child's relationships with significant people at school, namely, with themselves, their teacher aide, and their classmates, (b) their perceptions of the child's transition to school, and how well their adjustment was currently working, (c) any particular strategies employed by either the child or the teacher for interacting with each other on a one-to-one basis, and (d) some initial ice-breaker questions. The interviews with the teacher aides were a shortened version of the teacher interviews (see Appendix M), and focused mainly on the topic of the children's relationships with their peers. For all interviews, a cassette audio-recorder was used to record the interviews and these were later transcribed.

3.4 Data Scoring and Coding

3.4.1 Attachment Q-set

The scores for the 90 AQS items for each target child reflected the pile numbers in which they had been placed by the parent Q-sorters and these scores were recorded on a data spreadsheet. A criterion sort correlation was conducted whereby each child's AQS scores were compared with the scores of the hypothetically most secure child on the constructs of security and dependency. For this purpose, a Spearman rank (non-parametric) correlation was chosen as it was felt that it was likely that the data would not be normally distributed, given the nature of the sample. Thus, correlation coefficients were calculated for both security and dependency for each target child. These coefficients became the children's security and dependency scores, and these were used in the final correlation. In addition, a sample mean correlation coefficient was calculated for both constructs. The target children were then clustered into three groups on the basis of their security scores and by examining patterns of significant differences in these scores. Specifics on this process are described in the Results Chapter.

3.4.2 Student-Teacher Relationship Scale

This 28-item instrument was scored by detaching the top sheet of the Response Form to reveal the Scoring and Profile Sheet. The numbers circled by respondents for each of the 28 items were transferred to the boxes in the appropriate subscale columns, and these scores were then summed up, producing a raw score total for each of the subscales. These subscale raw score totals were then transferred to the appropriate spaces on the left side of the Scoring and Profile Sheet. These subscale raw scores were then embedded in the following formula to calculate an STRS total raw score:

$$(72 - \text{Conflict raw score}) + \text{Closeness raw score} + (30 - \text{Dependency raw score}) = \text{Total raw score}$$

Raw scores were then converted to percentiles for each of the subscales and the STRS total scale score using the Total Normative Sample Conversion Table. The percentiles were then transferred onto the Profile Charts. In some instances, teachers failed to complete one of the 28 STRS items and, in these cases, a formula was used to prorate that particular subscale raw score. The formula was the obtained raw score multiplied by the number of items on that subscale, divided by the number of items actually completed.

To interpret the STRS for each dyad, the percentiles on each Profile Chart were examined in the four aspects of conflict, closeness, dependency, and the total scale. For each subscale score and the total scale score, scores were categorised as extremely high or low by comparing the score to the figures obtained when the instrument was normed against 1500 students in the United States. Under the Conflict subscale, if a particular child's percentile came in above the seventy-fifth percentile, this was regarded as extremely high. For the Closeness subscale, if a particular student's percentile fell below the twenty-fifth percentile, this was regarded as critically low. Under the Dependency subscale, if a child's percentile came in above the seventy-fifth percentile, again, this was regarded as critically high. Finally, if the Total Scale percentile fell below the twenty-fifth percentile, this was again regarded as extremely low and an area of high concern.

The dyadic relationships for each of the target children were then examined more closely in terms of these four aspects, attempting to find patterns of consistency or difference for each target child. Children were then clustered into relationships of low, medium or high concern. A child was placed into the Low Concern cluster if all their dyadic relationships were characterised by either no or only one area of concern according to the percentiles on their Profile Charts. If a child's relationships were characterised by only two areas of concern, the student was placed into the Medium Concern Cluster. If the child had dyadic relationships characterised by several critical areas, he or she was allocated to the cluster of High Concern. Whereas it was the STRS percentiles that were used to make interpretations for each child, it was the children's raw scores in these four aspects that were used for the final correlation.

3.4.3 Peer sociometric measure

The PNT was analysed by simply adding up the number of positive nominations received in a given class and, in particular, the number received by the target child in that class. These data were simply used to embellish the data from the LRS. The LRS was analysed by calculating mean liking ratings for the entire class of a given target child, and standard deviations were also computed. From this, a class mean and standard deviation were also calculated. This process was repeated for the whole class of every target child in the sample.

The next step in the process was to calculate Z scores for each target child using their mean liking rating and standard deviation, and using the class mean and standard deviation. On the basis of these Z scores, the target children were then grouped into clusters. Those children whose Z scores were more than one standard deviation above their class means were placed in the cluster of 'significantly higher'. Those children whose Z scores were within the range of plus or minus one standard deviation of their class means were placed in the cluster of 'similar'. Finally, those children whose Z scores were more than one standard deviation below their class means were grouped in the 'significantly lower' cluster. Finally, both the Z scores and the numbers of positive nominations were used in the overall correlational analysis.

3.4.4 Interviews

The interviews of parents, teachers and teacher aides were transcribed. These interview transcripts were then analysed with a focus on capturing the essence of participants' responses to each specific interview question, and to help create an overall picture of the nature of their interactions and relationships with the target child, and the nature of the student's transition into and adjustment to school. Given the directive nature of the questions and the clear connection to specific research questions, the inference load on categorising parental, teacher and teacher aide responses was quite low. It is for this reason that no attempt was made to employ inter-rater reliability procedures with regard to the categorisation of parental, teacher and teacher aide responses to the interview questions.

3.5 Data analysis

The three survey instruments produced multiple variables and these were compiled into a final data set. This data set included the children's ages, their AQS security and dependency scores, their liking Z scores, and the number of positive nominations received by each child. It also included the STRS raw scores for each teacher and teacher aide under the subscales of Conflict, Closeness, Dependency, and for the Total Scale score. A spearman non-parametric correlation was then conducted to examine the associations between the multitudes of variables.

This study also involved in-depth case studies of seven of the target children. The seven case studies will focus on providing more detailed descriptions of each of the seven children to assist in answering the three research questions. The children were chosen for case studies to represent either those children who were most successfully adjusted to school, or those whose school adjustment could be regarded as less successful. The data for the case studies were derived mainly from the interviews, and these were coded according to themes, although additional data came from the quantitative measures. The next two chapters will present and discuss the results to answer the three research questions. Chapter Four will focus on presenting and discussing the results from the surveys and interviews, while Chapter Five will focus on presenting the case studies.

CHAPTER FOUR

RESULTS AND DISCUSSION: SURVEYS AND INTERVIEWS

This study focused on examining three inter-linked facets of the adjustment to school for young children with special needs. First, it assessed the attachment security of these children at home with parents and how this may have affected their relationships at school with teachers and with peers. It also examined how the patterns of interactions of these children and their caregivers may have contributed to their attachment behaviour. Third, it focused on examining the processes that occurred during their transition to school, and on how the patterns of interactions and relationships between the participants may have affected this transition process. The results of this study will be presented and discussed in two chapters. This chapter will focus on answering the three research questions, and Chapter Five will present a number of case studies chosen to represent those children who were viewed as well adjusted to school, and those children who were viewed as less successful in their school adjustment.

The first research question in this study is ‘What are the strategies that children with special needs and their caregivers use when interacting with each other?’ The first section in this chapter will focus on answering this research question, and will be answered by a purely qualitative approach. The second research question is ‘What is the relationship between children’s attachment security at home with parents and their relationships at school with teachers, teacher aides, and peers during the first year of formal schooling in a sample of young children with special needs?’ The second section in this chapter will focus on answering this research question, mainly by utilising the quantitative data, but will also incorporate qualitative data where necessary. The third research question is ‘How was the transition to school process conducted for a sample of young children with special needs?’ This research question will be answered by a purely qualitative approach, and will be addressed in the third section of this chapter.

4.1 What are the strategies that children with special needs and their caregivers use when interacting with each other?

In a discussion of the literature surrounding attachment security in infants and young children with special needs, Hanson (1996a) discusses the interactional processes that occur

between these children and their primary caregivers. This author goes on to say that when a young child is disabled, the interactions between him or her and their caregiver may be disrupted because the child enters the interactional process with a limited or atypical behavioural repertoire, and studies of typically developing children show that adults do differentially respond to children on the basis of their characteristics. Hanson speculates that these children may have fewer or different interactional cues when interacting with their parents or caregivers.

One of the objectives of this current study was to examine the interactional processes between young children with special needs who had recently entered formal schooling and their parents and teachers. A purely qualitative approach was used to answer this research question, and interviews of both teachers and parents were conducted in a semi-structured manner. A range of interview questions for both parents and teachers was designed specifically for the purpose of eliciting this information.

In all cases except one, it was only the teacher and parent interviews that included this set of questions; teacher aides were not included in this process except in the instance of a child named Callum. In the case of Callum, this child only attended for those hours that a teacher aide was employed in the classroom, and his programme, which was individual to him, was delivered solely by his teacher aide. On this basis, when this set of questions was put to his teacher, she declined to answer, believing that it would be more appropriate for his aide to respond to these questions. More details about this will be provided in the case studies. It should also be noted here that, although teacher aides were not asked directly about interactional strategies (apart from Callum's teacher aide), in some instances, teacher aides would offer information on this topic on a spontaneous basis, and this data will also be presented here.

Parents and teachers were asked if a particular child used any special strategies when interacting with them on a one-to-one basis, and if they could think of any strategies that might be different to those used by the typically-developing children in their family or class. For the purposes of this study, interactional strategies are defined as cues or tactics used by either partner when interacting with one another and used to achieve a particular goal or aim. These strategies may be verbal, gestural, auditory, visual, tactile, olfactory, or

gustatory, and will involve the use of the senses where these senses are essential in interpreting the interactional strategies. Research has indicated that when one of the senses is impaired, this may interfere with the processes of communication and interaction (Fraiberg, 1977; Friedman, 1986; Hadadian, 1995; Hanson, 1996a). This could result in these children mis-interpreting the cues of their caregivers, or their caregivers mis-interpreting the cues of these children, which in turn may impact on the formation of attachment relationships (Hatton et al., 2002).

Teachers and parents were also asked if they themselves employed any special strategies when interacting with a named target child. In other words, interviewees were being asked to directly compare the strategies of the target children, and the strategies that they themselves used with these children, with those of the typically-developing children in the same family or class. Although this set of questions was designed to directly elicit this information from the interviewees, in some instances, interviewees (either a parent or a teacher) would spontaneously proffer this information outside the framework of these specific interview questions. If the interviewee seemed to be having difficulty responding to these questions, examples were provided to prompt their thinking.

In these interviews, interviewees offered a whole range of strategies being used either by the children or by themselves with their children. Some of these strategies were general to many of the children and were in widespread use, while others were specific to individual children. Strategies that were used by teachers sometimes coincided with those being employed by the parents, while in other cases, there was some mis-match between the responses of parents and teachers. Also, other teacher strategies were often complemented by those used by parents, and in some instances, strategies used by the children were complemented by those used by their parents or teachers. To some extent, the type of strategies being employed was found to be related to the nature of the child's disability. Additionally, the number and range of strategies being employed was frequently related to the severity of the child's disability, particularly in the case of the low vision children.

The responses of the parents and teachers can be categorised into four clusters, that is, child strategies, parent strategies, teacher strategies, and the use of the senses, and the following sub-sections will focus on these four clusters. As eye contact, smiling, and the

interpretation of facial expressions are such an integral part of the interactional process, these issues were also examined, and the data relating to these matters will be incorporated in the sub-section on child strategies.

4.1.1 Child strategies

Parents and teachers were asked if a named target child had any particular strategies for gaining their attention, or for keeping track of them or locating them as they moved around the house or classroom. The strategy found to be in the most widespread use by the children was using their voice for the purpose of communicating or for locating the parent or teacher, and if the child did not get an immediate response, the calling out became repetitious and the volume increased. It could be argued that this is a strategy used by most children, even typically-developing ones, although it must be remembered that respondents advanced this information in direct response to making comparisons with non-disabled children. In one instance, the case of a child with a severe vision loss named Seth, his mother commented that he would frequently call out to her or to his best friend 'look at me' (for example, when climbing on a climbing-frame at school), when this was actually a strategy to locate that person. There were three boys in this sample, Liam, Riley, and Damien, whose parents or teachers commented that, when the child wanted to gain their attention and they did not achieve an immediate response, they would bellow really loudly, or scream or squeal because of a lack of language. In the case of Riley (a child with a severe language disorder), his mother reported that he always needed to know where she was, and if she went out of his sight, he would continue to scream until he located her.

However, there was also a group of children whose parent or teacher commented that, when the child wanted to gain their attention, rather than calling out to them, the child would go right up to them and either stand by them, touch them, or tug at their hand using a non-verbal form of communication. This group included Jacob, Adam, Chelsea, and Callum. This strategy was also put forward by Damien's teacher, who had earlier reported that, at other times, Damien would squeal really loudly to gain her attention. The teachers of Gene and Jacob commented that these boys seemed quite reticent or reluctant about coming forward or trying to gain their attention in the classroom situation.

Damien's mother reported that, when he wanted to gain her attention for something, rather than waiting for permission as her non-disabled children would do, he would simply go and just help himself to that object. Callum's mother commented on how, if he had something to show her, he would come up to her and put the object right up in her face. The parents of two children, Seth and Riley, reported that, if their child was trying to gain their attention and the parent did not respond immediately, the child would come right up to them and take hold of the parent's face in their hands, turning their face around towards them. In the case of Seth, this could be explained by his extremely poor vision, that is, an attempt to force direct eye contact with his parent. However, in Riley's case, this child apparently had quite normal vision. Conversely, Riley's mother also reported that, at other times, he would do the opposite and completely avoid her eye contact.

Certain strategies were offered solely by the teachers and parents of the children with low vision. For example, many of these parents and teachers reported that these children recognised the parent, teacher, or teacher aide by the sound of their voice, using that recognition to locate that person, orientating towards the sound of their voice. Similarly, some of the respondents reported that these children recognised them by their clothing, to the extent that, if they should change their clothing in a single day, the child would fail to recognise them. The teachers of two of the low vision girls, Sasha and Chelsea, reported that these girls had a habit of sticking very closely to their friends and maybe even holding their hands, particularly in the school playground. It should be acknowledged here that, to a certain extent, these strategies would be exactly what one would expect from children with such poor vision.

As smiling is such an integral part of the interactional process between partners in a dyadic relationship, and as many of the participants in this study had low vision, this issue was explored through the interview process. Children with visual impairments may not observe others (whether it be children or adults) smiling and, therefore, may not themselves understand how to appropriately exhibit this behaviour (Compton & Niemeyer, 1994). First, parents and teachers were asked whether a particular child was able to gain eye contact with them. Here, there was some incidence of mis-match between the responses of parents and teachers, with parents more likely to answer in the affirmative than teachers,

and some teachers replying “only sometimes” to this question. Concordance between respondents was reached in eight cases, with agreement in the positive for the parents and teachers of six of these children. The exceptions were Jacob, where both his teacher and his father answered in the negative to this question, and Duane, where both his mother and his teacher agreed that they would have to be up very close to him to get his eye contact. In those cases where there was disagreement between the answers of parents and teachers, this may be explained by children being more willing to look parents in the eye than teachers, out of shyness or respect for their teachers. This was illustrated by Adam’s mother who replied in response to this question “he is able to get eye contact with me, but when he’s unwilling to comply, he will refuse to look me in the eye”.

Parents and teachers were then asked if a named target child used smiling in the same way or to the same extent as other children in their family or class would do. Here, interviewees were being asked to directly make comparisons with typically-developing children. Although there was again some element of discord between respondents for this question, the level of agreement was greater, with teachers and parents reaching concordance with 12 of the 17 children. Of these 12, the parents and teachers of seven children described them as just as smiley as other children, while the parents and teachers of the other five believed that these children were not as smiley. In the case of the remaining five children, there was disagreement between teachers and parents about how much the child smiled, with parents believing their children to be more smiley than did the teachers.

Teachers and parents were also asked if a named target child displayed their emotions or feelings through their facial expressions. Again, respondents reached agreement in the case of 12 of the 17 children, with parents and teachers of nine of these answering in the positive and three replying in the negative. For the remaining five children, there was discord between the responses of parents and teachers, with parents more likely to answer in the positive than the teachers. The only exception to this was in the case of Damien where, although his teacher answered in the positive to this question, his mother replied that he did not seem to display his feelings through his facial expressions. The parents of three of the low vision children, Jacob, Sophie, and Chelsea, commented that these children seemed unable to pick up on the facial expressions or body language of others, and Jacob’s teacher

concurred with this. His father elaborated on this by commenting that, as Jacob's vision impairment had not been picked up until he was at preschool, he had been unable to learn by observing his parents' behaviour as children with normal vision would do in their early years.

Compton and Niemeyer (1994) noted that children with sensory impairments may experience difficulty in both receiving and expressing affection because of the limitations imposed by their disabilities. These authors suggest that children with visual impairments may not be able to pick up on social signals such as affectionate facial expressions or gestures in others, and may not observe other children or adults engage in affectionate behaviour, such as smiling or physical contact and, therefore, may not themselves understand how to appropriately exhibit these behaviours. In addition, Fraiberg (1977) showed that the parents of visually-impaired children have difficulty reading their child's emotional signals. If this is a problem for parents who spend more time with their children, then it is likely to be even more difficult for peers and other adults to be able to read the signals of these children (Compton & Niemeyer). Consequently, these children are at greater risk of not receiving or reciprocating affection due to their sensory limitations. Because child-caregiver affection is a precursor of child-child affection and interaction, it could be possible that young children with special needs may experience negative patterns of child-peer affection and interaction. Compton and Niemeyer suggest that social interaction is one of the most critical components for the success of mainstreaming children with visual impairments in regular classes.

In sum, special interactional strategies exhibited by these children included much more extensive use of the voice, non-verbal forms of communication such as physical touch, and recognition of people by the sound of their voice or by their clothing. There was some concordance between parents and teachers on the issue of the extent to which these children smiled, and on the issue of the degree to which they displayed their emotions compared with their typically-developing counterparts. There was less agreement between respondents on the issue of eye contact, and with all three issues, parents were more likely than teachers to answer in the affirmative. One possible explanation for this discrepancy is that, at this age, the parents would be spending more time with their children than would

the teachers and would, therefore, be more familiar with their children. Additionally, it is likely that the children felt more comfortable with their parents than with their teachers. It must be remembered that these strategies were put forward by parents and teachers as a result of being asked to directly compare these children with the typically developing children in the same family or class. There seems to be a scarcity of research on this topic, thus making it difficult to compare these findings with other studies.

4.1.2 Parent strategies

As mentioned earlier, many of the strategies suggested by parents complemented those being used by their children (see the previous sub-section) or were complemented by strategies put forth by teachers (and this will be discussed again in the next sub-section). The strategy that was most universally reported by the parents of this group of children (and indeed by their teachers, as well) was using more verbal forms of communication than they would with other, typically-developing children in the same family. In fact, the only children for whom neither parents nor teachers reported using this strategy were Adam (who had a speech/language delay), Gene (who had mild developmental delays), and Tyler (who had dyspraxia and mild Pervasive Developmental Disorder (PDD)). Apart from this, there was one child (Sophie, a child with low vision) whose teacher reported using this strategy, but not her mother. This strategy was even in common use for those children whose parents or teachers described as ‘very visual learners’.

This strategy of verbalisation took many forms. In some instances, parents reported making instructions more explicit for their child with special needs, or repeating themselves over and over again to make things clearer to the child, and spending time explaining to the child exactly what was going to happen in order to warn the child in advance. It also meant that, when in a strange or unfamiliar place, the parent had to be very explicit about where they were going to, or going to be, so their child did not panic on losing sight of their parent. This last strategy was put forward by four parents, all of them parents of children with low vision. Additionally, two parents reported that, when collecting their child from school at home-time, as their child would not recognise the parent visually, the parent would call out to the child so that he or she could orientate to the parent’s voice. This meant ensuring

arriving on time and standing reasonably close to the child so that he or she could hear the parent.

The use of this verbalisation strategy to facilitate interactions within similar populations is supported by other research. A study by Mash and Johnston (1982) compared the mother-child interactions of two samples of hyperactive children with the mother-child interactions of two samples of typically-developing children of the same ages. These interactions were observed in both unstructured play situations and in structured task activities. Results showed that the mothers of the hyperactive children were generally more verbally directive in both types of activity than were the mothers of the typically-developing children of the same age. Hanson (1996a) suggests that parents of children with special needs may be able to adjust to the interactional differences of their children, and these adaptations may include more directive or more structured interactions than would occur with typically-developing children.

Several studies have found that the mothers of blind and visually-impaired (VI) children tend to be highly directive and protective in their dyadic interactions with their children (for example, Adenzato, Ardito, & Izard, 2006; Behl & Akers, 1996; Dote-Kwan, 1995). Behl and Akers compared the interaction behaviours of the mothers of young VI children with those of the mothers of young children who were mildly developmentally delayed but who had normal sight in free play sessions. The two groups of children were matched by both chronological and developmental age. Results showed that the mothers of the VI children used more controlling strategies, were more physically involved with their children, and spoke more to them than did the mothers of the sighted children. However, the quality and appropriateness of the interactions of the mothers of the VI children were found to be no different to those of the mothers of the sighted children. Adenzato et al found that the interactive style of the mothers of VI children had no long-lasting negative consequences for the psychological development of their children. These authors suggested that, as long as these mothers are loving and are sensitive to their children's needs, their greater physical intervention and control of child exploration can play an important role in helping their children develop into secure and well-balanced people.

Friedman (1986) found that the mothers of VI infants adapted to the sensory limitations of their children, with the mothers of the more severely VI children being more responsive to their children's initiations. Campbell (2007) observed the mother-child dyadic interactions of blind preschoolers, and found that these parents were able to adapt by finding alternative strategies for interacting with their blind children. This author concluded that these children needed to be given more information about what they could not see. It is suggested here that, in this current study, the finding that the mothers of these children with special needs used more verbalisation strategies with their children cannot truly be viewed as maternal directiveness. Rather, it is suggested here that this finding is more in line with Campbell's (2007) suggestion that the mothers were giving their children more information about what they could not see.

Three parents commented on using singing or music to communicate with their children. For example, the mother of Marcus, a boy with low vision who was the first-born child in a family of three, reported that she had sung to him a lot as an infant or toddler in order to reassure him. The mother of Sophie, a girl with low vision, reported that she would have to either raise her voice or to get very close to the child's face to let her know that she was displeased with her. In the case of Adam, a boy with a mild hearing loss and speech/language delay, his mother reported using more physical forms of contact with him, for example, having to go right over to this child, taking his face in her hands in order to ensure that she had his attention. Likewise, Damien's mother reported that calling out to him would not in itself be sufficient to gain his attention; she would have to go right up to him. Stefan's mother reported using a set of visuals at home when wanting to communicate with him and, as this was a strategy that was in more common use at school, this will be described in more detail in section 4.1.3.

One of the practices employed by parents that was complemented by teachers was the use of a notebook or small exercise book to pass messages between the home and school. These were used on a daily basis or as the need arose, as a form of communication between parents and teachers and were generally used to exchange information about how the child was doing. This practice applied to four of the participants, and the children involved were Duane, Marcus, Chelsea, and Tyler. Stefan's mother also reported that a similar type of

notebook had earlier been used with her child's school but was no longer being used, and this was a source of some frustration for her. In the case of Duane, a boy with some very complex needs, this took the form of a switch to a communication device which he himself could operate to share messages, not only with his teacher and classmates, but also with his family. Like Duane, Marcus and Chelsea also had ongoing medical issues associated with their disabilities, and this may have necessitated this practice. However, as all four children seemed to be well adjusted to school, there is a sound argument for more widespread use of these resources among this population of children. Bronfenbrenner (1979) suggested that cooperative linkages between home and school, such as the sharing of information about the child and support with homework, can facilitate children's progress at school. Alton-Lee (2003) believes that quality teaching effects are maximised when supported by effective school-home partnership practices focused on student learning.

In sum, the strategies reported by parents for interacting with their special needs children included using more verbal forms of communication, making instructions clearer and more explicit, warning the child in advance about what is going to happen, and using singing or music as a form of communication. They also included the parents thinking ahead and trying to anticipate any problems or difficulties in advance, going right up to the child to gain their attention, and using a notebook to pass communications between home and school. It should be remembered that these strategies were all put forward by parents making comparisons with the non-disabled children in the same family.

4.1.3 Teacher strategies

As with parents, the strategy reported to be in most common use by classroom teachers was using more verbal forms of communication with these children than they did with their typically-developing classmates. As with parents, this took many forms, and an example of this is seen by Chelsea's teacher making a special effort to use her name more frequently to ensure that she had the child's attention. Using more verbal forms of communication was even commonly employed with those children described by either parents or teachers as very visual learners (see more details below).

The use of this verbalisation strategy to facilitate interactions within similar populations is supported by other studies. Kemp and Carter (2000) measured classroom survival skills in a sample of children with a range of intellectual disabilities in their second term at school, including their on-task behaviours across a range of activities. Their ability to follow teacher directions was compared with that of typically-developing (TD) peers. Results showed that teachers gave more verbal directions to the intellectually-disabled children than they did to the TD children, and the number of directions given by teachers varied across level of intellectual disability, with teachers giving more directions to children with moderate to severe disabilities than to those with mild impairments.

A strategy that was advanced by both parents and teachers for interacting with the children with Autism Spectrum Disorder (ASD) was the use of a set of visuals, and these children were described as very visual learners. Visual learners are defined by Tissot and Evans (2003) as children who process and retain information more effectively if it is presented in a format where it is written down and can be seen, as opposed to information that is primarily heard. The children involved were Liam, Damien, Callum, and Stefan, and their teachers and parents described all four boys as very visual learners. The teacher of Tyler also reported using this resource when he had first started at school, although she believed he no longer needed the visuals. This resource took several forms, but most commonly involved a set of photographs of the child functioning in the classroom or school environment. This strategy was designed to aid the child in adjusting and settling in to the classroom and school routines. Some studies (for example, Forest, Horner, Lewis-Palmer, & Todd, 2004; Tissot & Evans, 2003) have confirmed the value and importance of using visuals with ASD children, especially in educational settings.

In the case of the first three of these boys (Liam, Callum, and Damien), this strategy was being used quite effectively and was spoken of enthusiastically by both parents and teachers. In the case of Stefan, however, this tool had been used effectively in the past but was no longer being used. Mentis, Quinn, and Ryba (2005) describe the use of visuals as an example of differentiation being practised in the classroom to increase a student's independence within the school environment. (Differentiation will be discussed further later

in this chapter). Although this example of the visuals indicates that some of the teachers of this sample were using differentiation practices, others were using fewer of these practices.

As mentioned earlier in this chapter, some of the strategies employed by teachers for interacting with these children complemented those being used by their parents. For example, with two of the children with low vision, Seth and Hollie, their teachers reported that, in the mornings when the child arrived in the classroom, the teacher would call out 'hello' to the child, at the same time using the child's name, rather than waiting for the child to say 'good morning' to the teacher, as they would do with the other children. The purpose of this routine was to allow the child to orientate towards the teacher's voice. Additionally, at the end of the day, the teacher would indicate to the child that his or her parent had arrived to collect them, again guiding them off in the direction of their parent. This was complemented by the parent calling out to the child 'hello' so that the child could orientate to the parent's voice.

These two teachers also reported that, when supervising in their classroom, rather than pointing at a child and asking 'are you alright?' as they would do with the other children, they would walk right over to the target child and crouch down beside them to ask that question. Similarly, when the class was seated on the mat, with the other children in the class, the practice was for the child to raise their hand and then the teacher to point to them. With the target child, it was more usual for the teacher to indicate to the child by verbalising their name. Another teacher described how, if the non-disabled children required her attention while working at their tables, they were expected to raise their hands, whereas if the target child should want her attention, she was allowed to come right up to the teacher and tap her on the shoulder, especially if wanting to use the bathroom.

Other strategies to be employed by teachers included seating the child in the classroom with their back to the light, having them out of the glare, and eliminating objects from the classroom that might reflect the glare, such as tables or table-cloths. Several teachers reported that, when walking away from the classroom or school as a class, they would ensure that another child was in front of and behind the target child to keep an eye on them, or would make sure that the target child's hand was held, either by another child or by an adult. Additionally, several teachers described seating the target child as near to them as

possible on the mat, and this strategy did not just apply to the children with low vision. These teachers may also have seated the child at a table near to the front of the classroom. When the class were seated on the mat, teachers employed strategies such as lowering the book down closer to the child so that he or she could better see the pictures. They may also have asked the child to come up to stand beside the white board so that they could better see what was there, or asking the child afterwards did they want to have another look. Although this range of strategies was more common for the children with low vision, it was not exclusive to them.

A strategy that was in common use by several of the teachers, and not just the teachers of the children with low vision, was using the child's name more frequently to indicate to him or her that they were speaking to them. Dote-Kwan (1995) found that the mothers of VI children frequently used the strategy of attentional cueing with their children, and the attentional cueing strategy most commonly employed by these mothers was to say their names before addressing their children. Some strategies were specific and tailored to individual children and were described by teachers. The teacher of Adam, a boy with a speech/language delay and mild hearing loss, reported that, when she wanted to stop the class in what they were doing, she would turn to face him so that he was better able to see what she was saying. Coupled with this was forming the words with her lips in a more accentuated fashion in order to better enunciate what she was saying. Tyler's teacher commented that, because he was such a sensitive and serious child, it was her practice to use a more light-hearted manner when interacting with him. Also, when she needed to reprimand him, she would adopt a softer, kinder tone of voice to do this. Finally, Sasha's teacher reported that, when the class was doing physical education (PE) or some form of running around, she would ensure that the teacher aide was as near to Sasha as possible.

To summarise, these strategies were all offered when teachers were asked to make comparisons with the non-disabled children in their classes. Teacher strategies included using more verbal forms of communication, using a set of visuals to communicate with the child, speaking to the child on arrival at class in order to allow the child to orientate towards their voice and, at the end of the school day, guiding the child off in the direction of the parent. These strategies also included using the child's name more frequently, seating

the child with their back to the light, eliminating glare from the classroom, and seating the child near the front of the mat. When away from the classroom or from the school, teachers reported allowing the child to hold the hand of an adult or another child, or positioning other children in front of and behind the child if walking in a line.

4.1.4 Use of the senses

Parents and teachers were asked if a named target child used or had developed any of their senses to a greater extent to compensate for their special needs. This question elicited a wide range of responses. Many teachers and parents commented that a particular target child seemed to have a greater reliance on their hearing, or a more accentuated sense of hearing. This was most common in, but not exclusive to, the children with low vision. Both the mother and the teacher of Gene, a boy with mild developmental delays but no visual impairment, reported that he seemed to have a more acute sense of hearing. In the case of 11 of the total sample of 17 children, either a parent or a teacher commented that they had noticed that these children also reacted strongly to loud noises, or had difficulty orienting when there was a cacophony of sound.

Many of the children of this sample had low vision and, historically, blindness or low vision has been associated with compensation for the loss of vision by the other senses (Roder & Rosler, 2004; Wakefield, Homewood, & Taylor, 2004). The series of studies by Roder and Rosler, using methodologies such as magnetic resonance imaging (MRI), examined the perceptual functions of blind participants, including auditory and tactile perception. Their results suggested that the brain is able to adapt to the loss of one sense by increasing the processing efficiency of the remaining sensory systems. Additionally, compensatory behaviour is mediated by neural changes within the remaining intact sensory systems, and this is known as intra-modal plasticity, and changes that cross modality borders, and this is known as inter-modal plasticity. The study of Smitsman and Schelingerhort (2000) showed that blind children are able to compensate for the loss of vision by enhancing their sense of touch. Wakefield et al examined both perceptual and cognitive compensations in olfactory tasks in both blind and sighted children. Their results showed that the blind children were superior on tasks that utilised non-visual memory, and this aided them in the odour-naming tasks. Thus, these three studies indicate that blind and

low vision children are able to compensate for the loss of vision by enhanced functionality of their remaining senses.

The parents and teachers of six of the target children reported that these children had a greater reliance on vision, or a more acute sense of vision, and were very visual learners. This was most common in the children with ASD and was most evident in the use of the visuals in the classroom situation (as explained earlier). For example, the teacher aide of Callum described how he would need to see the pictures in a book at story-time in order to be able to understand the story, relying solely on the aural did not work for this child. However, this greater reliance on vision was not solely confined to the autistic children. Both the teacher and the mother of Adam, a boy with a mild hearing loss, reported that he needed to be shown visually how something should be done.

The parents or teachers of 11 children (64.7% of sample) reported that these children were very sensitive to touch or texture, and described them as quite tactile people. Three of these were also sensitive to either the texture or temperature of food. Another three children reacted strongly to the feel of certain fabrics or clothing on their bodies, or of shoes on their feet, or did not like the feel of dirty or wet clothes, and this applied to three of the boys with ASD. For example, the mother of Liam, a boy with Asperger's, described extreme reactions on his part to the wearing of certain footwear, and she had continued to experience these intense reactions right through his five years of life. Additionally, she reported having to cut the labels and buttons off his school uniform prior to him starting school because he had reacted to these so strongly. Callum, another child with Asperger's, was described by his mother as reacting strongly to the wearing of dirty or wet clothing. It must be remembered that Asperger's Syndrome is at the high-functioning end of the Autism Spectrum Disorder. Research studies of gifted children have found very similar results (for example, Meckstroth, 1991, cited in Silverman, 1993).

The teachers of four children and the parent of a fifth reported that their child used touch or physical contact to identify that it was the teacher standing nearby, to gain the parent's or teacher's attention, or to pull them over to where they wanted their attention to be. While discussing the subject of touch, interview respondents also suggested that four of the ASD children did not like to be touched, and these were Callum, Liam, Stefan, and Damien. On

the other hand, Riley, a child described as having autistic-like tendencies, was reported to be quite the opposite, loving the reassurance of touch.

On the subject of smell, the parents of five children reported that their children were extremely sensitive to smell, and then proceeded to relate incidents where their child had reacted strongly to certain smells. For example, the mother of Flynn described an incident where she had been downstairs feeding the family cat. Although this child was upstairs and some distance from the cat food, he had begun to vomit, and yelled out “Oh, no, what’s that smell? Make that smell go away!” Likewise, Sophie’s mother related how she had had to discard her favourite hair spray because Sophie had objected so strongly to its smell, and how she could not have popcorn in the house because, again, Sophie had reacted so intensely to its smell. All these five children were visually impaired. Several parents described their children as being very sensitive to taste or very fussy about food, preferring not to try new foods. All the parents of the autistic children reported that their children preferred bland foods. Damien’s mother commented that, although he loved bland foods, he could also go to the opposite extreme and go for very spicy foods. On the other hand, Adam’s mother reported that he was particularly good about trying new foods and actually preferred more adult food.

This heightened sensitivity of the senses in this sample of children with disabilities may be likened to Dabrowski’s theory of over-excitabilities in gifted and talented children (see Dabrowski, 1938, cited in Silverman, 1993). In his theory of the emotional development of the gifted, Dabrowski saw five over-excitabilities; sensual, psycho-motor, imaginal, intellectual, and emotional, and Dabrowski believed that these are innate and are observable in young children. The sensual over-excitability incorporates heightened experiences of the senses of seeing, hearing, touch, taste, and smell (Silverman). In young children, this over-excitability may mean extreme reactions to the feel of certain fabrics or to loud noises, or it may mean enhanced sensitivities to certain foods. Reactions such as these may last right through until adulthood (Silverman).

It seems eminently possible that Dabrowski’s sensual over-excitability in the gifted could be mirrored in many of this current sample of young children with disabilities. This implies some similarities between gifted and disabled children. It must be remembered that the

phrase ‘children with special needs’ incorporates not only those with disabilities but also includes the gifted. There is a possibility that gifted children and those with disabilities may be more alike than unlike. This has implications for the inclusion of children with special needs (in general) in regular classes, and this will be discussed further in Chapter Six.

In sum, many of this sample of children with special needs had impairments to at least one of their senses. This has the potential to interfere with their ways of interacting with others (Hanson, 1996a) and with the formation of attachment relationships (Hatton et al., 2002). For the majority of these children, at least one of their senses appeared to have become more heightened, and it would appear that some of these children may have been using these heightened sensitivities to compensate for deficiencies in other senses. In addition, it would appear that many of the parents and teachers were relying on or using these heightened senses as a strategy to interact with the children.

4.1.5 Summary and conclusions

Many of the strategies described here were found to be in extensive use by a large number of the children of this sample, or by their parents and teachers, while other strategies were confined to just a few children. Some of the strategies reportedly used by parents coincided with strategies being employed by teachers, and an example of this is illustrated by the widespread use of more verbal forms of communication by both parents and teachers. Moreover, some of the strategies used by children were complemented by strategies employed by their parents and/or their teachers, for example, for those children who were described as very visual learners, sets of visuals were used to support them in the classroom situation.

Similarly, strategies employed by parents were sometimes complemented by strategies used by teachers and vice versa. For example, with two of the children with low vision, a verbal interchange between parent and teacher at each end of the school day was used to guide the child off in the direction of the other party. This type of complementary strategy can be seen as parents and teachers working together in a collaborative team effort to better meet the child’s needs. A further example of this is illustrated by some parents and teachers

using a small notebook to exchange information about the child between the home and school.

These linkages between school and home illustrate the mesosystem within Bronfenbrenner's (1979) ecological systems model. This is a set of nested systems, at the centre of which is the individual. First comes the individual's microsystems, which are those environments in which he or she is immediately and directly involved and, for the child, this will include his or her home and school or preschool. Next comes the mesosystem, which is the inter-relationships among the individual's various microsystems. The mesosystem reflects the linkages between the developing child's microsystems, and processes operating in different settings are not independent of each other. For example, events at home can affect the child's progress at school, and vice versa (Bronfenbrenner, 1986). In this current study, the use of a notebook to pass information between the family and school exemplifies the inter-relationships of the mesosystem. Bronfenbrenner (1979) suggests that development is likely to be optimised by strong, supportive links between the child's various microsystems.

This study found some degree of concordance between teachers and parents in certain aspects of these interactional strategies, while in other aspects, there was some incidence of mis-match. This can particularly be seen in the section on the use of smiling, the ability to gain eye contact, and the displaying of emotions through facial expressions, all of which play an important role in the interactional process between dyadic partners. These mis-matches indicated that parents viewed their children in a more positive light in relation to these factors than did teachers, and this may be significant if it impacts on how these children are perceived, especially by their teachers, teacher aides, and classmates. One possible explanation for these mis-matches is that, at this age, the parents would be likely to be spending more time with their children than would the teachers and would, therefore, be more familiar with their children. Additionally, it is likely that the children felt more comfortable with their parents than with their teachers.

It is perhaps easier to see a clear pattern of interactional strategies emerging with the children with low vision than it is with the remaining children in this sample. However, it must be remembered that the visually-impaired children were much more homogeneous in

nature, while the remainder of the sample is quite heterogeneous. To some extent, the type of strategies being employed was related to the nature of the child's disability.

Additionally, the number and range of strategies being employed was frequently related to the severity of the child's disability. Children with impairments at the more minor end of the scale appeared to be using fewer of these interactional strategies and, in addition, fewer strategies were being used with them. Examples of this include Marcus and Sophie, whose vision impairments were more minor in nature. Similarly, Adam's (who had a minor speech/language delay and hearing loss) and Gene's (who had mild developmental delays) impairments were more minor in nature. On the other hand, where the children's disabilities were at the more severe end of the scale, the number and range of strategies being used were greater, richer, and more diverse. Examples include Chelsea and Seth, whose vision impairments were more severe. Further examples can be seen in Duane (who had complex needs) and Callum (who had Asperger's Syndrome).

In her discussion of the literature, Hanson (1996a) speculates that children with special needs may have fewer or different strategies when interacting with chief interactional partners. There appears to be a real lack of research on this topic and, on this basis, it is difficult to compare the findings of this current study with those of other studies. However, in this study, parents were asked to directly compare the strategies that their child with special needs employed, or that they themselves used with this child, with those of other, typically-developing children in their family. Likewise, teachers were asked to directly compare these strategies with those of the non-disabled children in the same class. Thus, the range of strategies described here was all put forward in response to making these comparisons. However, it is asserted here that the interactional strategies employed by these children and their parents and teachers were not markedly different to those being used by or with typically-developing children of the same age (see also Hanson, 1996a). Hanson also goes on to suggest that the parents of children with special needs may be able to adjust to these interactional differences, and what differences do occur do not indicate deviance or dysfunction. The evidence provided here would tend to support this. When children are impaired in various degrees, their parents are generally capable of

compensating for this potential obstacle in the dyadic relationship (Van Ijzendoorn et al., 1992).

4.2 What is the relationship between children's attachment security at home with parents and their relationships at school with teachers, teacher aides, and peers during the first year of formal schooling in a sample of young children with special needs?

Children's inter-personal relationships may serve a number of functions that will either enhance or impede their adaptation to new environments during the process of transition (Ladd, 1996). A close relationship with the teacher or with friends may provide children with resources during difficult times. Families are a primary support system for children, and children's experiences at home may influence early school adjustment (Ladd). Pianta (1994) suggested that it is a commonly-held belief by children, parents, and teachers that children's relationships with their teachers are an important component of their experience at school and are related to children's adjustment. Security in the child-parent relationship predicts competence in other settings (Pianta).

This research question was answered by examining three sets of relationships. The first sub-section will describe the children's attachment relationships at home with parents. The second sub-section will examine the children's relationships at school with teachers and teacher aides. The third sub-section will discuss the children's relationships with their peers at school. The fourth sub-section will analyse the associations between these three sets of relationships and, finally, this section will conclude with a summary of the findings related to this research question. Quantitative data will be used to answer this question although, where possible, data from the interviews will be woven into this section.

4.2.1 Children's attachment security with parents

The Attachment Q-set (AQS) (Waters & Deane, 1985) produces security and dependency scores that range along a continuum from the most securely to the most insecurely attached children. In this current study, the children's security scores ranged from .46 to -.25 ($M = .25$, $SD = .21$) (see Table 4.1). These scores resulted from a comparison with those of the hypothetically most secure child, and when a result is statistically significant, this means that it is significantly different to that of the hypothetically most secure child. A meta-

analysis by Van Ijzendoorn and others (Van Ijzendoorn et al., 2004) found a mean security score of .32 in normative samples, and a mean security score of .21 in clinical samples.

Table 4.1

Attachment Q-Set security and dependency scores for a sample of young children with special needs

	Security	Dependency
Seth	.27**	-.03
Sasha	.43**	-.31**
Jacob	.40**	-.18
Hollie	.35**	.00
Marcus	.46**	-.20
Sophie	-.03	-.13
Duane	.03	-.18
Flynn	.03	-.18
Chelsea	.43**	-.19
Adam	.46**	-.20
Gene	.35**	-.13
Tyler	.40**	-.18
Callum	.36**	-.30**
Liam	-.25*	.38**
Stefan	.03	-.18
Riley	.30**	-.09
Damien	.19	-.29*

Note: * $p < .05$, two-tailed. ** $p < .01$, two-tailed.

Dependency scores were also calculated for these children (see Table 4.1). The dependency scores for this sample ranged from .38 to -.31 ($M = -.14$, $SD = .15$). Only four of these scores reached statistical significance, and all but two were in the negative range. These negative dependency scores indicate low levels of dependency on the part of the majority of these children. The exception to this was the dependency score of Liam (.38, $p < .01$).

The children were clustered into three groups on the basis of their AQS security scores and whether these scores reached statistical significance (see Table 4.2). Waters and Deane (1985) suggest using .3 as a cut-off point between security and insecurity of attachment. On this basis, in this current study, 10 out of the total sample of 17 had security scores above

this cut-off, but another child (Seth) was also placed in the securely-attached group as his security score came in just below the cut-off at .27 and was statistically significant ($P < .01$). Thus, 11 of the total sample were securely attached (64.7%). Another five of the children had security scores that ranged from .19 to -.03, and all these scores lacked statistical significance. This became the second group. Finally, the security score of one child (Liam) was much lower than those of all the other children at -.25 and, again, this reached statistical significance ($P < .05$). As the security and dependency scores of this child were so different to those of other children in this sample, this will be examined more closely in the case studies.

Table 4.2
Parent-child relationship clusters based on AQS security scores in a sample of young children with special needs.

Securely-attached children ^a	Insecurely-attached children ^b	Insecurely-attached children ^a
Seth	Sophie	Liam
Sasha	Duane	
Jacob	Flynn	
Hollie	Stefan	
Marcus	Damien	
Chelsea		
Adam		
Gene		
Tyler		
Callum		
Riley		

Note: ^aChildren with security scores with statistical significance. ^bChildren with security scores without statistical significance.

A study by Cohn (1990) of attachment security in a sample of normal, middle socio-economic status (SES) six-year-olds found that 55% were securely attached (Type B), 14% were insecure avoidant (Type A), 6% were insecure ambivalent (Type C), 15% were insecure disorganised (Type D), and 10% were unclassifiable (see Ainsworth et al., 1978; Main & Solomon, 1990). A meta-analysis by Van Ijzendoorn and his associates (Van Ijzendoorn et al., 1999) showed that, in clinical samples, or in other SES populations, the proportion of Type D attachment could be two or even three times higher. These authors included samples of adults with mental health problems, such as depression, and children with disabilities, such as ASD, in their definition of clinical samples. Because of the small

size of this current sample, these children were not classified into categories of attachment security, that is, Types A, B, C, and D. Nevertheless, it is quite relevant to compare the proportions of securely-attached versus insecurely-attached children of this current sample with the findings of other studies. In this study, 64.7% of the children were found to be securely attached, which compares quite favourably with other research on attachment security. For example, another meta-analysis by Van Ijzendoorn and his colleagues (Van Ijzendoorn et al., 1992) found that percentages of attachment security were generally lower in children with disabilities, less than 50%, compared with around 65% in typically-developing (TD) children. Thus, the proportion of securely-attached children of this current study would appear to be more in line with samples of TD children.

In the parent interviews, parents were asked a series of attachment-related questions. These included how their child reacted upon separation from and reunion with the parent, and how he or she behaved in a variety of situations, such as when meeting new people for the first time, when hurt or injured, and when being disciplined. In general, the responses from the parents supported the AQS data. For example, Sasha's security score was .43 ($p < .01$) and her dependency score was -.31 ($p < .01$), indicating a child who is both secure and independent. Sasha's mother reported that she was polite and friendly on meeting strangers and reacted well to being disciplined. When her parents went away for a few days, Sasha would be quiet but not tearful on separation, and upon reunion with her parents after their absence, would be pleased to see them again but would quickly return to whatever she had been doing.

On the other hand, Stefan's security score indicated insecurity of attachment (.03, $p > .05$) and his dependency score was -.18 ($p > .05$). His mother reported in her interview that Stefan did not react well to being disciplined, screaming loudly if put into time out. His reaction to meeting strangers was to hide behind her, or to be quite shy and stand-offish. Additionally, Damien's security score indicated insecurity of attachment (.19, $p > .05$), although his dependency score indicated a fair degree of independency (-.29, $p < .05$). His mother also described difficulty with meeting new people and with being disciplined. Interestingly, this mother reported that, when Damien met his maternal grandparents (who could be regarded as secondary attachment figures), he tended to back towards them for them to hug him,

rather than approaching facing them and hugging them himself. This type of behaviour is redolent of the insecure disorganised pattern of attachment (see Main & Solomon, 1990). However, there was no report of such behaviour with either of his parents, his primary attachment figures.

Parents and teachers were asked how a named target child would behave in a strange, new, or unfamiliar place when compared with children without disabilities. Examples that were provided for parents included how the child would behave in a shopping centre, car park, or supermarket. Examples that were provided for teachers included how the child would behave when away from school on a class trip. Parent and teacher respondents reported that the strategy most commonly used by these children was to stick very closely to the side of the parent, teacher, or teacher aide, maybe holding their hand or holding onto the stroller (in the case of a parent with a younger child in a push-chair). Parents also reported that, in these situations, these children did not like the parent to go off unless the child accompanied them, or unless they were very clear as to where the parent was going. However, parents and teachers also stressed that this type of behaviour was confined to unfamiliar environments; in more familiar settings, such as at home or at school, the children coped very well. This way of behaving in unfamiliar situations applied to 11 children out of the total sample of 17 (64.7%) and occurred in children from a wide range of disability types.

Some of the parents also reported that, if their child should lose sight of them in one of these unfamiliar situations, they would panic and start screaming. Or, as the mother of Flynn (a low vision boy) described, on being reunited with his mother again, would become quite angry and aggressive, hitting her and saying “why did you walk away from me, you didn’t tell me where you were going”. Flynn’s mother commented that she thought it to be quite unusual for a five-year-old boy to still want to hold her hand. Sophie’s mother reported several similar behaviours on the part of her daughter in unfamiliar settings, that is, Sophie would cling very closely to her mother’s side or would insist on holding onto the stroller, and would tend to panic and scream if she lost sight of her mother. Additionally, if she moved with her mother from one room to another where the light changed or dimmed, Sophie tended to instinctively move closer into her mother’s side. There were other

children in this sample who, on losing sight of their parent, would panic and just freeze on the spot. This applied particularly to Jacob (a boy with low vision) and Tyler. In Tyler's case, this type of behaviour also occurred in large, open spaces, or in large rooms or buildings with high ceilings. It must be remembered that Tyler suffered from dyspraxia and mild PDD, and his mother commented that he would sometimes adapt to these situations by holding onto the walls in order to move around those spaces, such as in the hall of the family home.

It seems possible that some of these types of behaviours in unfamiliar surroundings could be seen as the result of insecurity of attachment in the parent-child relationship. For example, the behaviour of Flynn in unfamiliar settings was to cling very closely to his mother and to hold her hand and, if he lost sight of her, would panic and scream out. Flynn was found to be insecurely attached in the AQS. Similarly, like Flynn, Sophie was a low vision child and was also found to be insecurely attached. On the other hand, Riley's mother reported very similar behaviours from him in these unfamiliar situations, and Riley's AQS security score was found to be in the secure range. Other children exhibited similar behaviours on losing sight of their parents, that is, panicking and either screaming out or freezing on the spot, including Sasha, Jacob, Chelsea, and Tyler. Like Riley, all these children were found to be securely attached and had a variety of special needs. Thus, it seems more likely that these behaviours could be directly attributable to the specific characteristics of the child, rather than to insecurity of attachment.

In sum, the AQS revealed that 64.7% of this sample was securely attached and 35.3% were insecurely attached. Parents and teachers were also asked a series of questions about the children's reactions in strange or unfamiliar places. The responses of the parents to these attachment-related questions in the interviews tended to confirm on an individual basis whether their child was securely or insecurely attached.

4.2.2 Children's relationships with teachers and teacher aides

The Student Teacher Relationship Scale (STRS) (Pianta, 2001) was used on 28 dyadic relationships, that is, 17 child-teacher relationships and 11 child-teacher aide relationships (nine of the children had teacher aides, but two of these had two aides working with them

who both participated in this research). This produced raw scores and percentiles in four areas; conflict, closeness, dependency, and the STRS total score.

In the Conflict sub-scale, percentiles ranged from 5 to 82. Three children had conflict scores in their teacher relationship on the fifth percentile, Marcus, Flynn, and Tyler. At the other extreme, Callum's conflict score in his teacher aide relationship was on the eighty-second percentile. Callum had two dyadic relationships, one with a teacher and one with a teacher aide, although the majority of Callum's teaching was carried out by his teacher aide with little input or interaction from his teacher. Thus, it is asserted that his relationship with his teacher aide is the more important of his relationships and, therefore, it is rather concerning that there is so much conflict in this relationship. Conflict was also high in his teacher relationship on the 73rd percentile. Using the 75th percentile as a cut-off point, other conflict scores to fall into the critically high range included Jacob's teacher relationship (77th percentile). Coming in just below the cut-off were the teacher aide relationship of Duane (73rd percentile), the teacher relationship of Riley (65th percentile) and the teacher aide relationship of Stefan (65th percentile). All the children that experienced high conflict in their teacher or teacher aide relationships were boys, and Birch and Ladd (1997) found significantly more conflictual relations with boys in the teacher-child relationship in their study.

In the Closeness sub-scale, percentiles ranged from under the first percentile (Jacob's teacher relationship) to above the 99th percentile (Seth's teacher relationship). The 25th percentile was used as a cut-off point to determine closeness sub-scales of concern. In Jacob's case, this extremely low closeness percentile is of concern in the absence of a teacher aide, as a close relationship with a teacher aide could have the potential to act as a protective buffer against a poor child-teacher relationship. For several children, this low closeness existed in both their teacher and teacher aide relationships. This included Callum on the second percentile and on the sixth percentile respectively, Stefan, on the sixth percentile and on the 13th percentile respectively, and Duane, on the 15th and fifth percentiles respectively. All three dyadic relationships for Damien showed low closeness, with his teacher relationship on the 15th percentile, and with his two teacher aides on the 13th and 28th percentiles. Like Jacob, Riley had only a teacher relationship and closeness in

this relationship was on the 18th percentile. Interestingly, there were three children (Seth, Sasha, and Hollie) for whom there was low closeness in one of their dyadic relationships, and these were children who were otherwise deemed to have quite positive teacher and teacher aide relationships (and this will be discussed later). Warmth, closeness, and open communication in the child-teacher relationship may function as a support for young children in the school environment (Birch & Ladd, 1997), and these authors found a positive correlation between closeness in the student-teacher relationship and children's reports of liking for school.

In the Dependency sub-scale, percentiles ranged from the first percentile (in Tyler's and Stefan's teacher relationships) to the 85th percentile (in two of Chelsea's relationships, that is, with her teacher and one of her two teacher aides). Again, as with the Conflict sub-scale, the 75th percentile was used as a cut-off point to determine critically high levels of dependency. Besides Chelsea, other relationships to indicate high dependency included Damien's relationship with his teacher on the 80th percentile. Additionally, coming in just below the cut-off was Liam's teacher relationship on the 70th percentile. In Chelsea's case, this over-dependency may be explained by her newness at school as she had only been attending less than three months. Dependency in the student-teacher relationship should decrease over time, while closeness should increase (Birch & Ladd, 1996).

Arguably, the STRS total scale score could be seen as the most important of these four aspects. Percentiles ranged from the eighth to the 99th percentile. There were several relationships in the high to very high range, including both Seth's and Tyler's relationships with their teachers on the 99th percentile, Hollie's teacher relationship on the 86th percentile, Marcus's teacher relationship on the 95th, Sophie's teacher relationship on the 80th, Flynn's and Chelsea's teacher relationships on the 77th, and Gene's teacher aide relationship on the 86th. Coming in just below this were the teacher relationships of Gene and Liam on the 70th percentile.

At the other extreme, there were some relationships with total scale percentiles in the critically low range, that is, below or near the 25th percentile. These included Jacob's teacher relationship on the eighth percentile, Duane's teacher aide relationship on the 13th, Callum's teacher relationship on the 11th and his teacher aide relationship on the 12th

percentile, and Stefan's teacher aide relationship on the 26th. As in Callum's case, it could be argued that Duane's relationship with his teacher aide is the more important of his two dyadic relationships. Because Duane has some very complex needs, it is the teacher aide who works most closely with this child and, therefore, it is concerning that this relationship is so poor.

In a sample of 206 children in their first year of school (mean age 5.58 years) and their teachers, Birch and Ladd (1997) used the STRS to examine three aspects of the teacher-child relationship, conflict, closeness, and dependency. This study found that all three were related to various aspects of the children's adjustment to school. Conflict was associated with teachers' ratings of school avoidance, liking for school, self-directedness, and cooperative participation in the classroom. Closeness was positively correlated with child academic performance, and teachers' ratings of self-directedness and liking for school. Dependency was correlated with school adjustment difficulties such as poorer academic performance, more negative attitudes to school, and less positive engagement with the school environment. The authors concluded that these results confirmed the need to consider these three aspects of the teacher-child relationship individually when examining young children's adjustment in the early stages of starting school.

The children were then clustered into groups on the basis of these STRS scale and sub-scale percentiles (see Table 4.3). The three clusterings included children with relationships of low, medium, and high concern, and in making these groupings, all the dyadic relationships for a particular child were taken into consideration. A child was placed into the Low Concern cluster if all their dyadic relationships were characterised by either no or only one area of concern in the four aspects. The majority of the children were placed into the cluster of low concern relationships ($N = 11$, 64.7%). There were only four girls in this sample, and all four were in this low concern cluster. The children that were placed into this cluster had relationships with their teachers and teacher aides that were generally very positive. There was only one area of slight concern in these relationships.

Table 4.3

Teacher-child relationship clusters of low, medium, and high concern in a sample of young children with special needs.

Relationships of Low Concern	Relationships of Medium Concern	Relationships of High Concern
Seth	Riley	Jacob
Sasha	Damien	Duane
Hollie		Callum
Marcus		Stefan
Sophie		
Flynn		
Chelsea		
Adam		
Gene		
Tyler		
Liam		

The cluster of medium concern consisted of those children whose relationships were characterised by only two areas of concern. Only two children were placed into this group (11.76% of sample) and these children were Riley and Damien. With no teacher aide, Riley had only the one dyadic relationship, and this was found to be very low in closeness and moderately high in conflict. Damien had two teacher aides, and in each of his three dyadic relationships, closeness was very low, while in his teacher relationship, dependency was extremely high.

The cluster of high concern consisted of those children whose STRS indicated several areas of concern in their dyadic relationships. There were four boys in this cluster (23.5% of sample) and these were Jacob, Duane, Callum, and Stefan. Jacob had only the one dyadic relationship with his teacher, and this was characterised by extremely high conflict, and extremely low closeness and total scale score. Duane had two dyadic relationships with his teacher and aide, and these were both characterised by high conflict, extremely low closeness, and an extremely low total scale score. For Duane's teacher aide, dependency was also an area of concern. For Callum, there were two dyadic relationships and, again, the critical areas were conflict, closeness, and the total scale score in both relationships. Finally, Stefan's relationship with his teacher aide was characterised by low closeness, high

conflict, and an extremely low total scale score. His teacher relationship had only the one area of concern, and this was critically low closeness.

In their interviews, parents were asked to reflect on their child's relationships with both their teacher and with their teacher aide if their child should have one working with him or her. In general, parents' perceptions of these relationships matched the perceptions of the teachers and aides as evidenced by the STRS. For example, Hollie's mother perceived her daughter's relationship with her teacher as very good, but suggested that her relationship with her teacher aide might not be as close, as Hollie did not talk much about her aide, and this was evidenced in low closeness as reported by the teacher aide in the STRS. However, there was some incidence of mis-match where parents' perceptions were different to those of teachers or aides. For example, Chelsea's mother perceived her daughter's relationship with her teacher and with one of her teacher aides as very good, but suggested this child's relationship with the second aide might not be as positive, based on Chelsea describing this aide as being "mean to me". However, all three staff perceived their relationships with this child as quite positive in the STRS, if a little high in dependency.

Each teacher and teacher aide were also asked to reflect on their relationship with a particular target child, and on each other's relationship with the same child. There was some concordance between the interview responses of teachers/teacher aides and their perceptions as evidenced by the STRS. For example, Jacob's teacher described her relationship with this boy as quite difficult, and this was born out by the STRS data. However, there was also some mis-match between the interview responses and the STRS findings. For example, Stefan's teacher described both her own relationship and that of his teacher aide with this boy as quite good. However, his teacher aide described both relationships as quite distant, and this was more in line with the STRS data. For Callum, the STRS performed by both his teacher and aide indicated that these relationships were rather poor and, yet, both his teacher and his aide described their relationships with this child as quite reasonable. Where an anomaly occurred between the STRS data and the qualitative views as expressed by the teachers and aides, these views showed the relationships to be more favourable than was evidenced by the STRS. However, it should also be noted that any anomalies or mis-matches were in the minority.

In sum, the STRS revealed that the majority of this sample had either positive or very positive relationships with their teachers and teacher aides. While the STRS raw scores were used for the final correlation, the percentiles were used to determine critical areas of concern for each individual child. Children were clustered into groups of low concern, medium concern, and high concern relationships. When parents, teachers, and teacher aides were interviewed, there was some concordance between their views of the children's relationships with teachers and aides, although there were also some incidents of mis-match, particularly in the teacher and teacher aide interviews. Why should this anomaly have occurred? One possible explanation is that teachers and aides may have been attempting to create a favourable impression. Tuckman (1994) suggests that one of the pitfalls of interviews is that they may be influenced by the respondent's desire to create a favourable impression. However, these incidents of mis-match were quite isolated and, in general, the views of teachers and aides matched the STRS data.

4.2.3 Children's relationships with peers

There were two parts to the peer sociometric measure (PSM), a positive nomination technique (PNT) and a liking rating scale (LRS), and all the target children (except three) themselves participated in both procedures. The three children who did not participate because of the limitations imposed by the nature of their disabilities were Duane, Callum, and Damien.

In the PNT, the number of positive nominations received by each target child in their class ranged from five down to none (see Table 4.4). Most notable amongst this sample of children were the number received by Hollie who, on five nominations, was the most popular child in her class amongst her participating classmates, and also received the most nominations of this sample, and by Chelsea, who received four nominations. The other two girls in this sample, Sophie and Sasha, received two and one respectively. At the other end of the scale, there were several boys who received no positive nominations at all, including Jacob, Duane, Adam, Gene, Tyler, Callum, and Damien. The positive nomination figures were, in the first instance, used to embellish the data produced by the LRS, and more information on this will be provided later.

Table 4.4

Liking Z scores and number of positive nominations received by each child in a sample of young children with special needs.

	Liking Z scores	Number of positive nominations
Seth	2.00	2
Sasha	-2.88	1
Jacob	-4.48	0
Hollie	1.27	5
Marcus	-1.13	1
Sophie	-2.57	2
Duane	1.25	0
Flynn	-1.00	1
Chelsea	0.88	4
Adam	-1.14	0
Gene	0.32	0
Tyler	-3.09	0
Callum	-1.28	0
Liam	0.89	2
Stefan	0.54	1
Riley	-6.26	2
Damien	-0.34	0

From the LRS, Liking Z Scores were calculated for each child (see Table 4.4). These ranged from 2.00 down to -6.26. At the top end of the scale was Seth with a liking Z score of 2.00. At the other extreme, there were three liking Z scores of some note, Riley (on -6.26), Jacob (on -4.48), and Tyler (on -3.09), and these Z scores are rather concerning as they are so low.

The target children were then clustered into three groups on the basis of these liking Z scores (see Table 4.5). The first cluster included those children whose liking Z scores were significantly higher than their class means and, therefore, this group could be regarded as having very positive peer relations. There were only three children in this cluster (17.64% of sample), Seth (on 2.00), Hollie (on 1.27), and Duane (on 1.25). As discussed earlier, Hollie also received the most positive nominations of any child in this sample at five.

Table 4.5

Peer relationship clusters based on liking Z scores in a sample of young children with special needs.

Significantly higher than class mean	Similar to class mean	Significantly lower than class mean
Seth	Chelsea	Sasha
Hollie	Gene	Jacob
Duane	Liam	Marcus
	Stefan	Sophie
	Damien	Flynn
		Adam
		Tyler
		Callum
		Riley

On the other hand, Duane received no positive nominations. It is interesting that Duane should achieve a relatively high liking Z score and yet receive no positive nominations. This anomaly could be explained by the fact that Duane's liking Z score was based on a high 'like to play with' rating by his classmates. Apparently, Duane, a boy with some complex needs, including spastic quadruplegia and a lack of speech/language, is able to interact socially with a small group of classmates within the classroom context, particularly by playing computer games. His positive nomination score, on the other hand, was based on not being nominated by his classmates as 'most liked' or as 'best friend' in the class. It is asserted here that, while Duane is capable of playing with his classmates, his complex special needs would prohibit him from fulfilling the usual functions required by the role of best friend. It is also possible that his classmates liked to play computer games with him simply because this gave them access to computer games. Townsend (1992) says that children are more popular when they are skilled at a valued activity, such as playing computer games.

The second peer relationship cluster included those children whose liking Z scores were similar to their class means (see Table 4.5) and, therefore, these children could be regarded as having quite reasonable peer relations. There were five children in this cluster (29.41% of sample), and their liking Z scores ranged from 0.89 (Liam) and 0.88 (Chelsea) down to -

0.34 (Damien). As discussed earlier, Chelsea also received a high number of positive nominations at four. While Liam received two positive nominations, Damien received none. Also in this cluster were Stefan and Gene who received one and none respectively. When combined with the children in the first cluster, it could be said that eight children (47% of sample) had either positive or very positive relationships with their peers.

The anomaly of Damien's reasonable liking Z score and yet lack of positive nominations needs further examination. When interviewed, his teacher and teacher aides described Damien's type of play within the classroom context. Apparently, this child was capable of playing within a larger group, but it would be more usual for him to be engaged in a parallel type of play, rather than engaging in interactive or cooperative play with the others in the group. At the same time, however, he would not be disrupting or interfering with the other children's play. This may have led to his acceptance as a group member and his reasonable 'like to play with' rating. However, his lack of social skills suggest that, developmentally, he was not yet at a point where he was making the types of connections with the other children that would result in him being nominated as a 'best friend'.

The third cluster included all those children whose liking Z scores were significantly lower than their class means (see Table 4.5), thus implying poor relationships with peers. This numbered nine children (53% of sample). In this cluster, liking Z scores ranged from -1.00 (Flynn) down to -6.26 (Riley) (as discussed earlier). The number of positive nominations received by the children in this group ranged from two to none. Interestingly, the child with the lowest liking Z score out of this entire sample (Riley) actually received two positive nominations. However, as the clustering was made on the basis of the liking Z scores alone, it is extremely concerning that the majority of this sample should have such poor peer relations.

The study of Cohn (1990) computed positive nominations and liking ratings to assign children to sociometric status categories of popular, rejected, neglected, and average. Although this current study did not use similar sociometric status categories, it is quite possible that Riley, Jacob, and Tyler, with low liking Z scores, may have been rejected by their peers. Also, it is possible that Hollie and Chelsea, with high numbers of positive nominations and liking Z scores, were quite popular with peers. In her study, Cohn found

that all the rejected children were boys, and girls were over-represented in the popular group. Girls were better liked by both peers and teachers than were boys, boys were perceived by peers as more aggressive and disruptive, whereas girls were seen as more cooperative and shy, as nominated by peers.

In the interviews, parents were asked for their perceptions of their child's relationships with their classmates. Some parents' perceptions of their child's peer relations corresponded closely to the PSM data. For example, at the positive end, the perceptions of Seth's and Stefan's mothers were of their sons having good peer relationships. Duane's mother talked about her son's popularity, especially with the girls who, apparently, liked to mother him. The mother of Riley, whose liking Z score was the lowest of this group, reported that her child never talked about the other children at home, did not appear to have a close buddy or friend at school, and never showed any interest in having his classmates back home to play. Similarly, Damien's mother was concerned that her son did not appear to have a close friend or buddy at school, and she had often observed her son on his own in the classroom or playground, and this was born out by his lack of positive nominations. The father of Jacob recognised that his son had experienced some difficulty in his peer relations, although (as with his teacher relationship), this father believed these relationships were improving.

On the other hand, in some instances, parents' perceptions of their child's relationships with classmates did not match the perceptions of their peers. For example, while Hollie's mother recognised that her daughter was popular with at least some of her classmates, she expressed some concern that Hollie's social skills might be a little lacking and, yet, Hollie's PSM data made her one of the most popular children in this sample. Sasha's mother perceived her daughter as very popular amongst her classmates, and then proceeded to relate incidents that she had observed at school which proved this popularity to her, during which this mother's voice broke with emotion, finishing with "it's heart-swelling stuff". Yet, Sasha's liking Z score indicated that this mother's perception differed from those of her peers.

Teachers and teacher aides were also asked a whole series of questions on their perceptions of the target children's interactions with classmates, and these questions were designed to

supplement the data produced by the PSM (see Appendix M). They were first asked if the other children were aware of the child's special needs. Interviewees were then asked about the other children being empathic or supportive with the target child, and whether they were comfortable about working with this child. They were also asked whether the others felt happy to talk with and share experiences with this child, and whether they felt comfortable about playing with the child. Among other things, one of the objectives in asking these questions was to determine if there were any patterns in terms of the gender of the children making these interactions with the target child.

Two trends emerged from the responses to this section of the interviews. First, there was one group of these children where their teachers believed that their classmates were unaware of the target child's special needs and, in these instances, the classmates did not tend to see these children as any different. Thus, for these target children, some of this set of questions tended to be rather irrelevant, especially the question on the other children being empathic or supportive with the target child. This applied to Marcus, Flynn, Gene, Tyler, and Riley, and a common response from the teachers or aides was "the other children don't really see him as any different, so that question doesn't really apply". When considered alongside the liking Z scores, it is rather surprising that Tyler and Riley should be perceived as 'not being any different' by the other children, as both children achieved quite low liking Z scores, although it must be remembered that this was the teachers' perceptions of the situation.

A second trend to emerge from this set of questions was around the issue of the gender of the children making these interactions. In general, interviewees' responses indicated that there was no particular pattern in terms of boys or girls being better at interacting with the target children. Rather, those children who tended to be better at making these interactions with the target child tended to be those children who had been at school with the target child the longest, that is, those that knew the target child the best, or were his or her particular group of friends. This response came only from the teachers or aides of those children who had been at school for some time, and this included Seth, Sasha, Duane, Liam, and Stefan.

Teachers and teacher aides were also asked if the target child ever became aggressive or hostile with classmates, and whether he or she ever became shy or withdrawn with peers. In general, the majority of these children were perceived by teachers and aides as neither aggressive with classmates, nor as acting in a shy, withdrawn manner with their peers. Some teachers commented that the target child did not really become shy with the other children, but could become quite quiet or shy in a large group situation, or reluctant about putting themselves forward, and this applied to Sasha, Marcus, Sophie, and Tyler. In terms of aggressiveness or hostility, there were two children whose teachers or aides commented that there had been some incidents of hostility towards classmates in the early days after starting school, but this had declined, and this applied to Sophie and Duane. Finally, there are two boys whose behaviour stands out in both aspects, and this was Jacob and Riley. Jacob's teacher confirmed that he could be both at different times, and tended to oscillate between shy, withdrawn behaviour and being "domineering and bombastic" with his peers. Likewise, Riley's teacher reported similar behaviour; he could at times be "argumentative and confrontational" with classmates, but at other times, could become quite shy and withdrawn. More details on individual children will be provided in the case studies.

In sum, the liking Z scores were used to group the children into peer relationship clusters and this revealed that eight of the children had either good or very good relationships with classmates, while nine had either poor or very poor peer relations. Parents' perceptions of their children's peer relationships sometimes corresponded with the peers' perceptions while, in other cases, parents' perceptions differed from what the PSM data indicated, and this was split down the middle. Teachers and teacher aides were asked a series of questions about the target children's interactions with classmates, and their responses tended to enrich and expand on the PSM data by discussing the aspects of the children's aggressiveness/hostility and shy/withdrawn behaviour with classmates.

4.2.4 The association between relationships

A Spearman (non-parametric) correlation was run on the following variables: child age, attachment security and dependency scores, STRS scale and sub-scale raw scores for each child-teacher and child-teacher aide relationship, liking Z scores, and numbers of positive nominations. No associations were found between the variables of the PSM, that is,

between the liking Z scores and the number of positive nominations received. Child age was negatively correlated with closeness in the teacher-child relationship ($-.60, p < .05$). That is, as the age of the children increased, closeness with the teacher decreased. Birch and Ladd (1996) suggest that it is optimally adaptive for closeness in the student-teacher relationship to increase over time. However, Pianta and Stuhlman (2004) found that both closeness and conflict in the teacher-child relationship declined from preschool to kindergarten to first grade in the American school system. Conversely, Saft and Pianta (2001) found that, as age increased, the levels of conflict in the teacher-child relationship also increased, although this current study made no similar findings. Child age was also negatively associated with the number of positive nominations received ($-.58, p < .05$). Thus, the older the child, the fewer positive nominations he or she received.

Attachment security was negatively correlated with dependency in the child-parent relationship ($-.61, p < .01$). This means that, as security increased, dependency decreased, and this is exactly what one would expect for any parent-child relationship in children of this age. There were no other significant correlations between attachment security or dependency and any of the other variables.

A few significant associations between the various variables of the STRS were found. In the child-teacher relationships, conflict was negatively correlated with closeness with the teacher ($-.48, p < .05$). Similar results were found for the children's relationships with their first (or only) teacher aide, and nine of the children had at least one teacher aide. Here, there was also a strong negative correlation between conflict and closeness with this teacher aide ($-.92, p < .01$). Also, there were no correlations for the dependency variable in any of these relationships. Additionally, there were no associations between the child's various relationships at school, that is, with his or her teacher, first or second teacher aides.

This study also found no association between the target children's attachment security at home with parents and their relationships at school with teachers, teacher aides, or with peers. This finding challenges the findings of other research. This includes studies which examined the association between children's attachment security with parents and their relations with teachers, for example, Cohn (1990), De Mulder, Denham, Schmidt, and Mitchell (2000), Howes, Matheson, and Hamilton (1994), and Howes and Ritchie (1999).

Page and Bretherton (2001) found an association between teacher-child relationships and mother-child attachment, but not with father-child attachment.

Other studies examined the association between parent-child attachment security and children's relationships at school and preschool with peers. As with this current study, Howes and her colleagues (Howes, Matheson, et al., 1994) found no association between attachment security with parents and competence with peers in the classroom. However, other research has made opposing findings. For example, the studies of Bost, Vaughn, and Heller (2004), De Mulder et al (2000), and Howes and Ritchie (1999) all examined attachment security with mothers using the AQS and social competence with peers in preschoolers. In Howes and Ritchie's study, the preschoolers were from difficult life circumstances, and in Bost et al's study, the children were from low income, minority backgrounds. All three studies found an association between children's attachment security with mothers at home and peer competence. That is, children who were securely attached with mothers were found to be more socially competent and popular with peers. The studies of Elicker, Englund, and Sroufe (1992) and Granot and Mayseless (2001) examined attachment security and social competence with peers in samples of typically developing children in middle childhood, and found similar results.

Third, this current study found no association between teacher-child and peer-child relationships. Conversely, Howes, Hamilton, and Matheson (1994) found a clear association between these two sets of relationships at preschool. Although the work of Howes and her associates (Howes, Hamilton, et al., 1994; Howes, Matheson, et al., 1994) found no association between maternal attachment and peer relationships at preschool, they did find an association between maternal attachment and teacher relationships and, in turn, between teacher relationships and peer competence in the preschool. This led the authors to suggest that mother-child relationships influence relationships with teachers which, in turn, facilitate adjustment in the classroom through the process of interactions with peers.

Many of the studies referred to here were longitudinal in design, in contrast to this current study which was concurrent, as were the studies of Cohn (1990) and Granot and Mayseless (2001). Additionally, some of these studies were conducted in samples of children of preschool age, while others were in children of middle childhood. Moreover, all of these

studies examined associations in relationships in TD children, in contrast to this current study, and many were in middle SES samples, while the study of Bost (Bost et al., 2004) was in preschoolers from low SES, minority backgrounds.

Although the data analysis conducted in this current study produced no significant associations between the three sets of relationships, that is, between the parent-child relationship, the teacher-child relationship, and the peer-child relationship, grouping the children into three clusters for each of these three sets of relationships has produced some interesting results. When the groupings are compared for the three sets of relationships (see Tables 4.2, 4.3, and 4.5), some contradictions are evident. For example, there are children who are securely-attached with parents but who do not make it into either the teacher-child relationship cluster of low concern, nor into either of the two positive peer relationship clusters, namely, Jacob, Callum, and Riley. An even bigger contrast is seen between the teacher relationship clusters (Table 4.3) and the peer relationship clusters (Table 4.5). This indicates several children with apparently good relationships with teachers and teacher aides and, yet, they have poor or very poor peer relations, including Sasha, Marcus, Sophie, Flynn, Adam, and Tyler. Birch and Ladd (1996) ask what might happen when one of these sets of relationships is good but the other is discordant, for example, when the teacher-child relationship is positive but the peer-child relationship is not so good. These authors go on to speculate that, in this situation, these two sets of relationships may make compensatory contributions to different aspects of the child's adjustment to school. A close relationship with the teacher may act as a protective factor against loneliness for those children having difficulties with peers (Birch & Ladd). Examples of this can be seen in this current study in Marcus, Sophie, and Tyler, all of whom had liking Z scores significantly below their class means, putting them in the lowest peer relationship cluster and, yet, all three children experienced closeness in their relationships with their teachers, as evidenced by the STRS.

Bowlby (1973) argued, in his theory of attachment, that children have internal working models, that is, expectations of relationships and of people that are based on early experiences in the child's first relationships with attachment figures, and these expectations are carried forward into subsequent situations and relationships. Thus, the child who is securely attached with a primary caregiver has expectations of attachment figures as

available and responsive, while the child who is insecurely attached with parents has expectations of attachment figures as rejecting or as inconsistently available (Bretherton, 1995). Bowlby also argued that the internal working models of insecure children become rigidified or distorted. For some of the children of this current study, for example, Seth and Hollie, these children were found not only to have secure attachments with their mothers, but were also found to have close relationships with teachers, teacher aides, and with peers. This would tend to support Bowlby's notion of the inner working model, that is, for these children, secure attachments with parents predicted positive relationships with others in the school setting. On the other hand, Liam was found to be insecurely attached with his mother and, yet, his relationship with his teacher was found to be quite positive. Thus, for this child, an insecure internal model was ameliorated by a good relationship with his teacher. Additionally, Jacob was found to be securely attached with his father and, yet, this child had quite poor relationships at school with his teacher and his peers. This would tend to suggest that internal working models are perhaps more flexible and less fixed than Bowlby (1973) asserted.

In sum, correlations were run, and these produced some degree of association within two of the measures, that is, within the AQS and the STRS. Relationships were also found between child age and some of the other variables. However, no associations were found between the three sets of relationships.

4.2.5 Summary and conclusions

This second research question has been answered by examining three sets of relationships, and the majority of the data to answer this question has derived from quantitative sources, with interview data woven throughout. Three standardised survey-like measures were used to examine the three sets of relationships for the target children. The data produced by each measure was used to cluster the target children into groups for the three sets of relationships, and this clustering was carried out for convenience and to provide clarification.

First, a criterion sort correlation was conducted between the children's AQS scores and those of the hypothetically most secure child on the constructs of security and dependency,

producing a security and dependency score for each child. This sample of children was found to have a mean security score of .25 and a mean dependency score of -.14. The children were clustered into three groups on the basis of security scores, and eleven of the target children were determined to be securely attached, while six were found to be insecurely attached. In the interviews, parents were asked a series of attachment-related questions, including how the child reacted upon separation from and reunion with the parent, and how he or she reacted in a variety of situations, such as meeting new people for the first time, when hurt or injured, and when being disciplined. In general, the parents' responses supported the data from the AQS, and examples were provided, including Sasha, who was found to be securely attached, and Stefan and Damien, who were found to be insecurely attached.

Parents were asked questions about how their child reacted in strange or unfamiliar settings. The answers from some of the parents about their children's behaviour in unfamiliar settings could suggest insecurity of attachment. For example, both Flynn and Sophie tended to cling very closely to their mothers or to insist on holding their hands and, if they lost sight of their mothers, would panic and scream out. Both children were found to be insecurely attached. On the other hand, other children exhibited similar behaviours, including Riley, Sasha and Jacob, and all were found to be securely attached. As the majority of this sample was securely attached, it is asserted here that it is the children's specific and individual characteristics that resulted in these behaviours.

The children's relationships with their teachers and teacher aides were measured using the STRS, and this produced data for each child for the aspects of conflict, closeness, and dependency, and for the overall STRS scale. The children were clustered into three groups on the basis of all their dyadic relationships in the classroom. The three clusters indicated which children had good, medium, or poor relationships with teachers and teacher aides. In sum, the STRS revealed that the majority of these children ($N = 11$) had either positive or very positive relationships with their teachers and teacher aides.

In the interviews, parents, teachers, and teacher aides were asked for their reflections on a particular target child's relations with teachers and aides. Interview responses indicated some degree of concordance between the interviewees' views and the data produced by the

STRS while, in some isolated cases, there was a mis-match, particularly in the teachers' and teacher aides' views of their own relationships with a target child. However, a possible explanation for this discrepancy was offered, that is, teachers and aides may have been trying to create a favourable impression with their interview responses. Tuckman (1994) indicated that techniques such as interviews measure not what people believe, but what they *say* they believe, not what they like, but what they *say* they like. Tuckman goes on to say that one of the pitfalls of interviews is that they may be influenced by respondents' self-awareness and a desire to create a favourable impression. However, it must be stressed that the degree of concordance far outweighed the incidents of mis-match within this context.

The peer sociometric measure used for this study consisted of two parts, a positive nomination technique (PNT) and a liking rating scale (LRS). From the LRS, liking Z scores were calculated for each child, and these indicated the difference between the children's liking ratings and their class means. Clustering the children into three groups on the basis of their liking Z scores indicated that eight of these children had either positive or very positive peer relations, while nine had either poor or very poor relationships with classmates. Interviews were used to gain parents' perspectives on their children's relationships with peers which indicated some degree of concordance between the perceptions of these parents and the perceptions of the classmates, as evidenced by the PSM. There was also some level of mis-match, although incidents where parents' perceptions did not match the PSM data were in the minority.

The interviews with teachers and teacher aides were used to gauge their perceptions of the target children's interactions with classmates. One distinctive trend was that many teachers reported that many of the target children's classmates did not perceive these children as being different in any way. A second trend to emerge from the interviewees' responses to these questions indicated that those classmates that were most comfortable and positive about interacting with the target children were those children who had been at school with the target child the longest and, therefore, knew them the best. According to the responses of the teachers and aides, no patterns emerged in terms of the gender of the children initiating these interactions.

It is rather concerning that such a high proportion of these children had such poor peer relationships. Other studies have found low levels of acceptance of children with special needs by their TD peers (for example, Cook & Semmel, 1999; Ochoa & Olivarez, 1995; Roberts & Zubrick, 1992; Sale & Carey, 1995; Yu et al., 2005). However, other studies have found no differences in either peer sociometric status or levels of peer acceptance when comparisons were made between groups with and without disabilities (for example, Kemp & Carter, 2002; Nikolarazi et al., 2005). One possible explanation for the poor peer relationships of the target children in this current study is that the individual characteristics of these children may have played a role. The study of Siperstein and Bak (1986) showed that child characteristics, such as abnormal physical appearance, impacted on the attitudes of non-disabled children to accepting their classmates with special needs.

Finally, a Spearman correlation was run to examine for associations between the three sets of relationships. Some degree of association was found between the variables of the AQS, and some associations were also found between the variables of the STRS. However, no relationships were found between the variables of the PSM. Some association was found between child age and other variables, but no relationship was found between children's attachment security at home with parents and their relationships at school with teachers, teacher aides, or with peers.

In conclusion, examining the three sets of relationships for the 17 target children helps to illuminate those children who experienced secure relations with parents, and positive relations with teachers, teacher aides, and peers, and those who experienced less secure or positive relations in at least one of these areas. For example, Seth, Hollie, and Chelsea were all found to have good relations with all these people. Liam experienced good, positive relations at school with his teacher and with his peers and, yet, was found to be quite insecure and dependent in his attachment relationship with his mother. On the other hand, Jacob, Riley, and Callum were all securely attached but experienced poor relations with teachers, teacher aides, and/or with peers. This provides some evidence of those children who are well adjusted and not so well adjusted at school, and more evidence will be provided to support this in the next section and in the case studies.

The patterns found in this section clarify and strengthen the patterns found in section 4.1 on interactional strategies. That is, section 4.1 indicated that the target children and their caregivers (parents and teachers) evidenced specific patterns of interacting with each other and, in this current section, it is clear that these ways of interacting are linked to the formation of relationships with parents, teachers, teacher aides, and with peers. For example, the mother and teacher of Seth used a range of special strategies for interacting with this child, and these ways of interacting appear to have contributed to the formation of very positive relationships with his mother, his teacher, his teacher aide, and his peers. Conversely, there appears to be a distinct lack of interactional strategies used either by Jacob's father and teacher when interacting with this child, or by Jacob himself when interacting with his caregivers, and this may have contributed to his poor relationships with his teacher and his peers. In the case of Stefan, his mother reported using a set of visuals at home with Stefan, and believed this to be an effective strategy for interacting with her son. However, although these visuals had also been used effectively by his previous teachers, after the return to the classroom of his regular teacher, she had discontinued this practice. Another practice that this teacher had discontinued using after her return was the use of a small communication notebook to pass messages between home and school, a practice which his mother had found to be quite helpful. In addition, Stefan's teacher aide also reported not using these two practices, and this child's relationships with his teacher and his teacher aide were found to be rather poor. In the case of Hollie, several types of interactional strategies were reported to be in use by her mother, her teacher, and her teacher aide, and her relationships with all three people were found to be very positive. Finally, a rich and diverse range of strategies was found to be in use by Chelsea's mother, teacher and two teacher aides with this child and, like Hollie, her relationships with all these people were found to be very positive. Therefore, it is asserted here that the participants' ways of interacting found in section 4.1 are linked to the patterns of interactions found in section 4.2.

4.3 How was the transition to school process conducted for a sample of young children with special needs?

The transition into formal schooling has been identified as a significant time for children, for families, and for teachers (Dockett & Perry, 2004; Ladd, 1996). For most children,

starting school marks a major milestone in their short lives (Newman, 1996). The transition to school reflects no developmental stage in the child's life but, rather, is marked merely by the attaining of a certain age (Ladd, 1996) and, in New Zealand, this occurs on the child's fifth birthday. It can be a time of overwhelming anxiety and uncertainty for both child and parent and, for some families, the presence of special needs in their child could place additional pressure on the adjustment process. If the transition to school is a time of nervous anticipation and anxious uncertainty for typically-developing children and their parents, it can be a time of frustrating challenge and stressful vulnerability for children with special needs and their families.

One of the objectives of this current study was to examine the factors and processes that occurred in the transition to school for this group of young children with special needs. Semi-structured interviews were designed to gather the data to answer this research question. Teacher aides were not included in this set of questions, and the questions directed at parents differed from those directed at teachers, although there was some cross-over.

To answer this research question, the findings will be presented in a series of sub-sections with the parental data presented first, and the teacher data presented last. However, where parents and teachers were asked similar questions, such as their fears and concerns prior to the start of school, the data from parents' and teachers' interviews will be woven in together. This section will conclude with a summary.

4.3.1 Children's early childhood education experiences

Every child in this sample experienced some form of early childhood education, ranging from an informal, mother-run play group, through public kindergartens, to private preschools that were part of a larger, independent school, and everything in between. The informal play group was attended by the child living in the most isolated, rural locality, that is, Marcus, and his attendance there had begun as an infant. Those children who attended the private preschool of a larger, independent school were Sasha and Jacob, who then transitioned into the New Entrant/Year One class at the same school. Only one child (Sophie) attended a special preschool for part of her early childhood education experience.

By far, the most common form of early childhood centre attended by the children of this sample was public kindergartens, and 12 of the children attended a kindergarten for at least part of their early childhood experience. Five of these 12 children, namely, Hollie, Sophie, Flynn, Adam, and Chelsea, had previously attended other types of preschool and then, six months out from school, their families had made the decision to send them to the local public kindergarten, and this decision was made to facilitate a smoother school transition process.

Parents were asked if their child's early childhood education had been a satisfactory experience for them and for their child. The majority of parents ($N = 15$) answered in the affirmative to this question, and gave a variety of reasons for responding thus. Their answers included that this provided their children with more opportunities for socialisation with peers, it gave them more separation and independence from the family, it provided them with more space to run around and play, and it accustomed the children to the kinds of routines that they would eventually encounter once they started school. The mothers of those children who had originally begun at other preschools and then transitioned into public kindergartens commented that, at their first preschools, their children had had the advantages of smaller teacher-child ratios and more individual attention. These parents had experienced some concerns about transferring their children to public kindergartens because of the greater numbers and teacher-child ratios that they would encounter there, but then found that their children had "absolutely bloomed" in the new environments.

Only two parents expressed some ambivalence when asked how well their child's early childhood experience had worked for them. Jacob's father replied that preschool had introduced Jacob to more social interactions with other children, but in terms of his academic progress, it had been less successful, as both his family and teachers had been unaware of his vision impairment. Liam's mother expressed some frustration that, when she had first enrolled Liam at public kindergarten, the centre had refused to allow him to start until there was an Education Support Worker (ESW) in place to support him, which meant that his mother had had to remain with him at the centre in the beginning. Following this, there had been some ongoing issues with the availability of ESWs. However, she then

went on to say that attending kindergarten had been a valuable experience for Liam as it had prepared him for school, preparation which she herself could not have provided.

In sum, all the children of this sample experienced some form of early childhood education, and there was a wide variety of types of centre attended. For the overwhelming majority of the families, their early childhood education experiences had been very valuable and worthwhile. Research has indicated that children who attend a good quality early childhood centre benefit from this experience (Wylie et al., 2006). Ladd and Price (1987) showed that children with school-like experiences prior to school, such as considerable time spent at preschool, adjust better once they have started school.

4.3.2 Fears and concerns of parents and teachers prior to school

The parents of children with special needs often experience concern or anxiety as their children transition through the education system (Addison, 2004; Pianta & Kraft-Sayre, 1999). In this study, parents were asked if they had had any concerns or fears prior to their child starting school. By far, the majority ($N = 15$) confessed to having had some concerns about their children going to school. The only exceptions were the mothers of Adam and Sasha. Parents' fears ranged from academic matters to socialisation issues to self-help problems, and most were based on the children's characteristics, especially on their special needs.

One of the main areas of concern for this group of parents was their children's socialisation with peers once they started school, and eight of the parents expressed some anxiety on this issue. Parents reported their desires to see their children "fitting in" with peers and not standing out as being "different" or as being "special needs". However, it should be noted that, in other research (for example, Dockett & Perry, 2003b), the parents of typically-developing children also reported concerns about their children fitting in. In this current study, parents were equally anxious about their children being bullied or teased by others, and whether they would make friends once they started school. The parents of Jacob and Flynn also recognised that these boys both tended to be aggressive at times, and that there was a possibility that their child might themselves become bullies once at school.

Concerns about academic matters were expressed by several of the parents of this sample. Four of the parents of low vision children were concerned about their child's poor vision inhibiting their ability to read or to access the curriculum, and these were the parents of Seth, Jacob, Marcus, and Chelsea. Additionally, Gene's mother espoused some concerns about how Gene would cope academically, as she believed that he did not learn things quickly. Finally, Tyler's mother expressed some concerns based on her child's poor concentration, and another concern of hers was that he had not acquired such before-school academic skills as learning the alphabet. However, other studies have indicated that New Entrant/Year one teachers place greater priority on transitioning children being able to follow teacher directions and classroom rules and routines, rather than on academic skills such as knowing the alphabet (see Chandler, 1993; Fowler et al., 1991).

Several parents had experienced some anxieties about how their child would cope with the environment at school. For example, Hollie's mother's concerns were based on both her child's spastic cerebral palsy and her low vision, that is, Hollie's mobility around the school environment and, second, the potential for the bigger children to run into her in the playground. Tyler's mother's concerns were also based on his special needs, namely, his dyspraxia meant that he had major difficulties coping with large, open spaces and rooms with high ceilings, and this meant that the school hall, where many of the class activities occurred, would present him with serious problems. Finally, Riley's mother's main anxiety was that her child would just leave the school grounds and run away.

A few parents reported having concerns about their child's self-help skills once they started school, and these were mainly in the area of their toileting. The concerns of Callum's and Stefan's mothers were very similar. Although both boys were just toilet-trained on entering school, their mothers were anxious about these two boys actually using the toilets, even though both parents reported showing these boys where the toilets were on their pre-school visits. Stefan's mother described how, when she had taken him to visit the school prior to starting and had shown him the toilets, he had become very stressed and started screaming on sighting the urinals, and from then on, had refused to go near the toilets. On the other hand, Riley's mother's concern was that her son was not toilet-trained at all upon entering school.

Similarly, research has also shown that teachers have concerns about educating children with special needs in their classes (for example, Fields, 1993). Fields found that teachers' concerns were primarily about the difficulties of implementing policies of inclusion, and their ability to access specialist personnel. In this current study, like parents, teachers were also asked if they had had any fears or concerns prior to the target child entering their class. Five of the 17 teachers of this sample claimed to have had no concerns at all. All the remaining teachers of this sample confessed to having had some fears or anxieties prior to the child's transition. Some of these teachers attributed these concerns to their inexperience as a teacher, or to their lack of experience working with a particular disability type. A couple of these teachers admitted that their fears had proved to be unjustified after the child had transitioned, for example, the teachers of Hollie and Sasha.

The teachers of the children with visual impairments were fairly uniform in their fears. In particular, they were concerned about these children's poor vision impacting on their ability to learn. Tied in with this was some anxiety about how well the child could see and how big the print needed to be for them to see it. These teachers expressed concern about being able to meet the child's needs, and about accessing as much information as possible from the various professionals involved with the child. This academic concern of the teachers coincides with the academic concern of many of the families of these children.

For a second group of teachers, their main concern surrounded how the target child's behaviour might impact on their classroom environment, on the other children, and on themselves. These fears seemed to be based on observing the child's behaviour prior to the transition and on the potential for disruption once they started. The teachers of Callum and Damien were particularly concerned for the sake of the other children in their classes, as these children would also be new, and "all five-year-olds, not just those with special needs, need a good start at school". These same teachers were also concerned about how they as teachers would cope unless they had the support of a teacher aide. However, both the teachers of Riley and Stefan commented that they had been pleasantly surprised about the child's behaviour once they entered their classes.

In sum, the majority of the parents of this sample ($N = 15$) had experienced some fears prior to their children starting school, and these concerns included issues of socialisation,

academic matters, self-help problems, and coping with the environment. Likewise, the majority of the teachers of this sample ($N = 12$) confessed to having had some fears prior to the target child entering their class. Some of these concerns were also academic, while other concerns were based more on classroom management matters, that is, the child's behaviour. These findings differ to those of Fields (1993) who found that teachers' concerns were primarily about policy issues and being able to access specialist personnel. In this current study, to some extent, these fears had been allayed once the child had entered school. It should be noted that research with normal populations found that up to 35% of parents experienced some anxiety about their child's school transition (see Pianta & Kraft-Sayre, 1999), and one of the major concerns for these parents was whether their child would be liked by teachers and peers.

4.3.3 The preparation for school

Parents were asked if they had done any particular preparation to get their children ready for school. They were also asked if they had had any opportunities to meet with either the class teacher or the school principal prior to their children starting and, if so, what kinds of matters had they discussed with these school staff. Parents offered a range of responses to these questions, but two factors emerged strongly as important and valuable to parents in facilitating their child's smooth transition to school. The two processes which this group of parents identified as most worthwhile were participating in a special transition meeting prior to entering school, and being allowed multiple visits to the school to prepare their child for the transition.

For a significant number of these families ($N = 11$), special transition meetings were conducted prior to their child starting school. These meetings usually occurred several weeks before the transition and, in general, were set up either by the child's Early Intervention (EI) teacher or their Resource Teacher – Vision (RTV). Parents stressed that these meetings were extra to the normal process of Individual Developmental Plan (IDP) or Individual Education Plan (IEP) meetings. Frequently, these meetings were held at the child's early childhood centre, and this was more likely if the centre was a public kindergarten, or at the receiving primary school. These meetings were attended by the child and a family member, which was usually the mother, and by a range of professionals,

including a teacher from the child's early childhood centre and personnel from the primary school, such as the New Entrant class teacher and, at times, one of the school's Assistant Principals or the principal themselves. Also present at these meetings would be the various stakeholders involved in the child's life, such as an EI teacher or RTV, a speech/language therapist, a physiotherapist, or an occupational therapist. Students with diverse learning needs frequently require support from professionals other than their teachers, and these children will often have a whole team supporting their successful inclusion (Mentis et al., 2005).

The purpose of these meetings was to acquaint the school staff with the target child and his or her family and to familiarise them with the child's special needs, and the main focus was always to discuss the child's requirements once they started. Development is enhanced when, prior to entry into a new setting, the personnel at both settings involved are provided with information, advice, and experience relevant to the impending transition (Bronfenbrenner, 1979). At these meetings, all the stakeholders were given an opportunity to have some input, for example, early childhood staff would describe the target child's progress and behaviour at preschool, and the family would discuss their needs and requirements for their child once they started. Working collaboratively in this way enables the perspectives of all members to be considered, with a focus on clear objectives and goals (Nagel, 2005). For example, Sasha's parents requested that she be allowed to sit near the front of the mat, that the teacher should be mindful of the glare, and they also discussed the lack of shade in the school playground. Duane's mother used this opportunity to report her concern that school staff would "put on" his older brother, in other words, rely on Warren to meet Duane's needs. In Chelsea's case, there were actually two of these special transition meetings as her teacher had not started working at the school until after the first meeting, and the second meeting was used to introduce Chelsea and her family, not only to this new teacher, but also to her two teacher aides. In general, parents expressed a great deal of satisfaction about the worth of being involved in this part of the transition process.

The children whose families did not participate in this process were Jacob, Marcus, Flynn, Adam, Liam, and Stefan. However, two of these families, that is, the parents of Flynn and Stefan, met with the school's principal prior to the transition to discuss what their child

would need after they started. In the case of Flynn, his new teacher also participated in this meeting, and Flynn's parents presented the staff with a written checklist describing his vision impairment and his needs, and this written record is now on his school file. Flynn's mother also participated in a four-hour induction meeting, along with other transitioning parents and, during this process, Flynn spent this time in the New Entrant classroom. For Marcus's family, although there were no such formal meetings, his mother did meet with his new teacher several times on a casual basis before he started and, like Flynn's family, provided a written record of her son's vision impairment and what his needs were.

Research has shown that factors for a successful transition for young children with special needs include careful planning and meetings between families, preschool staff, school staff, and other professionals (for example, Crosswell, 1998). Also, Blundell (1998) found that parents appreciated the pre-start meetings. Another study (La Paro et al., 2000) surveyed teachers' use of transition practices and found that teachers who had children with special needs in their classes were more inclined to use individualised practices such as arranging meetings to coordinate personnel. In addition, Janus, Kopechanski, Cameron, and Hughes (2008) found that, for the majority of the families in their study, the principal or a member of the school staff was actively involved in the child's transition process, as was a member of the preschool staff for more than half of the families in this study.

One of the significant outcomes of the special transition meetings for several of these children was the recommendation that they would benefit from more than the usual number of prior-to-school visits. For most of the schools that participated in this research, the usual number of visits allowed for transitioning children was one or two. However, in many cases, professionals involved in the special transition meetings recommended that the target child would benefit from more than the usual number of visits to familiarise them with the school environment and routines. Eight of the 11 children who participated in the special transition meetings were allowed more prior-to-school visits, and these visits generally numbered from five to seven. The one exception to this was Duane, who visited his school twice a week for six weeks prior to starting, and would be taken over to the school from his preschool either by his mother or by the preschool staff.

These school visits would be phased in gradually so that the target child was spending more and more time at school on each visit, or these visits may have occurred at different times of the school day, so that the child could experience what the whole school day looked like. Parents always remained with their child on these visits, and these visits were not spent entirely in the classroom; some time was also spent familiarising the child with other parts of the school environment, such as the playground and the location of the toilets. Parents were asked if these visits to their new school had been arranged by their child's early childhood centre and, in most cases, they answered in the negative to this question. Apart from Duane, the only exceptions to this were Jacob and Sasha, both of whom attended the preschool of a larger, independent school setting and, in both cases, it was the preschool staff who took these children over to visit the new Entrant classroom. Additionally, some of Duane's school visits were carried out by his preschool teachers. Although Jacob's father was rather vague about this matter, it would appear that Jacob was only taken on one or two visits to the New Entrant classroom prior to starting. Some parents also reported that, as well as these formal school visits, they would spend additional time at the school on a more informal basis familiarising their child with the school environment, such as when dropping off or collecting an older sibling from school, and one example of this was the mother of Seth.

Nine of the target children did not have extra prior-to-school visits and, interestingly, this included three of the 11 children whose families participated in special transition meetings, and the six children who did not. It is not clear why this occurred, or even if this opportunity was offered to these families, although none of the parents of these nine children expressed any frustration or dissatisfaction with this part of the process. However, those parents who were granted extra visits were extremely appreciative and positive about the value and worth of this part of the transition process.

With regard to the two issues of special transition meetings and extra school visits, one interesting case that stands out is that of Liam, who was granted neither. Liam's mother reported that the family could have made an appointment to meet with the school principal prior to him starting, but she said that she had been given the impression by her EI teacher that, if they made too much of an issue of Liam's special needs, the school could refuse to

enrol him. Thus, they chose to advise the school of his special needs by way of information on Liam's enrolment card. Liam's mother took him on just the one visit to school prior to starting, and used this opportunity to discuss with the New Entrant class teacher his autism and his needs. This mother also suggested that Liam's EI teacher had offered to set up a special transition process for this child entering school, but had changed her mind upon realising how small the class would be when he started, as Liam entered at the beginning of the new school year. This was obviously a source of some frustration for this mother. However, it has to be said that this was only the mother's perception of the situation, as neither the perspective of the EI teacher nor of the school were sought on this matter.

Some research has indicated that one of the most important factors for children with special needs transitioning into school is pre-start visits to the school (for example, Blundell, 1998; Fenlon, 2005; Wolery, 1989). Blundell goes on to say that these visits should incorporate introducing the child to the physical environment of the school, meeting with the teachers and the peers of the child's new class, familiarising the child with facilities such as the toilets, and familiarising them with school procedures and routines. However, none of these (above) studies stress the need for extra pre-start visits, as with this current study.

As well as the special transition meetings and the extra prior-to-school visits, parents outlined a number of additional procedures they had undertaken to prepare their children for school. In the main, this took the form of familiarising the child with the school environment outside the structure of the school visits, as mentioned earlier. This appeared to be one of the most major concerns for many of this group of parents. As mentioned earlier, five families made the decision, six months out from starting school, to transfer their child to a public kindergarten, and this strategy was viewed by these parents as a way of preparing their child for the transition to school. That is, attending a public kindergarten would expose them to greater numbers of students and higher teacher-child ratios, and would also provide them with greater independence.

In sum, parents identified a number of processes that had occurred in preparing their children with special needs for school. However, two factors emerged strongly as most important and valuable for this group of parents in facilitating a smooth and successful

transition process, and these were the holding of a special transition meeting in which the families could participate, and being allowed more than the usual number of school visits to familiarise their child with the school environment and routines.

4.3.4 The children's first day at school

Many parents ($N = 11$) reported that their child's first day at school had gone well, and that the child had been happy and at ease, while three parents were ambivalent about their child's first day. For example, Tyler's mother could not remember his first day but believed it had gone well.

On the other hand, three parents reported that their child's first day had not gone well. Duane's (a child with complex needs) mother reported that, at first, he had begun by only attending half days for the first week or so and, on his first day, he only lasted an hour before becoming so stressed that the school rang this mother and asked her to come and collect him. Callum (a boy with ASD) also started school by only attending for half days and, at the time of the research, was still only attending for half days. Callum's mother also reported that her son had become so stressed that he had thrown a tantrum and spent most of that day lying on the floor under a table. Stefan's (another child with ASD) mother reported a very similar first day for her son. However, at the time of the research, all three parents described their children as now being well settled into school.

Parents described experiencing a range of emotions as their children started school. Some parents ($N = 7$) felt thrilled, excited, happy, pleased, relieved, and confident. Other parents ($N = 4$) commented on feeling anxious and yet excited. Hollie's mother felt confident because she could see that her twins were also confident. The parents of Adam, Callum, Damien, Stefan, and Sophie all experienced either anxiety or nervousness as their child entered school, and Duane's mother felt so nervous and worried that she sat by the phone waiting for the school to call.

The parents of three children, Seth, Sophie, and Chelsea, reported feeling quite emotional and overwhelmed as their children started school because, for the first five years of the children's lives, their health had been vulnerable and at risk. Seth's mother described feeling a sense of graduation as Seth started school because he had "made it to his fifth

birthday”. Sophie’s mother described breaking down in tears as she watched her daughter standing in assembly, realising what Sophie had been through and that she had made it this far, and that she looked “relatively normal amongst her peers”. Chelsea’s mother talked about how “exciting and awesome” it was to get Chelsea to her fifth birthday and to school, considering what she had been through in her short little life (and more details about this will be provided in the case studies).

In sum, 11 of these children experienced relatively good first days at school, while another three parents expressed some ambivalence on this question, and another three reported that their children had had rather less positive first days. Parents outlined a range of emotions experienced as their children started school, from excitement to anxiety to worry. However, it is suggested here that, although the anxiety of some of these parents was based on their children’s special needs, it would be fairly normal for all parents to experience such a range of emotions as their children start school, even the parents of TD children.

4.3.5 Problems encountered by families and teachers after children started

Parent and teacher interviewees were all asked if they had encountered any problems or difficulties after the target children made the transition. The parents of only four children (that is, the mothers of Seth, Sasha, Hollie, and Sophie) commented that they had encountered no problems after their child had started school and got settled in, or that any difficulties they had anticipated prior to starting had not materialised. The remaining parents outlined a number of problems they had encountered. Many of these were primarily related to their child’s special needs.

For example, the mother of Gene, a boy with fine motor skill difficulties, reported that, although he had been capable of writing his own name prior to school, something happened soon after starting that made him refuse to attempt to write it, and he even seemed to have difficulty understanding the correct pencil grip. As mentioned earlier, Tyler was dyspraxic and had serious difficulty coping in the school hall because of its high ceilings. The main problem encountered by his family after he entered school was that his teacher would forget to either hold his hand or walk beside him in that situation, and this was something his mother had actually observed occurring.

The parents of the children with ASD encountered several difficulties after their children entered school. For example, the main problem espoused by Callum's mother was that this boy with Asperger's Syndrome simply did not understand what was going on in the classroom, and would throw tantrums, lie on the floor under a table sucking his thumb, and would have to be left there until he could gradually be coaxed to come out. Damien's family encountered several problems after he started school. Most significantly, this family experienced a long wait for teacher aide support to be put in place after Damien first transitioned. Similarly, other research has found that parents encountered long waits for services to be put in place after their children with special needs transitioned into school (for example, Janus et al., 2008). During this time, his mother reported that Damien and his teacher seemed to be struggling with each other. While Damien struggled to understand what was expected of him, his teacher struggled to understand that he was a very visual learner and needed to be shown what to do.

In their interviews, some parents put forward other problems they had encountered after their child had entered school that were less directly related to their child's special needs. For example, Jacob's father described how his son had been bullied by other children about his glasses, which had then been taken away from Jacob, stretched and broken. According to Jacob's father, this problem had begun while Jacob was still only at the preschool and had occurred on the way to and from school on the school bus. Flynn's mother reported that her son had still been wetting his pants up until he started school, but that she had been sure that this would cease once Flynn observed his peers using the toilets in the usual way. However, she was surprised to find that the pants-wetting had continued after the transition. There were a number of issues tied up with this, including the fact that (as discussed in section 4.1.5) Flynn was a child who experienced some extreme reactions to strong smells, which caused him to avoid using the boys' toilets at school, so contributing to his ongoing pants-wetting problem.

Some of these parents stressed that many of these problems no longer existed at the time of this research. For example, Damien's difficulties with his teacher had been ameliorated once teacher aide support was put in place for him. Flynn's mother stressed that his pants-wetting no longer occurred, Gene's mother reported that he was now able to write his own

name, and Tyler's mother commented that his current teacher was better at holding his hand when the class went to the school hall.

A parent who particularly emphasised how her child's problems had been resolved through a process of communication and collaboration with the school was the mother of Chelsea. When asked in her interview if the family had encountered any problems or difficulties after Chelsea had entered school, this mother talked about Chelsea's ability to operate with the small print, both with her reading and her handwriting. Discussions had ensued between herself, the teacher, the two teacher aides, and the Resource Teacher – Vision (RTV), suggestions were put forward about what might work for Chelsea, and these were trialed out through a trial-and-error process. Additionally, an Orientation and Mobility instructor from the Royal New Zealand Foundation of the Blind (RNZFB) had visited the school to assess any areas of danger for Chelsea, both within the classroom and outside in the playground. He had identified the steel water fountains in the middle of the playground as a source of difficulty for Chelsea, and so the school had painted these a bright pink colour to make them more easily identifiable for her. This is an example of this family and their school working together in a collaborative team effort to better meet the needs of this child, and this will be discussed further later in this chapter.

As for the teachers, only three of this sample of teachers claimed to have encountered no difficulties or problems after the target child entered their class, and this was the teachers of Seth, Tyler, and Stefan. The remaining teachers described several difficulties, most of which were associated with the children's special needs. The majority of the problems encountered by them could be classified as academic, behavioural/social, or other.

In the academic category, several of the teachers of the children with low vision described problems they had encountered because of the target child's poor vision. For example, one difficulty for teachers was in understanding what the child was capable of seeing in terms of print, and this applied to Sasha, Marcus, Flynn, and Chelsea. These teachers also reported that this problem had been resolved once the RTV visited and tested the child's visual capacity, but that, in some instances, they had had to wait some time for this visit to occur. Jacob's teacher reported that she perceived him not to be making the academic progress that he should be making, and she attributed this to his vision impairment.

In the behavioural category, the teachers of Damien and Callum described experiencing similar problems after these boys had entered their classes and got settled in. First, both teachers had encountered delays in accessing teacher aide support for these boys in the initial stages after they transitioned. Second, both teachers had met with disruptive behaviour from these children that had impacted on other class members. Additionally, the teachers of both Riley and Jacob had encountered problems with the behaviour of these two boys, that is, both teachers reported that these boys could be aggressive with their classmates.

In addition, other problems encountered by the teachers of this sample were also related to the children's special needs. For example, Sophie's teacher believed that this child's poor vision had impacted on her ability to quickly learn the classroom rules and routines, as the teacher believed that most of this learning would normally take place by way of observation of peers. Duane's teacher outlined an issue that had proved to be a major difficulty for her in trying to maximise the amount of time that Duane was actually included in activities with his classmates and, at the same time, ensuring that his other needs, such as feeding, toileting, and exercises, were met. Gene's teacher commented that she had only encountered one minor difficulty after Gene had started, and this was in his fine motor skills, particularly with his pencil grip and, for her, it was finding the time and having the resources to help him.

In sum, both parents and teachers outlined a number of problems and difficulties that had arisen after the target children had transitioned into school. However, there is some commonality between the problems encountered by parents and those encountered by teachers. For example, the delay in accessing teacher aide support for Damien was a problem for both his teacher and his family. Similarly, Gene's difficulties with his fine motor skills had been a problem for both parent and teacher. A recurring theme to emerge from this section is that the large majority of these difficulties seem to have been directly related to the children's characteristics, particularly their special needs. For some of these teachers and parents, many of these problems had been resolved at the time of this research. However, some of the problems described by parents continued to cause ongoing concern for these parents, and these will be discussed further later in this chapter.

4.3.6 Parents' and teachers' perspectives on teacher aide support

Parents and teachers were asked, if the target child was supported by a teacher aide in the classroom, how well this situation was working for them. If there was no teacher aide, they were asked if they would like the child to have some teacher aide hours allocated to them. Nine of the 17 target children were supported by teacher aides in the classroom, and a tenth child (Adam) had an aide who had only just started working in the classroom with him and who did not participate in this research. Of the nine children with teacher aides, three of these had more than one aide working with them. Both Chelsea and Damien had two aides working with them on a part-time basis, both of whom participated in this research, while in Duane's case, only his main teacher aide was available to participate at the time of the study.

The parents of those children who were supported by teacher aides were, in general, quite satisfied with this service. Those reporting some doubts or concerns were in the minority. Damien's mother expressed satisfaction with how the teacher aide situation was currently working for her child but, as this was near the end of the year, also reported feeling some anxiety about whether he would qualify for an aide the following year. Sasha's mother expressed some concern about how much time Sasha's teacher aide was spending with her, both in the classroom and in the playground.

The parents of those children not currently receiving teacher aide assistance were somewhat more divided about whether their children would benefit from this type of support. The mothers of Marcus, Flynn, and Tyler felt that this was unnecessary at this stage of their education, and Flynn's mother reported that her son was "absolutely petrified that he might have to have some kind of special helper" to assist him in the classroom. The parents of Sophie and Liam were rather ambivalent on this issue. On the other hand, Jacob's father was quite unequivocal when saying that teacher aide support would help Jacob to catch up academically. Riley's mother reported that, prior to her son starting school, Early Intervention (EI) had recommended a teacher aide be put in place to support him once he started school, but that this had not yet occurred, which was a source of some frustration for her.

As with parents, teachers were asked how well the teacher aide situation was working for them. For those children who were receiving teacher aide support in the classroom, the majority of their teachers expressed satisfaction with this situation. One exception to this was Callum's teacher, who reported feeling satisfied with how the teacher aide situation was currently working for this child, but described some concerns for his future support. As Callum was only attending for those hours when a teacher aide was funded to support him, there was some doubt about whether this support could be extended in order to increase his hours of attendance at school. Also, both the teachers of Callum and Damien reported some doubts about whether these children would continue to qualify for teacher aide funding in the following school year.

For those children who were not supported by teacher aides at the time of this study, the majority of their teachers believed that there was no current need for this support. Jacob's teacher believed that, as long as she could continue to draw on the advice of the Resource Teacher – Learning and Behaviour (RTL), she would not need the assistance of a teacher aide. The teachers of both Adam and Liam had aides working in the classrooms a minimal amount of time each day but, in each case, these aides were not dedicated solely to these two boys. Both teachers expressed a desire to see their hours of teacher aide support extended, not specifically to assist with Adam and Liam, but just to support these teachers with their whole classes. Although there was no teacher aide working in Riley's class, his teacher expressed a strong desire for an aide, not just to support Riley, but to assist her with several children in her class.

In sum, the majority of these parents and teachers expressed satisfaction with the way the current teacher aide situation was working for them, whether the target child had the support of an aide or not. To a large extent, parents and teachers were in agreement about this situation. For example, both Damien's teacher and mother expressed some concerns about whether this child would qualify for teacher aide support in the following school year. In addition, both Riley's mother and teacher expressed a desire to see a teacher aide placed in this child's classroom. However, there was some disagreement between Jacob's father and teacher as to whether he should have teacher aide support or not.

4.3.7 Any ongoing concerns or issues for families

Parents were asked if they had any issues with their child's school in the way it was managing their child and his or her special needs, or any ongoing concerns, apart from the matter of teacher aide support. Of the total sample of 17 parents, 11 (64.7%) answered in the negative to this question, or enthused about how cooperative and accommodating the school staff had been in meeting their child's special needs.

However, several parents described matters that were either issues or ongoing concerns for them as a family. Duane's mother reported an ongoing concern that was specifically related to Duane's special needs in that, because of his cerebral palsy, he did not have a well-developed chew on him, which meant she was constantly concerned about his teacher aide's ability to feed him, and his ability to digest food. Sasha's mother outlined an issue she had already raised with her school which had not yet been resolved, and that was a concern about the large amount of glare that occurred in Sasha's classroom. (As an albino, Sasha is particularly sensitive to strong light conditions).

As has already been discussed, Stefan's mother had an ongoing issue with Stefan's teacher refusing to use the visuals. According to this mother, Stefan was, in the main, coping quite well in the classroom, but there were situations that occasionally arose which this mother felt would be better managed if only the teacher would use the visuals. In addition, this mother was concerned that this teacher had also discontinued using the little communication notebook to pass messages between school and home, a practice which she had found quite useful. Damien's mother espoused several ongoing issues she had with her child's school. She was concerned that Damien was left to wander around the playground on his own during breaks, particularly during lunchtimes. Additionally, she had an issue with the school's "closed door policy" and the lack of communication between herself and Damien's teacher. (More details of this will be discussed in a later sub-section).

Three parents for whom this research occurred near the end of the school year, expressed anxiety or concern about what their child might encounter educationally in the following school year. These were the parents of Damien, Liam, and Riley, all of whom were expecting their children to be moved on to new classes with new teachers. Damien's

mother's concern was based on whether her son would receive teacher aide support the following year, as the school had hinted that he might no longer qualify, and how quickly this would be put in place. The anxieties of the mothers of Liam and Riley were based more on which teachers their children would be placed with the following year, and whether these new teachers would be quite as understanding as the current teachers were.

Another issue raised by several parents was not directly related to their children's schools but, rather, was a concern about the extent of availability of speech/language therapy (SLT) for their children. The parents of Adam and Riley commented that their children did not appear to be receiving the level of SLT support they had been expecting, and this was a source of some frustration for them. Both the families of Tyler and Damien were funding private SLT themselves in the expectation that their sons would still receive SLT through the public system, but this did not appear to be happening which, again, was a source of frustration for these families. In a recent review of the *Special Education 2000* policy, Bourke and her colleagues (2002) also found concern and frustration expressed by both parents and teachers over the level of access to SLT for children with speech/language needs.

In conclusion, however, it is important to remember that parents reporting concerns or issues were actually in the minority. The majority of families in this sample expressed either satisfaction or even enthusiasm about how their schools were coping with their children and their special needs.

4.3.8 Communication, cooperation, and collaboration between families and schools

Parents were asked how much contact or interaction they had with their child's school in order to meet their child's needs. From their answers, it was clearly evident that, for some of these families, there was a strong sense of good communication occurring between parents and school personnel, and of families and schools working together in cooperation and collaboration to better meet the children's needs. For other families, parents reported a degree of contact and interaction occurring that appeared to be satisfactory for these families. On the other hand, for a small group of these families, there appeared to be a

distinct dearth of interaction or communication occurring, leading to a void in collaboration and cooperation.

For about eight families, there emerged a strong sense of families and schools working together in a collaborative team effort in order to overcome any difficulties and to provide the best possible circumstances for the child. Seth's mother was typical when she reported that her school always seemed ready to listen to her suggestions and to answer her queries. Sasha's mother talked about being a strong advocate for her child's needs as "you only get one shot at this education". Duane's mother described her school as having an open door policy, said she made a practice of popping into Duane's classroom on a regular basis, and believed in making herself available to the staff in case they wanted to discuss any problems or ask any questions of her. Gene's mother reported being parent helper in her son's classroom one morning a week, and this gave her an opportunity to observe for herself her son's progress. Particularly noteworthy was the case of Chelsea where (as has been described earlier) Chelsea's mother outlined how she would visit her daughter's classroom at least once a day to enquire if there was anything that needed to be done, and she was able to do this because she had a part-time job at the school. When problems or difficulties arose, brain-storming or problem-solving discussions would ensue involving herself as parent, the teacher, the two teacher aides, and the RTV. This mother reported that "it's a case of throwing in suggestions and then trialling them out to see what works", and she always felt that her input into this process was valued by the professionals. It is clear to see that, in the examples cited here, cooperation and collaboration have been possible because these schools have had an open door policy and have welcomed parents into the classroom.

For a second group of parents, the situation with regard to the amount of contact/interaction between themselves and their schools was less clear-cut. For example, the parents of Flynn, Adam, and Tyler believed that they as a family had little interaction with their schools to meet their children's needs. However, when questioned further, it turned out that these mothers were in their children's classrooms twice a day to drop off and collect them and would use these occasions to talk with the teachers. These mothers also admitted that the school personnel were quite pro-active in approaching them to let them know how their

children were doing, to discuss any problems, and to encourage them to ask questions. Thus, for these families, it seems that the level of contact may have been greater than these parents believed it to be, and any lack of interaction was certainly through no fault of the schools.

Finally, there was a third group of parents where the level of interaction appeared to be quite minimal. When asked about the degree of contact or interaction with school, Jacob's father replied that "the school encourages it far more than we actually participate". This may have partly been a distance issue, as this family were located in a rural town some 40 minutes' drive away from another rural town where Jacob attended school. However, it also appears that this family had a rather 'hands-off' attitude to his education, saying that "we prefer to stand back and let the school get on with it and put in the work, go the extra mile at home". In the case of Callum and Riley, although these mothers were at school twice daily for dropping off and collecting their children, these families also appeared to have had minimal contact with their schools to discuss their children's needs. Damien's mother commented on the extreme lack of communication between herself and the teacher, saying that she had found it useless to try to talk to the teacher after school to ascertain how Damien was getting on, because of the teacher's apparent unwillingness to communicate with her. In addition, this mother reported that Damien's school did not encourage parent helpers in the classroom during class time, which would give her the opportunity to observe for herself what was going on. As has been discussed earlier, this mother reported that her school had a "closed door policy" which was a source of some frustration for this family.

It is important to note that, for some of these families, a communication system was being used to pass messages between parents and teachers (see section 4.1.2). For Tyler, Marcus, and Chelsea, this took the form of a little exercise book or notebook while, in Duane's case, this took the form of a switch to a communication aid which he could operate himself. These communication devices were being used on a regular basis to exchange information between home and school.

Although teachers were not directly asked about the level of interaction between themselves and the families to meet the children's needs, a general sense of cooperation and collaboration, or the lack thereof, did emerge from some of the teacher interviews, and

this tended to confirm what the parents had reported. For example, Seth's teacher gave a real sense of working cooperatively with the family, and included Seth's teacher aide and RTV when describing this team effort. She commented that, if she ever felt unsure of anything (as a relatively new, inexperienced teacher), she only had to ask Seth's mother for her help or advice. Conversely, the interview with Jacob's teacher appeared to confirm the real dearth of interaction between the school and family. The teachers of the two high needs, ORRS-funded children (Duane and Chelsea) described with some enthusiasm the real team effort that was occurring, and this team effort extended beyond to include other professionals working with these children. A quote from Chelsea's teacher: "I had lots of specialists coming into the classroom, you know about four or five, and I just said straight out to them, and I said 'look, I don't know much about this, so I want you to tell me what to do to help me'. And they did, they were fabulous, and we all just worked together as a team". These examples of cooperation and collaboration are a good illustration of Bronfenbrenner's (1979) cooperative linkages between home and school, and the inter-relationships of Bronfenbrenner's mesosystem.

In this study, neither parents nor teachers were asked directly about the type or extent of liaison and continuity between the school and early childhood centre. However, this issue came up in answers to other questions. Research set in the New Zealand educational scene (Bourke et al., 2002) found that both parents and teachers expressed concern about the lack of liaison between early childhood and school settings, the exchange of information between these settings, and the lack of continuity of assistance. This study also found that where liaison and continuity had occurred, there had been positive benefits for children, families, and teachers. In addition, Newman (1996) also found a lack of continuity between sending and receiving programmes. Dockett and Perry (2007) acknowledge the need for links between prior-to-school settings, such as early childhood centres, and schools. For this reason, it is worthwhile to examine this issue in more depth for this current study.

One way of ensuring continuity and liaison between these settings would be for the children's preschools to take them on their visits to school in the period leading up to their transition. This only occurred for three children, Jacob, Sasha, and Duane. Parents commented that arranging the school visits had largely been left up to them. For this

sample, the most common means of achieving liaison and continuity between the two types of setting was by way of the special transition meetings, and these occurred for 11 (64.7%) of the 17 target children. In some instances, these were held at the child's early childhood centre, in other cases, these were held at the child's receiving school, although when these were held at the school, a representative of the preschool staff was always in attendance. These meetings gave everyone, including early childhood and school teachers, an opportunity to have some input. Thus, these transition meetings ensured some level of continuity and liaison between preschools and schools.

Other research has stressed the need for collaboration between families, preschool staff, primary school staff, and other professionals as part of the transition process for both children with special needs (for example, Bourke et al., 2002; Conn-Powers et al., 1990; Fenlon, 2005; L. Fox, Dunlap, & Cushing, 2002), and for typically-developing children (see Dockett & Perry, 2003b, 2004, 2006). Studies have also recommended continued family participation and involvement throughout the transition process (for example, L. Fox et al., 2002). Research has also identified the need for communication between preschool and school staff, or between the sending and receiving programmes, as part of the transition process for both children with special needs (see Bourke et al., 2002) and for normal populations (see Dockett & Perry, 2003b). Additionally, Blundell (1998) stressed the need for good communication between families and schools, and found that parents appreciated the high level of communication between themselves and New Entrant teachers, and their school's open door policy. On the other hand, Newman (1996) found a lack of communication between sending and receiving programmes in the transition of young children with special needs. The research of Bourke and her colleagues (2002), a New Zealand study, found that parents were more likely than schools to believe that schools could improve the levels of communication.

In sum, for some of these target children, a strong sense emerged of families and schools working together in a collaborative team effort to better meet the children's needs. However, for other children, an equally strong sense emerged of a lack of communication and cooperation between schools and families. This was confirmed by the data from the teacher interviews. Although some level of liaison and continuity was achieved for some of

these children by way of the special transition meetings, it is asserted here that this was quite minimal. However, it could be argued that the level of continuity and liaison needs to be increased, and one way to achieve this would be to make these special transition meetings available to the families of all children with special needs transitioning to school (and this will be discussed further in Chapter Six).

4.3.9 Adaptations to classroom environment or to curriculum/programme

Teachers were asked if they had had to make any modifications or adaptations to their classroom environment, and to their curriculum or programme to cater for the target child's special needs. In terms of their classroom environment, ten of these teachers replied in the negative to this question. The majority of the remaining teachers who answered in the affirmative to this question were teachers of children with either visual impairments or physical disabilities, or both. For example, the teachers of Sasha and Jacob reported moving the furniture and the mat around so that the glare was not in the child's eyes. The teachers of Chelsea, Hollie, and Seth described ensuring that there were big enough gaps between the tables for these children to move around with ease, reminding children to push their chairs in and to pick their jumpers up off the floor. Seth's teacher reported that she had made room for some of his specialist equipment, and she also outlined the need to keep the physical layout of the classroom constant, as it was anything new or unexpected that would throw Seth. Additionally, Chelsea's teacher reported that, if she needed to change the room around, it was her intention to walk this child around the classroom to familiarise her with the new layout.

Duane's teacher reported that she had had to make room in her classroom for his wheelchair, and in order to move him around the classroom and because his wheelchair was so large, she had had to ensure clear pathways between the various fittings and fixtures, and this had been quite difficult for her at times. It had meant talking to the other children in the class about this and, at times, it had also meant moving the children rather than the furniture. Apart from these examples, the only other teacher to report adapting her classroom to accommodate the child's special needs was the teacher of Callum. Because Callum was fully supported by a teacher aide, and because his programme was delivered entirely by his aide, this teacher described having to make an area available for them to

work in, and they had their own little corner of the classroom. In addition, this child had to be seated where there were not too many distractions or things to touch, and this teacher reported having to draw an 'X' on the mat to indicate where he was to sit.

In terms of modifications to their curriculum or programme, many teachers answered in the negative to this question, but then went on to describe some adjustments they had made, which these teachers described as being within the normal range. A response that was typical was that from Damien's teacher, who described her programme as catering for a wide range of differing abilities within her class. Some of the modifications they had made included Seth's teacher reporting that this child was in a small reading group who all gathered around his closed circuit television (CCTV) for reading, and all used the CCTV to read from. In addition, Seth's readers had the Braille version alongside the print, while Chelsea's RTV had enlarged the text in her readers to facilitate her reading. Some of the teachers of the low vision children had made adaptations such as allowing these children to write with felt pens instead of pencils, and darkening the lines or using thin black tape to mark the lines in their exercise books to facilitate their handwriting.

However, the teachers of two children reported making more major modifications to their programmes to cater for these boys' needs, and these were Duane and Callum, who were on individualised programmes. Duane, a boy with complex needs with no prospect of learning to read or write, was mainstreamed for the purpose of socialisation. His teacher commented that she had two goals in mind when designing his programme, and the first was to involve him or include him with his peers as much as possible, and the second was to meet the goals of his IEP. Callum's teacher reported that this child's whole programme had been modified to meet his needs and, although it basically followed the programme of the rest of the class, it was at the same time quite different.

Some of the practices described here may be seen as examples of differentiation being put into practice in the regular classroom. Differentiation is the process by which teaching methods, curriculum objectives, resources, assessment methods, and learning activities are planned to cater for the needs of individual students (George, 2003). The practice of differentiation is making the whole curriculum accessible to all individuals in ways which meet their learning needs. Some of the purposes of differentiation are to remove barriers to

participation and to maximise potential based on individual needs. George goes on to say that differentiation is valuable for the mixed ability groupings encountered in most primary schools under an inclusive model of schooling. Differentiation is not just about helping slow learners or stretching clever students; it is about all children because all children are different (George, 2003). Mentis et al (2005) cite differentiation as an inclusive practice, and say that quality teaching to ensure that students with diverse learning needs are successful learners may require differentiation across the curriculum. Examples provided by these authors include assisting a student to compensate for intellectual, sensory, physical, and/or behavioural difficulties, such as enlarging the print or providing reading material in Braille for a child with a visual impairment. Other examples include increasing a student's independence in the school environment, for example, by using visual strategies such as photographs, or making adaptations to the physical classroom environment, such as providing ramps into a classroom or making room for a child's wheelchair. Finally, in an inclusive model of education, the function of educators is to alter, adapt and improve the environment to meet the needs of all students (Moore et al., 1999), and the adaptations being made by teachers in this current study would appear to be in line with this requirement.

In sum, the majority of teachers of this sample reported making no modifications to their classroom environments to cater for these children's special needs. Those teachers who described making changes were, in the main, teachers of children with either physical disabilities or with low vision. Many of these teachers were making some adaptations to their programmes to meet the needs of the target children, and these adjustments may be viewed as differentiation being put into practice. In terms of modifications or adaptations to either the classroom environment or to the programme, only two children stand out as being quite different to the rest of this sample, and these were Callum and Duane.

4.3.10 Teacher expectations of child's behaviour and learning

Teachers were asked if they had the same expectations of the target child in terms of their behaviour and of their learning as they did of the other children in their class. In terms of behaviour, these teachers were almost unanimous in replying in the affirmative to this question, although several then went on to qualify their answers. Chelsea's teacher was

typical when she commented that she expected this child to adhere to the rules and routines because she had to operate within a school environment like every other child. “.... she has to be one of the team. It’s about observing the rules and routines of the classroom”.

The teachers of Riley and Jacob answered in the affirmative to this question, then continued on to add that, in truth, both these boys were non-compliant in relation to the rules. The teachers of five children reported that they were either a little more lenient with the child or made allowances for him or her, and these were Sophie, Liam, Callum, Duane, and Tyler.

When teachers were asked if they had the same expectations of the target child in terms of their learning as they did of the other children in their classes, they were relatively uniform in their responses. The majority of these teachers replied that they tailored their expectations of the child’s learning to suit the individual student, according to each student’s developmental level and ability, but that this would be the same for every student in their class. This is yet another example of differentiation being put into practice. George (1992) asserts that differentiation is about assessing individual needs, responding with appropriate learning experiences, and matching the individual’s learning to their ability. These teachers also commented that they had high expectations of every child in their class, and they expected them to do their best and to try their hardest. This type of response applied to 12 of the teachers of this sample. A quote from Hollie’s teacher: “.... and indeed, that changes from week to week with different children as we get to know them more and understand where they’re starting out from and the speeds at which they’re learning”.

Duane’s teacher replied that her expectations for this child were quite different, especially academically. As was discussed in the last sub-section, his programme is quite different to that of his classmates, and he is academically behind with little prospect of ever catching up. More unusual were the responses of the teachers of Flynn and Chelsea when they simply replied in the affirmative to this question. Finally, the teachers of Riley and Damien replied in the negative to this question, and then expanded on this by saying that the lack of language of both these boys was holding them back academically.

Teachers were also asked how comfortable they were with the target child’s rate of learning or rate of progress in their classroom. The majority of the teachers of this sample expressed

satisfaction with their target child's rate of learning, and used language such as "happy", "pleased", "proud", and even "pleasantly surprised". These teachers then expanded on this by specifying the levels each target child was currently at in terms of their reading, maths, and handwriting. The only minor concern that some of these teachers expressed was with the poor handwriting ability of several of the boys, but believed that this was quite normal for boys.

The teachers of four children, Jacob, Sophie, Stefan, and Riley expressed some concern or dissatisfaction with their target child's rate of academic progress. Jacob's teacher reported that she believed that this child should be further ahead than he actually was, considering he had been at school nearly a year. Riley's teacher expressed some concern about his general lack of progress in her class. Although he had only been at school a comparatively short time, she perceived him to be not really ready to learn, and commented that his lack of language was delaying his ability to learn his letter sounds. Finally, the teachers of three of the boys with autism, Stefan, Callum, and Liam, reported that these boys were reading well in terms of decoding, but their comprehension of their reading was less satisfactory.

In sum, the teachers of this sample were almost unanimous in their desires to have the same expectations of the target child's behaviour as they did of the other children in their classes, but a few of these teachers also believed that they had to make allowances. On the other hand, in terms of their expectations of the children's learning, the majority of these teachers answered neither in the affirmative nor in the negative. Rather, they believed in tailoring their expectations to suit each individual student, and they expected each to work to their potential. However, these teachers also commented that this was their expectation for every child in their class. Finally, the majority of these teachers also expressed satisfaction with the target children's rate of progress in their classes.

4.3.11 Summary

A purely qualitative approach was used to examine the factors and processes involved in the transition to school for this sample of young children with special needs, and semi-structured interviews of parents and of teachers were used to gather this data. Certain factors and processes have emerged as most salient and relevant for this study.

In light of other research (for example, Bourke et al., 2002), the data were examined for evidence of any liaison and continuity between the children's early childhood centres and their primary schools as part of the transition process. In this study, there appears to have been little continuity and liaison occurring between these two types of educational setting, and the only real evidence that emerged was through the pathway of the special transition meetings which, in some cases, were held at the children's preschools and, in most cases, were attended by staff from both settings. However, for many of these children, these special transition meetings did not occur. Therefore, it is asserted here that the level of liaison and continuity was quite low for this group of children, and needs to be improved in the transition to school of young atypical children.

Parents were asked about the level of contact and interaction occurring between themselves and their child's school. It was clearly evident from the data that, for some of these families, a strong sense emerged of good communication occurring between parents and school staff, and of families and schools working together in cooperation and collaboration to better meet the children's needs. Several factors contributed to this overall sense of collaboration. Some of these processes took place as part of the child's preparation for school, such as the special transition meetings and the extra pre-entry school visits, and some occurred following the child's entry into school, such as the family and school personnel communicating and consulting about any problems that had arisen. Alton-Lee (2003) says that quality teaching can be identified as a key influence on high quality outcomes for diverse students, and says that quality teaching effects are maximised when supported by effective school-home partnership practices focused on student learning. Some of the families reported that this collaborative team effort also extended to the other professionals working with their child. However, for other families, there also appeared to be a distinct lack of communication and interaction occurring, leading to a void in cooperation and collaboration between these families and their schools. This situation was confirmed by the teachers. This clear distinction between these two groups was quite marked, and will become more evident in the next chapter on the case studies.

For the developing child, Bronfenbrenner's (1979) ecological systems model points to the importance of the nature and strength of connections existing between the family and the

various settings that the child enters (Bronfenbrenner, 1986). Of particular importance are those transitions into and within peer groups and school. How is the process of transition influenced by prior connections between settings? For example, in the transition to school, there may be previous social interactions between the two contexts of the home and school, such as the child having an older sibling at the same school, or a parent-teacher friendship, or it may be the sharing of information about or between the two settings. A powerful factor influencing the child's ability to learn in the classroom is the relationship between the family and the school (Bronfenbrenner, 1986), and one of these factors may be the feedback from the school experience and vice versa. In addition, once the child has entered the new setting, this event has the potential to alter attitudes, expectations, and patterns of interactions within the family, especially in relation to the child. The child's development may be further affected by shifts over time in the nature and extent of linkages between the family and other principal settings in which the child spends his or her time, for example, the parents might encourage or discourage the child's contact with peers (Bronfenbrenner).

The teachers of this sample were almost unanimous in their beliefs about having the same expectations of the target children in terms of their behaviour as they did of the other children in their classes. However, in terms of the children's learning, most of these teachers reported that they tailored their expectations of the child's learning to suit the individual student, according to each individual student's developmental level and ability, but that this would be the same for every student in their class. Teachers also commented that they had high expectations of every student in their class, and they expected children to work to their full potential. Furthermore, most of these teachers expressed satisfaction with the target child's rate of learning in their classroom. Tailoring their expectations of the child's learning to suit the individual student is an example of differentiation being put into practice. Additionally, in section 4.3.9, other differentiation practices were identified in the adaptations that teachers of this sample were making to their environments and to their programmes to cater for the children's needs. However, there was also some evidence of differentiation not being practised, with Stefan's teacher discontinuing the use of the visuals for this child.

A recurring theme to emerge from this section of the data is that the children's individual characteristics, particularly their special needs, have lain at the root of many of the interviewees' responses. Bronfenbrenner (1979) believed that children's biological and social characteristics, habits and temperament, influence those around them, as well as being influenced by those around them. For example, the large majority of the parents' fears and concerns prior to their child starting school were based on their children's special needs and the implications this would have once they entered the New Entrant classroom. Likewise, many of the teachers' fears and concerns prior to these children entering their classes were also based on the children's special needs. Some of these concerns were for the child's sake, while others were for their own sake, that is, fears about how the child's behaviour might impact on themselves as teachers or on their classes. In addition, many of the problems or difficulties encountered by families or by teachers following the transition were based on the children's disabilities. However, it should be noted that many of these parents and teachers emphasised that some of the fears and concerns prior to the transition had proved to be unfounded. Additionally, when schools and families collaborated to resolve problems, this contributed to overcoming any difficulties brought about by the children's special needs. Furthermore, teachers' use of instructional practices such as differentiation also contributed to ameliorating any problems. In an inclusive model, the function of educators is to alter, adapt and improve the environment to meet the needs of individual students (Moore et al., 1999) and the use of differentiation practices in this current study was instrumental in helping to achieve this goal.

4.4 Overall conclusion

It would appear that the child's individual characteristics have impacted on both the nature of the interactional strategies being used, and on the nature of the relationships between the child, his or her parents, teacher, teacher aide, and peers. For example, a small majority of the target children had poor peer relationships, and one possible explanation for this may be their individual characteristics. A common theme which links Sections 4.1, 4.2, and 4.3 is the nature of the interactions that has occurred between these children, their parents, their teachers, and their peers, and this would appear to be a set of reciprocal processes. That is, it is evident that the nature of the interactional strategies seen in section 4.1 has impacted

on the formation of the relationships in Section 4.2 between the target children, their parents, their teachers, and their peers. In turn, the patterns of interactions seen at sections 4.1 and 4.2 are linked to the nature of interactions seen in section 4.3. A good example is the case of Seth, where the nature of his interactions has affected his relationships with his parents, his teacher and teacher aide, and his peers. Additionally, the nature of interactions between Seth's parents and teacher has influenced the nature of their relationships. For example, this child's mother and teacher employed the complementary strategy of using their voices to guide Seth off in the direction of the other party at the beginning and end of the school day. Other strategies were employed by his mother and teacher which indicate positivity about working together. This positivity has impacted on Seth's relationship with his mother and with his teacher and, in turn, has influenced the nature of the relationship between the family and school.

On the other hand, the nature of Jacob's interactions has influenced his relationships with his teacher and with his peers. For example, there appears to have been a paucity of interactional strategies used either by or with this child and his family and teacher. This may have contributed to a poor relationship between Jacob and his teacher. It may, in turn, have influenced the relationship between his family and teacher, where there appears to have been limited collaboration between them to meet Jacob's needs. This situation will be clarified in Chapter Five on the case studies.

A third example is provided by the case of Stefan, who was one of the children described as a 'visual learner'. In section 4.1, it is evident that his mother was using interactional strategies with this child, such as the visuals, which were not being used either by his teacher or by his teacher aide. This may have contributed to a poor relationship between Stefan and his teacher, and between this child and his teacher aide. Second, a practice that had been discontinued by his teacher was the use of a little communication notebook to pass messages between home and school. The absence of these two practices was a source of some frustration for Stefan's mother, and had the potential to cause friction between his family and school.

Section 4.3 on the transition to school provides further evidence of these reciprocal relationships, that is, the interactions between parents and teachers. Here, certain processes

and factors have occurred that facilitated a smoother and more successful transition. In the preparation for school, some of these processes included special transition meetings and extra school visits for the target children and their families, and these processes provided both teachers and parents with opportunities to have their input, and illustrate good communication between families and schools. Children who were provided with these opportunities include Seth and Chelsea, and children who were not given similar opportunities were Jacob and Liam. In the period following the transition, the level of contact and the quality of interaction between home and school also determined the level of cooperation and collaboration between families and schools. Examples of children for whom the positive interactions have been maintained following the transition include Seth, Hollie, and Chelsea, and examples of children for whom there have been poor levels of interaction include Jacob and Callum. Thus, the nature of the interactions between the target children, their parents, and their schools could be seen as a reciprocal process, and appears to have been a contributing factor in the adjustment to school for young children with special needs.

In conclusion, it would appear that the child's individual characteristics have impacted on both the nature of the interactional strategies being used, and on the nature of the relationships between the child, his or her parents, teacher, teacher aide, and peers. In turn, the nature of interactional strategies has impacted on the nature of the relationships between the various parties, and vice versa. Finally, the nature of both the interactional strategies and the relationships between the various participants have contributed to influencing the transition and the adjustment to school for the young child with special needs.

The next chapter, Chapter Five, will present seven case studies of individual children of this sample. The children chosen for case studies were selected to represent either those children who were well adjusted to school, that is, Seth, Hollie, Chelsea, and Liam, or those whose school adjustment could be viewed as less successful, that is, Jacob, Callum, and Riley. School adjustment is viewed here in terms of the relationships children formed at school with teachers, teacher aides and with peers. On the basis of these relationships, the remaining 10 children were not chosen for case studies because their situation is less clear-cut. Six of these children had good relationships with teachers and teacher aides, but were

found to have quite poor peer relationships, and these were Sasha, Marcus, Sophie, Flynn, Adam, and Tyler. On the other hand, Duane and Stefan were found to have good peer relationships but quite poor relationships with teachers and teacher aides. Gene and Damien were found to have good relationships with teachers, teacher aides and with peers, but were not chosen for case studies. In addition, these case studies will be used to pull together some of the threads of Chapter Four, and will develop and expand on some of the themes of this current chapter. The children selected for these case studies are also those whose cases best illustrate and exemplify these themes.

CHAPTER FIVE

RESULTS AND DISCUSSION: CASE STUDIES

This chapter presents seven case studies of individual target children of this sample. As a number of themes have emerged from Chapter Four, the purpose of these case studies is to exemplify and illustrate those themes. One theme is that many of the target children possessed a range of social, personal, and behavioural characteristics that have impacted on the nature of their relationships and this, in turn, has significantly influenced their adjustment to school. Second, the nature of interactions between the various participants in this study has had a critical influence on the nature of relationships, and vice versa. Third, the strong sense of communication and collaboration that emerged for some of the children has differentiated some of the children of this sample from others. For some of the children, their adjustment to school was far more successful than for others, and certain factors and processes have contributed to this success or lack thereof.

For many of the children of this sample, their school adjustment could be regarded as successful on the basis of the results of the three standardised measures, and Seth, Hollie, and Chelsea have been chosen for case studies to represent these successfully-adjusted children. Other children chosen for case studies have been selected because their school adjustment is viewed as less successful, and these children are Jacob, Callum, and Riley. A case study will also be presented for Liam, whose school adjustment could be regarded as successful on the basis that he had formed reasonably positive relationships with his teacher and with his peers. However, Liam's case is rather unusual in relation to other children of this sample in that he was significantly insecurely-attached in his child-mother relationship. In addition, some of the factors which determined a successful transition for other children were missing for Liam, and this will be discussed further later in this chapter.

5.1 Seth

Seth is a Caucasian male aged five years six months. He is the younger of two children with an eight-year-old sister, living in an intact nuclear family. His parents are professionals with both parents working, and the family lives in an urban area. Seth has

now been at school for approximately two terms, attending his local State primary school, and has a teacher aide.

Seth's special needs are low vision. He was born with bilateral cataracts which were widespread and dense. Following surgery to correct the cataracts, his eye pressures were raised with glaucoma. This condition has persisted throughout the first five and a half years of his life, resulting in approximately 30 rounds of surgery and general anaesthetics, and Seth's vision is now at risk. As this family lives in a provincial city some distance away from Auckland, this has meant the family making frequent flights to Auckland for these surgeries. He is a dual literacy learner, meaning that he is learning to read in both Braille and in large print.

Seth's vision impairment was first diagnosed as a baby, and the possible implications of this were recognised while he was still just an infant. This family believed they had been well supported from Seth's early age, particularly by their Resource Teacher – Vision (RTV). Seth's parents are professionals, and believed that they had been given valuable guidance from an early age by their own parents, who included teachers experienced in working with children with special needs. On the basis of this advice, they had chosen to expose Seth to as many rich background experiences as possible, to build up his visual library before he should lose his sight altogether, to develop his social skills as much as possible, and to develop his self-esteem, his confidence, and his independence. To this end, his mother chose to return to work while Seth was still under one year of age, and Seth and his older sister were placed in child care four days a week. Now, as a five-and-a-half year old, Seth participated in several out-of-school activities, including soccer and judo. He frequently had friends home to play after school, and these friends also often returned the invitation to Seth. Research has indicated the need for young children with visual impairments to be provided with opportunities to interact with other children (for example, Compton & Niemeier, 1994) and, in Seth's case, this appears to have been quite beneficial.

In their interviews, both Seth's teacher and aide created a picture of a lovely child who was a delight to teach. Seth was described as confident, compliant, independent, well-behaved, and polite. In her interview, the opening comment from Seth's teacher was: "I really enjoy having Seth in my class. He's just a breath of fresh air, most of the time, he's so confident

and happy. He's a really nice kid to have around, and he's very helpful. And he doesn't seem to let his disability affect him or bring him down in any way. He's just like a regular child in the classroom. We have a lot of fun with things he's learning to do, like with his new machine out there, like, he's taught me to use it, and we share a lot of the load together". Seth's teacher aide commented that he was very easy to get along with and was a lovely, smiley child. "How can you not like a child that smiles all the time?" Compton and Niemeyer (1994) indicated the importance of smiling in interactions with peers and with extra-familial adults, and for building positive relationships with peers and teachers.

In the three standardised measures used to assess the children's relationships with their parents, their teachers and teacher aides, and with their peers, Seth scored quite highly. In the Attachment Q-sort (AQS) (Waters & Deane, 1985) performed by his mother, Seth achieved an attachment security score of .27 ($p < .01$) and a dependency score of -.03 ($p > .05$) (see Table 4.1). Because his security score was statistically significant and above the sample mean ($M = .25$, $SD = .21$), Seth was regarded as securely attached with his mother. In the Student Teacher Relationship Scale (STRS) (Pianta, 2001) performed by his teacher, Seth achieved an extremely high closeness score, very low conflict and dependency scores, and an extremely high overall total scale score. In the STRS performed by his teacher aide, he achieved low closeness and dependency scores, and moderate conflict and overall total scale scores. On this basis, Seth was placed in the cluster of relationships of low concern. In terms of the peer sociometric measure (PSM), this child achieved the highest liking Z score of the entire sample, plus some nominations as 'best friend' or as 'most liked' in his class and, thus, Seth was placed in the top peer relationship cluster (see Table 4.5).

Research has shown strong associations between children's relationships with their teachers and their relationships with peers, both at preschool and at school (for example, Cohn, 1990; Granot & Mayseless, 2001; Howes, Hamilton, et al., 1994; Howes, Matheson, et al., 1994). Howes and her colleagues showed that differential aspects of the teacher-child relationship could impact on children's social competence with peers at different levels. For example, security with teachers as toddlers was positively correlated with complex peer play and gregarious behaviour at age four at preschool, and positive socialisation with teachers as toddlers was associated with higher perceived peer acceptance at four years of

age (Howes, Hamilton, et al., 1994). Pianta and Stuhlman (2004) used the STRS to measure the aspects of closeness and conflict in the teacher-child relationship from preschool through kindergarten to first grade in the American school system, and found that higher levels of closeness with teachers were related to the development of both social and academic skills at first grade. It is possible that the attitudes of teachers to mainstreamed children with special needs could be subtly communicated to the other children in the same class (see also Zigler & Hodapp, 1986). However, in Seth's case, it is also possible that this child's characteristics could have resulted in such good peer relationships.

In their interviews, Seth's teacher and aide concurred when discussing his peer relationships. This child had formed close friendships with a small group of boys who were now very good friends with him. Seth's mother commented that, after starting school, he had very quickly teamed up with another boy named Frank, and they as parents had wondered if this was a "smart survival mechanism" in order for a child with very poor vision to survive in the school environment. Seth's teacher and aide reported that the other children were aware of his poor vision, although were not familiar with the details, and were quite empathic and supportive with him. Although he was quite an independent child who did not like "a lot of attention in that way", if he was having any difficulties, his close friends would just quietly go along and help him in such a way that he did not really notice. His teacher continued on by saying that Seth did not really need helping because of his disability; in fact, it was actually Seth that helped other children because he had been in the class longer and was more familiar with the classroom rules and routines.

Additionally, Seth's classmates were quite comfortable about both working and playing with him. When playing outside in the playground, it was quite common for his group of friends to swing on the monkey bars and, in this activity, Seth was one of the more talented and confident. The other children were also happy about talking with and sharing experiences with him. Apparently, when it was news-sharing time, Seth loved to share his experiences with his classmates, and would engage in this activity with excitement, energy, and confidence. Because of these qualities, he was also good at bringing things out of the other children. Seth never became aggressive or hostile with his classmates, nor did he act in a shy or withdrawn manner with them. However, his teacher related an occasion earlier

in the term when he had been having problems with his vision and had become quite quiet and withdrawn when sitting on the mat in a large group situation, and seemed reluctant to join in, but she had put this down to a lack of confidence because of his vision difficulties.

Other qualities that Seth's teacher reported were that he was a very good listener and was good at taking instructions on board, and she believed that this listening skill had developed as a result of his poor vision. The only less positive characteristic reported by his teacher aide was that, to her, he seemed reluctant to learn his Braille with the visiting RTV. To engage in this learning task, Seth would be withdrawn, not right out of the classroom, but certainly over to one side away from what the rest of the class was doing. Therefore, it is asserted here that this withdrawal singled Seth out and made him feel different, which was the basis of his reluctance, rather than a reluctance to learn the Braille per se. Nagel (2005) comments that learners with visual impairments are able to do most of the things that their sighted peers do, and will want to be part of the class and of activities throughout the school. In addition, at the time of this research, it was also reported that Seth seemed to have accepted that he needed to learn the Braille.

There were several resources to support Seth in the classroom. In terms of personnel, his teacher aide worked five days a week with him, but was only employed in the mornings. The visiting RTV taught him Braille four and a half hours a week. Equipment included a Brailler and a closed circuit television (CCTV). Seth was in a reading group of three children who were all reading from the same reading book and, at reading time, this group would all gather around and read from his CCTV. Additionally, as he was a dual literacy learner, the text from his books would be enlarged and blue-tacked onto the page, with the same words in Braille underneath. Other resources provided by his teacher and aide were proffered in response to the set of questions on 'interactional strategies', and included a small chart, or individual copy of the teacher's number board that he could hold in his hand when she was teaching numbers from one to a hundred.

In Seth's transition to school, the two factors that had emerged strongly as most valuable and worthwhile for this family were participating in a special transition meeting and being able to take Seth on extra visits to school prior to him starting. The transition meeting had involved one of his early childhood teachers, an Assistant Principal in charge of special

needs from the school, and the New Entrant teacher. This was not his current teacher that had been with him since the beginning of this current school year but, rather, as he had attended school for just three weeks at the end of the previous school year with another teacher, this teacher had attended this transition meeting. Also present at this special transition meeting were his RTV, a representative from the Royal New Zealand Foundation of the Blind (RNZFB), Seth and his family, in other words, all the stakeholders in his life. This meeting had occurred at the school some six weeks before he transitioned. In terms of school visits, Seth was granted six, in contrast to the usual number of two allowed for other transitioning New Entrants. These took place over the four weeks immediately prior to him starting, and occurred at different times of the school day, including lunchtimes, so that by the time he started, he had practically done a whole day.

In addition to this, Seth had always been with his mother when she had dropped off and collected his older sister from the same school, and this had provided him with the opportunity to familiarise himself with the school environment, particularly with the playground and the climbing equipment. It had also provided Seth's mother with the opportunity to meet his upcoming teacher and to talk with her informally about Seth's disability and, at the same time, she would ask this teacher if Seth could familiarise himself with the classroom. Finally, Seth's judo club met twice a week in the school hall and, in the process of practising judo, would use the same toilets that Seth would eventually use once he transitioned, thus familiarising him with another school facility before he started.

Interviews with Seth's mother, teacher, and teacher aide revealed a strong sense of his family and school working together in a collaborative team effort to better meet his needs, and this can be seen in Chapter Four on the interactional strategies, on the relationships, and on the transition to school (sections 4.1, 4.2, and 4.3). For example, the teacher reported that she felt well supported by the RTV, the teacher aide, and by Seth's parents. She commented that Seth's mother had been a fantastic help and support to her, and she could ask her even the silliest little things, and his mother would help her to understand and let her know what she needed to do. Another example can be seen in the complementary interactional strategies employed in the classroom situation by both his mother and his teacher. That is, when Seth and his mother walked into the classroom at the beginning of

the school day, Seth tended to look around uncertainly for his teacher, so her strategy was to call out to him “Hi Seth” rather than to wait for him to greet her, as she would do with the other children in the class. This would assist Seth to orientate towards her. Similarly, when his mother arrived to collect him at the end of the school day, his teacher would say “Seth, there’s Mum” and his mother would call out “Hi Seth”, which would again guide him off in her direction. Finally, Seth’s mother described how accepting and accommodating the school had been in attempting to meet his needs at school.

In sum, it seems clear that the nature of interactions between Seth’s family and school have contributed to good relationships between Seth and his teacher, and to positive relationships between his parents and school personnel. The nature of these interactions has also contributed to good preparation for his transition to school, and to very satisfactory experiences following the transition. Good communication between Seth’s parents and school personnel has contributed to the family and school working together in cooperation and collaboration, and this has been to Seth’s benefit. In addition, it would appear that the nature of Seth’s own interactions with his peers has contributed to his positive peer relationships. It also seems evident that Seth possesses a range of characteristics that have endeared him to his teacher, teacher aide and peers, and have enabled them to respond to and engage with him in positive ways.

5.2 Hollie

Hollie is a Caucasian female aged five years three months. She is one of identical twins with a baby sister. She lives in an intact nuclear family with both parents working as semi-professionals, and they live in an urban area. Hollie has been at school one and a half terms, attends an integrated Catholic school, and has a teacher aide. She is fully mainstreamed but does not yet attend a full week because of tiredness.

Hollie’s special needs are cerebral palsy with right-side spastic hemiplegia, which causes paralysis in her right arm and leg, meaning she wears a brace and special shoe and walks with a noticeable limp. She also has right side heminopia, meaning she only has vision in the left side of each eye. The physical disability causes some tiredness and she often still needs an afternoon nap, hence limiting her current hours of attendance at school. Hollie’s

mother, teacher, and teacher aide reported (in their interviews) that her physical disability was more of a difficulty for Hollie than her vision impairment.

In their interviews, Hollie's teacher and teacher aide described this child as very positive, confident, determined, independent, likeable, well-balanced, and well-mannered, with a great sense of humour. Her teacher found her to be quite opinionated, and used expressions such as "a real fun child" and "a real go girl". This teacher reported that she always got feedback from Hollie in the sense that, if she ever joked with the class, while the rest of the class would laugh in response, Hollie would immediately bounce another joke straight back at her in return. Her teacher believed that this child had a great personality and that "this will carry her through". In addition, this teacher described Hollie as a very smiley child with an expressive face, although she reported that she only ever read positive expressions in her face, never anger, frustration, or sadness.

Her teacher aide described Hollie as "a real character, quite a comic, a neat child, a hard case, and such a force". She believed that, at times, this child could be strong-willed, stubborn, and persistent. For example, when the class was outside in the playground for fitness, if they were engaged in an activity that was difficult for Hollie to participate in, she was determined to give everything a go. This aide would try to divert Hollie into something else, such as her stretching exercises for her paralysed arm. In this event, Hollie would complete what was required of her as quickly as possible, then rush back to join her classmates in whatever they were engaged in. This behaviour is reminiscent of Seth's behaviour with learning his Braille, and could indicate a child that just wanted to be the same as everyone else in the class.

Another example of Hollie's determination to be independent was in her toileting. Her mother reported that she had never toileted herself independently prior to starting school, and when she first transitioned, her teacher aide always took her to the bathroom. The school discussed fixing hand-rails to the wall to help Hollie up onto the toilet, but her mother very quickly brought in a little hippo step-stool and, within a week, Hollie was toileting herself independently. From this point on, she would not let anybody take her to the bathroom and was quite determined to do it on her own. It is suggested here that this is another illustration of Hollie's desire to fit in with her peers. Additionally, Hollie had

started school using a slope-board on her table for her handwriting, and this angled her work up towards her face. This had not been used for very long as Hollie had wanted to be the same as every other child in the class.

Hollie's teacher and aide described another of her positive qualities as her ability to interact well with adults, as has been demonstrated earlier in the example given of her readiness to joke with her teacher. They reported that this child was not shy or hesitant about approaching and talking with adults. On Hollie's first day at school, her aide had taken her around all the other classrooms to introduce her to the other teachers and to the bigger children, so that they would watch out for her. Each of the teachers in turn had spoken to this child, and Hollie had been chatty and friendly with them in return. Hollie's teacher and aide speculated that her ability to interact effectively with adults may have been due to her frequent medical appointments over the years and, as a consequence, her frequent interactions with adults. This characteristic and her sense of humour had endeared Hollie to the other teachers who, apparently, often asked what she was like to teach.

In the three standardised measures, Hollie's scores were quite favourable. In the AQS, she achieved a security score of .35 ($p < .01$) and a dependency score of .00 ($p > .05$) (see Table 4.1), indicating a child who was secure in her relationship with her mother. In the STRS performed by her teacher, Hollie achieved low conflict and dependency scores, a moderate closeness score, and a high overall total scale score. In the STRS performed by her teacher aide, she achieved a low dependency score and moderate conflict and total scale scores. The only area of concern in these two relationships was a low closeness score in this teacher aide relationship. In her interview, this aide confirmed that their relationship was not particularly close. However, as all other aspects of these two relationships appeared to be quite positive, Hollie was placed in the cluster of relationships of low concern (see Table 4.3).

In the PSM, Hollie received a liking Z score of 1.27 (see Table 4.4) and, on this basis, was placed in the top cluster of peer relationships (see Table 4.5). In addition, she received five positive nominations, and this was the highest number for the entire sample, and was also much higher than any of the other children in her class. Although the children of this study were not grouped into peer sociometric categories, it is likely that Hollie would be

categorised as popular. A popular child is one who receives many positive nominations and few rejections (Townsend, 1992). Thus, the outcomes on the three relationship measures for this child were very positive.

Hollie's teacher and teacher aide concurred when discussing this child's peer relationships and peer interactions. Hollie had her own little group of close friends, and these were all girls. Apparently, Hollie had made friends with another little girl who tended to be quite shy and, as Hollie was herself such an outgoing child, this friendship was reported to be beneficial to both girls. Townsend (1992) notes that, by this age, children are using the word 'friend' and frequently select a same-sex friend. During the primary school years, best friends develop, and these friendships are more stable than in the preschool years, and tend to be reciprocal (Townsend).

As Hollie was now one of the oldest in the class, with several new entrants, she had frequently been called on to assist the new ones and to help them to learn the rules and routines, and Hollie had stepped up to the mark. These staff reported that the other children were happy to talk with Hollie and, at 'sharing news' time, Hollie was herself very confident about sharing her experiences with the other children. This child was also reported to be good at giving positive feedback to her classmates, and children who give a lot of positive responses are liable to receive a lot in return (Townsend, 1992). Hollie never became angry or aggressive with her classmates, never displayed frustration about her disability, and never became shy or withdrawn with the other children.

Prior to school, Hollie and her twin sister had attended a child care centre four days a week, and this was the same centre at which their mother worked. Six months before their fifth birthdays, the family had transferred the girls to a public kindergarten, which they as a family viewed as part of their school transition process. In order to choose a school which was suitable for their girls to attend, this mother visited several schools in their town with the twins, in the process of which she met with school personnel. Hollie's mother commented that she had found the chosen school to be very willing to accommodate Hollie's special needs and, because the staff had been so accepting, this is one reason why the family had chosen this particular school, even though it was over the other side of town from where this family lived.

Prior to the transition, this school provided Hollie's family with the opportunity for pre-entry visits as often as they needed. In addition, this family had participated in a special transition meeting at which all the stakeholders in Hollie's life had been present, including the RTV and the Early Intervention (EI) teacher. Hollie's mother commented that this EI teacher was still involved, in the sense that she would contact the family to enquire how Hollie's transition was progressing. Now, three months since the girls had transitioned, this mother expressed satisfaction with their choice of school, reporting that the whole school, including the bigger children, had proved to be very caring and nurturing towards Hollie. This may have been due to Hollie being taken around the school on her first day and introduced to the other teachers and children, something that her mother had been quite hesitant about when it had been suggested to her, although she now admitted that it had worked out all right in the end.

The teacher who participated in this research was one of two teachers job-sharing in Hollie's classroom. Prior to Hollie's school transition, this teacher had anticipated that this child might experience learning difficulties in the school environment. However, once Hollie had started, the teaching staff had been both pleasantly surprised and thrilled at her rate of academic progress in the New Entrant class. The only real difficulty they had encountered was with Hollie's handwriting. Because of the paralysis in her right hand, this child was learning to write with her left hand. However, Hollie was finding this process quite difficult, and teachers suspected that this may have been because, without the paralysis, Hollie might have been naturally a right-hander. At the time of this research, some of her older classmates had just been moved on to the next class, including Hollie's twin sister. When asked why Hollie had not also been moved on, this teacher replied that they did not believe that she was quite ready, partly because of her handwriting, and partly because she was still not attending school for full days.

When asked to consider the issue of interactional strategies, both Hollie's mother and teacher put forward several suggestions. Most notably, this mother and teacher both reported on the interchange between them at the beginning and end of the school day. That is, this mother and teacher would use their voices to guide Hollie off in the direction of the other party as she was dropped off at and collected from school, a practice that was very

similar to that used with Seth. This is another example of Bronfenbrenner's (1979) cooperative linkages between home and school, and an illustration of the inter-relationships of the mesosystem. In addition, as for Seth, this is another example of the family and school working together in collaboration to best meet this child's needs.

In sum, there appears to be several similarities between the case of Hollie and that of Seth. First, it would appear that Hollie possesses a range of characteristics that have contributed towards the formation of positive relationships at school with her teacher, her teacher aide, and her peers, and to her subsequent successful adjustment to school. Other research has shown that child characteristics can impact on children's adjustment to school (for example, see Al-Yagon, 2003; Cugmas, 1998). Also contributing to this successful adjustment has been the nature of interactions that has occurred between her family and school prior to, during, and immediately after the transition. Hollie's mother commented that she had found the school to be both supportive and accommodating. Thus, it appears that, like Seth's family, Hollie's family also experienced a high level of cooperation and collaboration with their chosen school.

5.3 Chelsea

Chelsea is a Caucasian girl aged five years three months, with an older sister who is seven years of age. She lives in an intact nuclear family with both parents working as professionals, and they live in an urban area. She has been attending her local State primary school for one term and is funded by the Ongoing and Reviewable Resourcing Scheme (ORRS). Thus, she has full-time teacher aide hours allocated to her, with two teacher aides fulfilling this position each on a part-time basis.

Chelsea's special needs are low vision; retinoblastoma was diagnosed as an infant, meaning that one eye has been removed altogether, and the remaining eye has only limited vision in it after tumours in that eye were treated with lasers. There is some suggestion that her remaining sight is also at risk and she may eventually need to learn Braille. She has suffered some ongoing effects from cancer, with chemotherapy, radiation, and a bone marrow transplant to cope with in her preschool years. Because of her condition, Chelsea's

family moved to the United States while she was just an infant, and lived there for three years.

It seems that Chelsea also possesses a range of characteristics that have endeared her to other people, not just to adults, but also to other children. In their interviews, her teacher and her two teacher aides described this child as sociable, resilient, adaptable, outgoing, extroverted, cheeky, and assertive. Most of their descriptions related to Chelsea's intelligence and her academic ability, describing her as very bright, smart, intelligent, learning quickly and picking things up easily. Like Hollie and Seth, this child was also described as confident and independent by the teaching staff. According to her mother, she had a sense of humour and was very good at interacting with adults. Again, like Hollie, this was put down to her frequent medical appointments over the years and her frequent interactions with adults as a result.

In addition, these staff reported that Chelsea had a great vocabulary and a huge general knowledge, and was quite self-assured at giving 'morning talks'. She had only been at school a short while when she got up in front of the whole class, describing her vision impairment and what had happened to her over the years. In doing this, she had apparently used some big words which, according to these staff, the other children had not understood, but Chelsea had used them correctly. Since then, she had frequently put up her hand to do 'morning talk', would often on these occasions bring in newspaper clippings about current affairs to share with the rest of the class, and was the only child in the class to do this. Additionally, when other children did morning talks, they would frequently choose Chelsea to ask them questions about their chosen topic afterwards.

In the three standardised measures, Chelsea scored quite positively. In the AQS, she achieved a security score of .43 ($p < .01$) and a dependency score of $-.19$ ($p > .05$) (see Table 4.1), indicating a child who was securely attached with her mother. In the PSM, Chelsea achieved a liking Z score of 0.88, that is, a liking rating that was very similar to the class mean (see Table 4.4). She also achieved four positive nominations as 'most liked' in the class and was one of the highest scoring in her class and in this entire sample of participants. She was placed in the second cluster of peer relationships, indicating a child with reasonably positive relationships with peers (see Table 4.5).

In the STRS performed by her teacher, she achieved a low conflict score, high closeness and dependency scores, and her total scale score was very high. In her relationship with her first teacher aide (referred to here as her first teacher aide as Chelsea spent more of her school day with this than with the second aide), she achieved low conflict and dependency scores, a moderate closeness score, and a moderately high total scale score. In her second teacher aide relationship, her closeness and dependency scores were high, with a low conflict score (as in her teacher relationship), and her total scale score was moderately high. Thus, this child was placed in the top cluster of teacher relationships, indicating positive relationships with these three staff (see Table 4.3). The only areas of concern in these three relationships were high dependency in her relationships with her teacher and her second teacher aide. Yet, her first aide, with whom this child spent more time, perceived her relationship with Chelsea as low in dependency. Arguably, it could be regarded as a source of some concern that there was such high dependency in these two relationships and, yet, it is also very understandable that a child with such poor vision should be so dependent on her teachers. Chelsea's AQS dependency score in her child-mother relationship (on -.19) is not helpful in that it suggests a child who is neither high nor low in dependency. On balance, however, these three sets of relationships for Chelsea could be regarded as very positive.

Because Chelsea had been so open about informing her classmates of her vision impairment, the other children were very aware of her special needs, and most were quite kind and caring towards her. Although this child had only been at school a comparatively short time, she had already built up around herself a small group of close friends, and these all tended to be girls. For a child with a severe vision impairment, coping with the daily routines of school life may have been quite difficult and stressful, and it is possible that Chelsea had developed these friendships early in her school life out of a sense of necessity. Having friends is important in one's ability to maintain a relatively low level of anxiety in coping with daily stress (Townsend, 1992).

In addition, her teacher reported that even some of the bigger, rougher boys in the class could be quite gentle with Chelsea. This child was never shy with the other children, and never became aggressive or hostile with her classmates. However, her teacher and aides

commented that Chelsea could be assertive with her classmates if she needed to be, and was quite prepared to “say her piece” or to “speak her mind” when necessary. For example, if she got hurt by one of the other children, she would soon let them know or, when coming to sit on the mat with the other children, she would say “Excuse me, I need to get closer”. The only concern that these staff had for Chelsea’s peer relationships was that, during lunchtimes, older Year Six girls were assigned to supervise this child in the playground. Chelsea’s teacher expressed a concern that this had the potential to isolate her and to impede her interactions with children of her own age during the lunch breaks.

A number of resources were being used to support Chelsea in the classroom. When she first started school, she would kneel on her chair to get her face closer to the print in order to be able to read better. So, she had been supplied with a slope-board, and this sat on her table and angled her books up towards her face. Teacher aides were marking the lines in her storywriting and handwriting books with thin black tape to indicate where she was to write, and she used felt pens instead of pencils. Her little reading books were taken away by her RTV in advance, and scanned and enlarged to make the font size easier for her to read. When the teacher was using large, blown-up books or poems with the class, she would lend them to Chelsea’s family in advance for them to go over with this child. A notebook was being used to pass messages between the family and school, particularly the teacher aides, and this tended to happen on a daily basis. A small chart had been made for Chelsea to hold in her hand while the teacher was teaching from the board, and this chart was a copy of what was on the board. In addition, the teacher reported that when she had modelled handwriting in front of the children on the whiteboard, Chelsea had initially sat at the front of the mat in order to be able to see better. However, after a time, it was determined that she was unable to see anyway, so from then on, she had sat wherever her friends were sitting.

Many of these resources and strategies were being used after problems had arisen, and were the result of problem-solving discussions between a number of people. Chelsea’s RTV visited her once a week and spent some time with her, and her mother, who worked part-time at the same school, would pop into the classroom every day to ask if there were any problems. Thus, these problem-solving discussions involved her RTV, her mother, her teacher, and either of the two teacher aides. Both the teacher and mother emphasised that

this had been very much a team effort, and these two interviewees concurred about the value and worth of this collaborative process. Chelsea's teacher reported that she had been new in this classroom when this child transitioned and, although she was a very experienced teacher, had little experience of this type of disability. As she had had many specialists visiting her classroom for Chelsea's sake in the beginning, and because of her lack of knowledge, she had asked for help in how to best meet this child's needs, and reported that everyone had been very helpful.

Like Seth and Hollie, Chelsea and her family were able to participate in two processes that paved the way for school. First, they took part in a special transition meeting which occurred some six to eight weeks prior to her fifth birthday, and which took place at her public kindergarten. Although neither her teacher nor her aides were present at this meeting (as they were, at this time, not yet employed at the school), this meeting was attended by the school's Assistant Principal (AP) in charge of special needs, the RTV, the kindergarten teachers, Chelsea, and her family. Later on, once the ORRS funding had been approved, this family was able to meet with the newly-appointed teacher and two teacher aides a couple of days before Chelsea entered school. At the special transition meeting, it was determined that this child would need more than the usual number of two pre-entry visits to the school, and this was approved by the AP. Chelsea's mother reported having four or five visits, where this child was orientated to the classroom, the bathroom, the playground, and the general layout of the school. These visits took place at different times of the school day, and so familiarised this child with the various rules and routines of the classroom. Again, as with Seth and Hollie, Chelsea's mother enthused about the benefits of these two processes.

In sum, several commonalities seem to be emerging from the case studies of Seth, Hollie, and Chelsea. First, for each of these children, the nature of interactions between the child's family and school has contributed to good relationships between the child and their teacher, and between the family and school personnel. The nature of interactions has also been important in that good communication between the various stakeholders in the child's life has paved the pathway of preparation for school. Third, good communication has also contributed to all these stakeholders working together in a collaborative team effort to meet the child's needs, and this has resulted in very satisfactory experiences following the

transition. Additionally, the nature of the child's own interactions with others has contributed to forming good relationships with their teacher, teacher aides, and with their peers. Finally, it would appear that each of these children possesses a range of characteristics that have allowed others to engage with them positively, and have contributed to their forming positive relationships with others in the school environment.

The results which underscore the importance of child characteristics are supported by other research. Hanson (1996a) suggests that it is likely that the characteristics of the child, such as the child's disability, may exert a powerful influence on the dynamics of parent-child interactions. Previous studies have indicated the salience of child characteristics for both children with special needs and typically-developing (TD) children. For example, child characteristics have been shown to impact on the quality of attachment security (Al-Yagon, 2003; Lyons-Ruth et al., 1993; Vaughn et al., 1992) and on their adjustment to school (Al-Yagon, 2003; Cugmas, 1998). Carlson and her colleagues (2009) found that the ease of transition to school for children with special needs was associated with child characteristics. These child characteristics were also found to impact on the attitudes of non-disabled children to accepting their special needs classmates (Siperstein & Bak, 1986) and on teachers' willingness to mainstream children with special needs in their regular classes (Soodak et al., 1998). In a sample of TD children, Cugmas (1998) showed that child characteristics impacted on attachment security with parents which, in turn, affected their adjustment to school.

The above sections describe the case studies of those children who were well adjusted to school. The next sections describe the case studies of those children whose school adjustment was less successful, especially in terms of the relationships these children formed with teachers, teacher aides, and with peers. Finally, a case study will be presented for Liam, whose case could be regarded as rather unusual in the sense that, although this child could be viewed as well adjusted to school in terms of his relationships, other factors contributed to a less successful situation.

5.4 Jacob

Jacob is a Caucasian male aged six years exactly. He is the younger of two children with an older sister living in an intact nuclear family. Jacob has an older father who is retired and who has grown-up children from a former relationship. His mother is a blue collar worker and they live in a small rural town. He attends an independent Christian school in another rural town some forty minutes' drive away from their home, and this has the full range of levels from early childhood to a tertiary college. He has no teacher aide. As Jacob's father is retired and his mother works, it was his father who participated in this research.

Jacob's special needs are low vision, and there are also some issues with behaviour problems. His vision condition is hypermetropia (also known as hyperopia). This is defined as far-sightedness, a condition in which light rays are focused behind the retina so that distant objects are seen more clearly than near ones. Thus, Jacob's near vision is much poorer than his distance vision, and has now been corrected with glasses with quite thick, strong lenses.

It appears that Jacob's vision condition was not picked up until he was around four years of age, and there seems to have been some lapse in time between the diagnosis and the fitting of corrective glasses. During this time, Jacob was shifted from attending a public kindergarten to the preschool of the Christian college where he is currently attending the primary school, and where his elder sister was also enrolled. His limited vision and, in particular, his lack of near-sightedness, the belated diagnosis of his sight condition, and the delayed fitting of corrective glasses all appear to have impacted on several aspects of Jacob's life and on his adjustment to school.

First, Jacob's father and teacher concurred when describing this boy as a very non-smiley child who always wore a blank, expressionless face. Both interviewees believed that he was unable to read either the facial expressions or the body language of others, and this appears to have affected his ability to display his own emotions through his facial expressions. In addition, Jacob's teacher described him as a rather distant, unaffectionate child. Although this child had been at school now for nearly a whole year, this current teacher had only been teaching him for half that time. She described her own manner with this child as warm

and affectionate, but felt frustrated that she never seemed to receive any feedback from Jacob in return, such as affection or a warm smile when she praised him. This teacher commented, on completing the STRS, that she had found it difficult to respond to the item 'I share a warm, affectionate relationship with this child', as the operative word here was 'share'. She described Jacob as a very non-responsive, self-contained child.

Compton and Niemeyer (1994) showed that children with sensory impairments may experience some difficulty in both receiving and expressing affection. Children with visual impairments (VI) may be able to recognise auditory cues, such as an affectionate tone of voice, but may be unable to observe affectionate facial expressions or gestures. Moreover, children with VI may not be able to observe others, children or adults, engage in affectionate behaviours, such as smiling or physical contact and, therefore, may not themselves understand how to appropriately exhibit these behaviours. In addition, Fraiberg (1977) showed that the caregivers of children with VI have difficulty reading their children's signals. Because child-caregiver affection is a precursor of child-child affection and interaction, it could be suggested that young children with sensory impairments are at greater risk of negative patterns of child-peer affection and interaction (Compton & Niemeyer, 1994). In Jacob's case, his lack of near-sightedness, plus the delay in the fitting of his glasses, may explain his inability to smile and to display his emotions through his facial expressions, and to receive and reciprocate affection. In addition, Nagel (2005) suggests that, because most social skills are learned through observations and visual modelling, children with VI are at risk of missing many of the non-verbal cues, such as facial expressions and body language, that feature in many of people's day-to-day interactions.

Second, Jacob's poor vision and the delay in time in the fitting of his glasses seem to have impacted on his ability to interact positively with his peers. The developmental history suggests that the acquiring of his glasses did not occur until some time after he started attending the preschool. The peers who attended preschool with Jacob had transitioned into the primary section of the same school with him, and were now his classmates in the Year One class. Consequently, those children who were now Jacob's peers had also been his peers when he had first started attending preschool, and when the negative patterns of

interaction had first begun. In addition, Jacob had always travelled by school bus to and from both preschool and school, and the others travelling in the same school bus included children ranging in age from preschoolers right up to Year 13 students. Jacob's current teacher carried out bus duty on this same bus, and had first learnt of his vision impairment through this bus duty.

Jacob's teacher described a pattern of interactions with peers that appears to have begun at preschool with Jacob, unable to see his classmates, approaching them and getting right up to their faces. Because he was invading their personal space, they would react by pushing him away, and Jacob would respond by pushing right back. This seems to have set up a negative cycle of interactions, where this child was now described as aggressive and hostile with other children. Jacob's father described him as "a very strong little individual" and, as he had older, grown-up half-brothers, who often engaged in "rough-house play" with him, this seems to have exacerbated the situation. In her interview, the teacher reported: ". . . that's fine, that's what boys do. But Jacob, I think, then struggles to engage in play that's appropriate physically to the same level as the other children of this age, so that could also be another factor". The rough-and-tumble of children's play, especially amongst boys, can quickly turn to aggression (Townsend, 1992). The teacher described several incidents where this child had bullied other children and, in addition, this teacher reported that, when she attempted to talk with Jacob about these incidents, his response had been to lie. Conversely, Jacob's father believed that, in discussing these incidents of bullying with his son, Jacob would be completely truthful.

On the other hand, Jacob's father created a picture, in his interview, of a boy who was himself the victim of bullying. This seems to have been related to Jacob acquiring his new glasses while still at preschool. This father described a number of incidents where the glasses had been snatched off Jacob and bent, scratched, or broken, and these incidents were occurring during the bus trips to and from school, and were happening about once a fortnight. This would mean that this child would be without his glasses for a couple of days on each occasion while they were being repaired, to the point where the family eventually felt it was necessary to approach the school about this matter. In summary, the events related by both the teacher and the parent suggest that, for Jacob, a certain developmental

history has occurred. Developmental history affects the interactions of individuals with others and, in turn, influences their relationships (Pianta, 1999).

Thus, a negative pattern of interactions with other children seems to have begun and become firmly established while Jacob was still just a preschooler, and this pattern appears to have been carried over to affect his peer relationships at school. In her interview, this teacher reported: “Because it’s not actually his fault that these things have happened, but there is a perpetuation that he has to be responsible for his part and the other children have to be responsible for perpetuating for their part”. Then further on in the interview: “It sets up a sort of itch, scratch, itch, scratch cycle”. Later: “. . . I don’t think he knows how to socially engage in how to sit alongside someone and start play or start a conversation. I don’t think he has the social interaction skills”. However, this teacher also acknowledged that some of what was happening may have been due to his vision impairment. “. . . but more often, it seems to be a misinterpretation of what the other child is doing, and he will react, thinking it’s an affront or an offence to him, and hit or hurt or pinch the other child. But it’s a misinterpretation. He’s misread or misunderstood the cues”.

When asked if Jacob ever became shy or withdrawn with his classmates, the teacher affirmed this, saying that he would, at times, oscillate between being shy and withdrawn, and being “bombastic, domineering, and over-bearing” with his peers. In addition, his classmates would refuse to either work with him or to play with him in the classroom situation. Jacob seemed to be reluctant to share his experiences with the rest of the class by engaging in ‘morning talks’, although his father reported that they, as a family, had frequently undertaken many out-of-school activities. When this teacher was asked if she had the same expectations of Jacob in terms of his behaviour as she did of the other children in her class, she affirmed this, but commented that, in truth, this child was non-compliant with the classroom rules.

In the Attachment Q-Sort, Jacob achieved a security score of .40 ($p < .01$) and a dependency score of $-.18$ ($p > .05$) (see Table 4.1). This meant that this child was securely attached in his child-father relationship. A meta-analysis by Van Ijzendoorn and his associate (Van Ijzendoorn & De Wolff, 1997) showed that 67% of all children (both boys and girls) were securely attached with fathers. The results from the other two measures, the

STRS and the PSM, tended to confirm the data from the interviews. In the STRS performed by his teacher, Jacob scored extremely high in conflict, and extremely low in closeness, dependency, and the total scale score. Thus, he was placed in the cluster of teacher relationships of high concern (see Table 4.3). In the PSM, this child achieved a liking Z score of -4.48 and no positive nominations (see Table 4.4) and, thus, was placed in the peer relationship cluster of children who were significantly below the class mean (see Table 4.5).

For Jacob, it seems that several factors may have contributed to his relationships with others at school. Pianta (1999) said that relationships embody features of the individuals involved, including developmental history, personality traits, and biologically pre-disposed characteristics such as temperament. As discussed earlier, Jacob seems to have experienced a developmental history that may have contributed to his relationships and difficulties. Additionally, he also possesses personality traits and a temperament that appear to have played a role in his relationships. However, it is also possible that those with whom he was interacting may have also possessed characteristics to contribute to this situation. Pianta (1999) goes on to say that relationships also include feedback processes, the purpose of which is to exchange information between the individuals, whether this be behavioural interactions or language and communication. Again, in Jacob's case, it is possible to see evidence of these feedback processes occurring, in that there was a negative cycle of both communication and actions between Jacob and his classmates.

The research of Ladd and his colleagues is also relevant to Jacob's case. Ladd and Mars (1986) showed that young children's perceptions of the interactional styles of their peers, especially their perceptions of aggressive or prosocial behaviour by peers, were related to their liking preferences and their friendship choices in the classroom. Ladd and Price (1987) examined children's prosocial and antisocial behaviour towards peers at preschool prior to the start of school, and then children's emerging peer relations after they entered school. Results showed that children's interactional styles with peers predicted their rejection or acceptance by peers during the first year at school. Using more negative peer contacts and more antisocial behaviour predicted peer rejection at school. Ladd, Price, and Hart (1988, 1990) found that, in a new school environment, children's success in

establishing new peer relationships is partly determined by the social skills they exhibit in their encounters with peers as preschoolers. It is asserted here that these phenomena are more likely to occur when a child enters the first year classroom with the same peers he or she knew at preschool, as in Jacob's case. Additionally, Ladd and Price showed that children's behavioural styles at preschool also predicted teachers' perceptions of classroom maladjustment, with those who were aggressive at preschool being perceived by school teachers as disruptive in the classroom. Other research has shown that child-teacher relationships play important roles in developing social skills with peers, both at preschool (see Howes, Matheson, et al., 1994) and at primary school (see Elicker et al., 1992).

In terms of interactional strategies, Jacob's father commented that they, as a family, did very little with this child that was different to what they did with his older sister. This father reported: ". . . we don't make allowances. Even after we found out about his sight, we didn't make allowances. We didn't want him to think he was any different". However, it would appear that, according to Jacob's teacher, his older sister was also visually impaired, although this fact was never imparted by the family at any time, but this would make a difference when the father was being asked to compare their strategies with those used with another child in the same family. In terms of special strategies used by Jacob himself for interacting with his parents, again, this father believed that his son was doing nothing different. When away from home in a new or unfamiliar place, this child made no attempt to keep his father close by, a behaviour that is in keeping with his security of attachment. However, this father reported that, if Jacob should lose sight of him in one of these unfamiliar settings, he would panic and, instead of calling out to his father, would simply freeze on the spot. Additionally, Jacob's teacher also appeared to be doing little in the way of special strategies to interact with this child, although she did report that she would seat Jacob at the front of the mat and, if she had something to show the class, would lower the object down to his level so that he could see better.

In Jacob's transition to school, some of the processes that occurred for some of the other children of this sample, including Seth, Hollie, and Chelsea, were absent for this child. For example, the type of special transition meeting that occurred for other children, where several professionals were present and whereby the target child's requirements for the

transition process were discussed, did not occur for Jacob and his family. When his vision impairment was first diagnosed while he was still at preschool, Jacob's family had an interview with the school's teacher responsible for special needs. As it was approaching time for him to start school, this teacher discussed his vision impairment with the New Entrant teacher (which was not his current teacher). Additionally, this child was granted no more than the usual number of pre-entry visits to the primary school than what the other TD children making the transition were allowed, that is, about two. These visits were conducted by the preschool with no participation by the family. Because the preschool and the primary school were located on the same site, it could be argued that this provided a seamless transition to school for this child, and afforded the continuity and liaison between early childhood centre and school that was lacking for other children in this sample. However, it could equally be argued that the absence of such processes as transition meetings and pre-entry visits that involved the family has denied this family several opportunities to have their input, thus contributing to a lack of communication and collaboration between school and family.

Moreover, the high level of contact and interaction between family and school since the transition that has emerged for some of the other children of this sample, including Seth, Hollie, and Chelsea, seems to have been absent for Jacob. When his father was asked how much contact or interaction they as a family had with the school to meet this child's needs, his response was: "The school encourages it far more than we actually participate". He then went on to say that they preferred to "stand back and let the school get on with it", and that, rather than interacting with the school, they preferred to "go the extra mile and put in extra effort at home with the homework". This situation was confirmed by Jacob's teacher. She commented that she had tried to encourage this family to interact with the school as much as possible to discuss any problems or issues, but they had not really taken up the offer. It is possible that the lack of interaction between the family and school was due to the long travelling distance between their home and the school, that is, both were located in rural towns some 40 minutes' drive apart. However, this situation seems to have contributed to the low level of collaboration and communication between family and school.

In sum, there appears to have been many factors that were present (or, indeed, processes that were absent) that have contributed to Jacob's adjustment to school. First, in contrast to Seth, Hollie, and Chelsea, this child seems to possess a range of characteristics that have tended to interfere with his ongoing interactions with both his teacher and with his peers. In turn, his interactional style has influenced his relationships with teacher and peers. Second, two factors have contributed to a dearth of good communication and collaboration between Jacob's family and his school. The absence of such prior-to-school processes as a special transition meeting and school visits that involved Jacob's parents have denied his family opportunities to have some input into the transition process. In addition, since the transition, reluctance by the family to maintain continued contact and interaction with the school also seems to have contributed to the low level of communication and collaboration between family and school. Third, there appears to have been limited use of special interactional strategies either by or with Jacob. Thus, as indicated by earlier case studies, it is asserted here that it is the nature of interactions between Jacob and his teacher, between this child and his peers, and between his family and his school that has determined the quality of his adjustment to school.

5.5 Callum

Callum is a New Zealand-born Asian male aged six years two months. He is the younger of two boys, lives in an intact nuclear family in an urban area, and only his father works as a professional. Callum did not start school until the age of five and a half years as he was not toilet-trained at the time of his fifth birthday. He has now been at school two and a half terms and attends his local State full primary school. He is fully mainstreamed but only attends school five mornings a week while the full-time teacher aide is present. His number of hours of school attendance is gradually being increased.

Callum's special needs are Asperger's Syndrome/Autism Spectrum Disorder (ASD). His needs are moderate to high, although he has not been verified for funding from the Ongoing and Reviewable Resourcing Scheme (ORRS). Callum's family doctor has placed this child on a special diet for autistic children, and this is a gluten-free, dairy-free diet, and he is receiving regular injections of vitamin B12, and is taking regular dietary supplements. His language is delayed, and he speaks in single words most of the time, although he is reported

to occasionally speak in two or three word sentences. This child does not adapt easily to changes to his daily routines. He also has fixations and, currently, has a preoccupation with insects although, as his mother reported, this will be likely to change from time to time. The level of Callum's autism is such that he engages in stimming behaviours, that is, stereotypic and repetitive body movements. As mentioned earlier, this child's family withheld him from starting school for six months because he was not toilet-trained on his fifth birthday and, thus, he was about five and a half when he finally started school. His mother used this six months to toilet-train him.

Callum's teacher and teacher aide concurred when describing this child's behaviour. He could, at times, be loud, noisy, disruptive, non-compliant, and sometimes engaged in temper tantrums. Because of his difficulty in adapting to changes to his routines, starting school seems to have been a difficult experience for him, as everything was different and new. His teacher and aide reported that if he became upset, he would start screaming and, if he became excited, he would engage in stimming behaviours. In the early days after starting school, when he felt unable to cope with whatever was going on in the classroom, his response was to crawl under a table, lie there for some time, and suck his thumb. On these occasions, his teacher aide would have to leave him there for some time until he could gradually be coaxed to come out, bit by bit. When Callum's behaviour became too disruptive, his teacher would ask the aide to remove him from the classroom so that he could have his play time outside, because she believed that this child's behaviour was impacting negatively on the other children, who were finding it to be "distracting and unsettling". This teacher reported that, at the beginning of the new school year, when this child had first transitioned, she had had a relatively large class for a New Entrant class, and all her children were new. She commented that "all five-year-olds, not just those with special needs, deserve a good start at school". Thus, Callum's transition to school appears to have been a rather difficult one, and it would appear that the nature of his disability has contributed to this situation.

As mentioned earlier, Callum only attended school for half days, although this was gradually being increased and, at the time of this research, he was staying for the lunch break once a week to familiarise him with the lunchtime routine. This limited attendance

was due to the availability of funding for teacher aide support, and the teacher had suggested at the special transition meeting that she felt unable to have Callum in her class without the support of a teacher aide. A quote from this teacher: “I actually don’t teach him at all. I’m happy to have him in my classroom because I’ve got a teacher aide, and he is only at school when the teacher aide is present”. As discussed in Chapter Four, Callum’s programme was individualised to him, although it basically followed what the rest of the class was doing, and was delivered solely by his teacher aide, with little input from his teacher. This situation was unique in this sample of children. Additional to individualising Callum’s programme to him was the fact that his programme had to meet the goals of his Individual Educational Plan (IEP).

The study of Bourke and her colleagues (2002) found that, when teacher aides were used to support children with special needs in regular classes, they were most often used to adapt the curriculum, to implement the IEPs, and to provide behavioural intervention, and this is in line with Callum’s case. It could be argued that, for Callum, the teacher aide’s presence in the classroom working in such a close, one-on-one way with this child, and solely delivering his programme, may have hindered the formation of a close relationship with his teacher. On the other hand, the presence of the teacher aide could be seen as a positive factor in that this teacher aide may have acted as a protective buffer for this child, in the sense that, without this teacher aide, it is possible that Callum may have really struggled in the regular classroom context.

When the teacher was asked if she had had to make any modifications to her classroom environment to meet Callum’s needs, she reported that she had made a special corner available for this child and his teacher aide to work in, where they had their own desks, and where the aide was able to store her own materials and equipment. In addition, this teacher commented that, for mat-time, she had had to draw an ‘X’ on the mat to indicate to Callum where he was to sit, and this had to be in a place where there was nothing to distract him. Thus, this teacher had made quite major modifications to both her programme and to her classroom environment to cater for Callum’s special needs. As discussed in Chapter Four, this is an example of the teacher putting differentiation into practice.

As with Jacob, Callum's teacher, teacher aide, and parent described this boy as unsmiley and somewhat devoid of facial expressions. His teacher described him as both frustrating and challenging to teach. Both teacher and aide described him as being in "a little world of his own". When asked if she had the same expectations of Callum in terms of his behaviour as she did of the other children, this teacher affirmed that, in the long term she did but, in the short term, she had to accept behaviour from him that she would not accept from the others. This answer stands out as markedly different to the answers of other teachers in response to this question. The teacher aide described Callum as non-compliant, and also said that, at times, he would "push the boundaries and try it on".

In the AQS, Callum achieved a security score of .36 ($p < .01$) and a dependency score of -.30 ($p < .01$) (see Table 4.1), indicating a child who is both secure and independent in his relationship with his mother. In contrast, the STRS performed by both Callum's teacher and teacher aide indicated that these relationships were very high in conflict, extremely low in closeness, moderate in dependency, and the total scale score was also extremely low. On this basis, Callum was placed in the cluster of teacher relationships of high concern (see Table 4.3). In the PSM, this child achieved a liking Z score of -1.28 and no positive nominations as 'most liked' by his classmates (see Table 4.4). Thus, like Jacob, Callum was placed in the peer relationship cluster of children significantly below the class mean (see Table 4.5) although, it should be noted that Jacob's liking Z score was markedly lower than Callum's (see section 5.4). Notably, Callum did not himself participate in the PSM process due to the nature of his disability. In sum, the three standardised measures revealed that, although Callum's relationship with his mother was good, his relationships with teacher, teacher aide, and with peers were less positive.

Like Jacob, Callum did not have any close friends or a particular buddy at school. It was reported that this child currently had a fixation with another boy in his class, a child named David, with Callum liking to stand behind David in a line or sit beside him in the classroom. However, it was also reported that this relationship appeared to be completely unilateral. Townsend (1992) notes that the formation of friendships is likely to be affected by a person's ability to communicate effectively, and Callum's language delay meant that he lacked these effective communication skills. Townsend goes on to say that children who

are from a different ethnic background, or who have a disability, are less popular and accepted than their peers. Additionally, research in New Zealand indicates that about 10% of all children at preschool and primary school level have no friends, while a further 20% have only one friend (Townsend).

When asked if the other children were ever empathic with Callum, his teacher replied that they would watch out for him if they were asked to. However, the other children never worked with him, although this appears to be more because he was working separately from his classmates on his own programme. In addition, although Callum would often play alongside the other children in either the classroom or the playground, he did not engage in games or activities with them, and this was described more as a form of parallel play, rather than as a form of interactive or cooperative play. Callum never talked with or shared experiences with the other children and had never participated in morning talks.

Apparently, this child never became shy or withdrawn with his classmates, in fact, his teacher and aide reported that he seemed to be rather indifferent to them. Additionally, although Callum could be loud and disruptive in his behaviour at times, he never became aggressive or hostile with his peers.

When Callum's teacher was asked to describe her relationship with this child, she replied: "Teacher-pupil. We have a reasonable relationship. I mean, he's friendly towards me. We're friendly towards each other". This teacher went on to report that she had recently been absent for a couple of days, and she understood that Callum had missed her during her absence by sitting and sucking his thumb, instead of participating in what he should have been doing. However, she then speculated that this may have been more due to the fact that autistic children do not like changes to their routines, rather than to any attachment he may have felt for her. The teacher aide concurred with this, saying: "Would he miss me if I was away? No way would he miss me". When this aide was asked to describe her relationship with Callum, she believed that he was, at long last, beginning to bond with her, although she believed that this had taken a long time. Thus, the teacher's and aide's views of their relationships with this child appear to be more positive than was evidenced by the STRS.

As mentioned earlier, Callum and his mother participated in a special transition meeting prior to his transition to school. This took place at his kindergarten, and involved not only

this child and his mother, but also the kindergarten staff, the New Entrant teacher (who was in attendance in her role as Assistant Principal responsible for junior classes), and the EI teacher. The main result of this meeting was that the teacher felt she would need the support of a teacher aide in her classroom once Callum transitioned. However, one thing that did not come out of this meeting was any suggestion that this child might need more than the usual number of pre-entry visits to the school to familiarise him with the routines and environment of the classroom and school. He was only granted the usual number of two of these visits. Given the fact that the nature of this child's disability means that he has some difficulty adapting to new routines, and given the fact that he experienced some serious problems following his transition, it is suggested here that this may have been insufficient to meet this child's needs. A greater number of visits prior to the start of school would have provided increased opportunities to familiarise Callum with the school and classroom rules and routines, and may have facilitated a smoother transition process. Although Callum's mother participated in the special transition meeting, she appears not to have asked for extra school visits. In addition, professionals present at the transition meeting appear not to have initiated multiple school visits when, clearly, this would have been appropriate.

Furthermore, the level of communication between this child's family and school following his transition does not appear to have been high. As with Jacob's family, Callum's mother appears to have had a rather 'hands-off' attitude to her son's schooling. Asked how much contact or interaction she had with the school to meet Callum's needs, she replied "I just let the school get on with it". Although she was at school twice a day to drop off and collect her son, this mother reported that she did not stop to discuss Callum's needs with the teacher or aide. Similarly, Callum's teacher reported that she had little interaction with his family, and his aide commented that her only real contact with his mother was to request that something be brought into school. Thus, the strong sense of family and school working together in cooperation and collaboration that emerged for some of the other children seems to have been absent for this child.

In sum, it seems that Callum possesses a range of both characteristics and behaviours that appear to have interfered with the ability of others at school to interact with him in positive

ways, and have interfered with the development of appropriate relationships with his teacher, teacher aide, and with his peers. Although this child worked quite closely with his aide, there appears to have been little interaction between himself and his teacher, nor does there appear to have been much interaction between Callum and his classmates. Thus, the nature of this child's interactions at school seems to have affected his adjustment to this new environment. In addition, although Callum and his family participated in a special transition meeting, they were granted no more than the usual number of school visits and, therefore, this family appears to have had little input into the transition process. Also, as for Jacob, there seems to have been little in the way of sustained contact and interaction between Callum's family and school following the transition. Thus, the level of communication and collaboration between Callum's family and school appear to have been quite minimal, as for Jacob, contributing to a pattern of interactions that would seem to be less than optimal.

5.6 Riley

Riley is a Caucasian male aged five years three months. He is the youngest of three children in an intact blended family, the others being an older brother and a step-sister, both aged seven years. Both Riley's mother and step-father work in semi-professional capacities, and this is an urban family. Riley has been at school for one term, attends his local State primary school, and has no teacher aide. His special needs are a severe speech/language disorder, unspecified/undiagnosed behaviour problems with autistic-like characteristics, non-toilet trained, poor concentration and some hyperactivity.

In her interview, Riley's mother described a detailed developmental history dating right back to the birth of her son. She outlined a whole series of problems that they, as a family, had encountered as Riley was growing up, first, as an infant, and then as a toddler and preschooler, dating right up to his current age as a five-year-old. One of the most sustained and long-lasting behaviours exhibited by Riley had been his constant screaming right throughout the five years of his life, and this behaviour appears to have been used both as a form of communication and as a means of demanding attention. This child appeared to have no sense of danger and, as a result, had experienced at least two major accidents as a toddler or preschooler. This mother believed Riley could not discriminate right from wrong

and, although she described him as an extremely affectionate child, he was indiscriminate about whom he gave his affection to, sometimes displaying his affection inappropriately. Another continual difficulty that had extremely frustrated this mother over the years was Riley's lack of toilet-training and the abnormal frequency of his soiling of his pants. Riley had had a number of medical appointments over the years, including assessments by paediatricians, in an effort by his parents to find a diagnosis for his difficulties. Medical professionals described him as having "autistic-like tendencies", but were apparently unwilling to identify him as autistic because of an insufficiency of ASD characteristics, and so had settled on describing him as having a "severe speech disorder". This lack of a diagnosis was a source of some frustration for his family. His mother reported: "Special Ed reckons he's quite bright, but there just seems to be a page missing somewhere".

Like Jacob and Callum, Riley was described as a very unsmiley child by both teacher and parent, although his face was apparently not completely devoid of expression. His teacher commented that she would often read sadness or moroseness on his face, although she never read positive expressions such as happiness. She perceived him to be not a very happy child, although she would occasionally encounter him singing, humming or whistling to himself on the mat, and she believed that this was the closest he ever got to happiness. Conversely, Riley's mother perceived him as a very "happy-go-lucky, carefree child". Both his mother and his teacher described this boy as very cuddly and affectionate, although his teacher commented that his constant need to cuddle her had died off once he had realised that the other children did not behave like this. Unlike the ASD children, this child loved the reassurance of touch but, like some of the autistic children, his teacher reported him to be hyper-sensitive to loud noise and would become quite miserable if the noise levels in the classroom increased too greatly. Thus, Riley could be seen as a child of contrasts and contradictions.

In the AQS, Riley achieved a security score in his child-mother relationship of .30 ($p < .01$) and a dependency score of -.09 ($p > .05$) (see Table 4.1), indicating that he was secure with his mother. Interestingly, though, in her interview, Riley's mother described a child who had been quite clingy as an infant and toddler, not allowing her to put him down for even the shortest time, and "wrapping himself around my leg or hip and clinging there". In the

STRS performed by his teacher, this relationship was relatively high in conflict, extremely low in closeness, low also in dependency, and the total scale score was moderately low. On this basis, Riley was placed in the cluster of teacher relationships of medium concern (see Table 4.3). In her interview, this teacher described her relationship with this child as quite close. “On the whole, I would say we’re quite close, and he’s always pleased to see me On the whole, good friends”. However, it is interesting that, in the STRS, this teacher-child relationship achieved a closeness score on the 18th percentile, that is, critically low.

Birch and Ladd (1997) examined the three aspects of closeness, conflict, and dependency in the teacher-child relationships of 206 children in their first year of school, and found that these three aspects were differentially related to various aspects of the children’s adjustment to school. Closeness was positively correlated with children’s academic performance and teacher ratings of self-directedness and liking for school. In Riley’s case, the STRS indicated low closeness in his relationship with his teacher and, as will be discussed later, he was also reported to be making poor academic progress in his first year of school. Birch and Ladd go on to say that warmth and closeness in the relationship also encompasses open communication, and it is possible that this open communication was missing in Riley’s relationship with his teacher, due to his speech/language delays (and this also will be discussed later).

In the PSM, Riley achieved a liking Z score of -6.26, which was the lowest liking Z score of the entire sample (see Table 4.4). On this basis, he was placed in the lowest peer relationship cluster (see Table 4.5). He also achieved two positive nominations, although it should be noted that, in this class where 95% of the class participated in the PSM, some of Riley’s classmates achieved as many as eight positive nominations. Also worthy of note was the classmate of Riley who, in the liking rating scale (LRS) from which the liking Z scores were derived, gave every child in his class (other than Riley) a liking rating of ‘four’, while he only gave Riley a liking rating of ‘one’.

Riley’s peer relationships and peer interactions were discussed in both the interviews with his mother and his teacher. Both interviewees acknowledged that this child had no friends at school, although his teacher reported that he would occasionally play within the classroom context with a little girl named Amy. The teacher commented that it was difficult

to know how they communicated, as Amy had very little English, but it is possible that the lack of language of these two children gave them a common bond. Riley had only been at school for three months, and it could be argued that this was a comparatively short time for him to have formed friendships. Conversely, both Chelsea and Hollie had been at school for a similar period of time as Riley and, yet, both girls had formed several close friendships in that short period of time.

Riley's mother reported that this child never talked about his classmates at home, and showed no interest in having other children home to play. She also reported making no attempt to set up play opportunities for Riley with other children, unlike Seth's family. Ladd and Pettit (2002, cited in McCollum & Ostrosky, 2008) say that children gain important benefits from interactions with other children outside the family. Parents can initiate opportunities for peer interactions, such as inviting other children back to their home to play. McCollum and Ostrosky go on to say that children with disabilities may require greater assistance from family members to connect with peers and establish friendships outside the school context. Limited experience with peers almost certainly affects social competence (McCollum & Ostrosky, 2008).

Riley's teacher talked extensively about his interactions with his classmates, and related several incidents that she had observed in the classroom. She affirmed that, although this child never hit or hurt the other children, he could become quite "argumentative and confrontational" with them at times. This teacher reported: ". . . Riley tends to hone in on the one or two who are going to fight back if he does do anything that they don't like", and these other children were always boys, although this teacher went on to say that she put some of the blame for what happened on the other children's part. This child tended to be silly when the children were doing something in a large group, for example, they had a bean bag they would pass around and could only speak when they received this bean bag. When the bean bag was passed to Riley, his tendency was to throw it away, a habit which would annoy the other children. If another child had a particular toy that he wanted, his reaction was to simply snatch it away from them. Apart from the occasional interactions with Amy (as discussed earlier), the other children would refuse to play with Riley, and would actively exclude him from their games and activities.

Townsend (1992) speculates that it is possible that a failure to have friends in childhood denies children opportunities to learn social and inter-personal skills. For example, it is difficult to learn the skills of sharing or taking turns if a child is excluded from the games and activities that other children engage in. Alternatively, a failure to make friends at an early age may be a symptom of some existing psychological difficulty that other children have sensed, and Townsend goes on to suggest that children may sense these problems more easily than adults such as teachers. In Riley's case, his teacher reported that his classmates had never been made aware of his special needs. However, it is also possible that his peers had picked up on some differences. For example, Riley would frequently soil his pants at school, and this is likely to have alienated his classmates. Finally, it is important to recognise that children need friends, and children without friends are at risk (Townsend).

Although Riley's relationship with his teacher could not be described as overly positive (as with Seth, Hollie, and Chelsea), nor as excessively negative (as with Jacob and Callum), it could be described as reasonable. Conversely, his relationships with his peers were quite poor. Birch and Ladd (1996) ask what might happen when one set of a child's relationships at school are good but the others are discordant, for example, when there is a good relationship with the teacher, but poor relationships with one's peers. In this situation, a positive relationship with the teacher may act as a protective buffer against loneliness for those children having difficulties with peer relationships (Birch and Ladd).

Apparently, Riley could also become quite shy and withdrawn in the classroom. His teacher reported that he would occasionally adopt a sad, morose expression on his face, and when she asked him about this, he would be unable to tell her, but then he would withdraw from the rest of the class. Poor peer acceptance may foster negative attitudes to school and may result in students withdrawing from social and academic learning opportunities (Birch & Ladd, 1996). This teacher believed many of Riley's difficulties were associated with his lack of language and his inability to communicate. Townsend (1992) notes that the formation of friendships is affected by a person's ability to communicate effectively with another person. However, this author also notes that it is through friends that one develops one's language and communication skills.

Although Riley was reportedly now beginning to speak and was currently speaking in one- or two-word utterances, his lack of language was a source of some frustration for his teacher, who believed that Riley's lack of language was holding him back in learning to read. Both mother and teacher described this boy as a very visual learner (as were the ASD children of this sample), and the teacher believed that the use of 'Jolly Phonics' in her classroom, where alphabetical letters were associated with actions, had facilitated his learning of the letter sounds. Nevertheless, this teacher described Riley, several times during her interview, as a real challenge to teach, and he had certainly changed the dynamics of the classroom since his transition. She reported to be somewhat dissatisfied with the academic level Riley was currently at after being at school three months, and believed he was making little progress with learning to read and write. She put this down to Riley's poor level of concentration and the fact that he seemed to be struggling to understand the reason for learning to write. She reported that he would often sit at his table without doing any work, or get bored and wander away, and she frequently had to bring him back on task. Townsend (1992) notes that children without friends often have poor achievement at school and experience learning difficulties.

Another challenge facing this teacher was in trying to understand this child's speech. In addition, this teacher reported that Riley required more of her attention than any other child in her class, and she would have to sit him next to her when the children were on the mat. In her interview, this teacher described this child's second day at school, when he had taken off and left the school grounds during the morning interval, as if heading for home. He was eventually found by a passerby, who had returned him to school but, following this incident, both his family and his teacher had had to talk to him about school rules and boundaries.

This child's teacher and parent reported that there were no special resources to support Riley in the classroom context. Riley did not have the support of a teacher aide, and both teacher and mother expressed some concern and frustration about this situation. Riley's mother commented that his EI teacher had requested a teacher aide for Riley at the special transition meeting but, to date, this had not occurred. His teacher felt that this child would certainly benefit from teacher aide support, but believed that she needed this assistance to

help her with many of her students, rather than one solely dedicated to Riley. She also felt that, as this was now near the end of the school year, Riley might have to be referred to the Resource Teacher – Learning and Behaviour (RTL) in the following school year, because of his poor academic progress. In addition, although she was not currently modifying Riley's programme, she predicted that, sometime in the future, Riley might need a programme tailored to meet his individual needs.

Riley and his family participated in at least one special transition meeting some six to eight weeks prior to his school entry, and this provided his mother with the opportunity to acquaint the class teacher and school principal with Riley's special needs and difficulties. This family were also granted many pre-entry visits to the school, and these visits ranged in duration and took place at various times of the school day. However, since Riley's transition, there appears to have been little in the way of communication and interaction occurring between his family and school. Although this mother was at school twice a day to drop off and collect her children, she commented "I don't believe in hanging around. I just drop them off and get out as quickly as possible". When this mother was asked if she had any issues with the school in the way they were managing Riley and his special needs, she commented on the lack of teacher aide support, but also admitted she had not approached the school to discuss this matter. Other concerns that this mother elaborated on included, as it was now near the end of the school year, a concern about which teacher her child would have in the following school year. She confessed to being extremely anxious about this situation but, again, admitted that she had not discussed this concern with Riley's school. Moreover, Riley's teacher reported that she had tried to encourage this family to raise any issues they might have, but this had not really occurred. Thus, as with Jacob and Callum, the strong sense of communication and collaboration between family and school that emerged for many of the other children of this sample did not seem apparent for Riley. However, this lack of communication does not appear to be due to any fault on the school's part but, rather, would appear to be more attributable to a lack of initiation on the part of the family.

In sum, Riley is a child displaying a number of characteristics and behaviours which have been the source of some serious frustration for his family over the years. In addition, his

difficulties have provided his teacher with a number of challenges in teaching him. Although his relationship with his teacher was found to be reasonable, his peer relations were found to be quite poor, and a number of factors seem to have contributed to this situation, including his characteristics and also the quality of his peer interactions. Townsend (1992) suggests that children with special needs are less likely to be accepted by peers and have fewer friends and, yet, Seth, Hollie, and Chelsea were all found to be popular and to have several friends. Although Riley's family participated in a special transition meeting and multiple school visits, the level of communication and the quality of interactions between family and school since the transition have been less than optimal, thus leading to a dearth of collaboration. Once again it is possible to see how the nature of interactions has impacted on this child's adjustment to school.

These last sections have presented case studies of children who were less successfully adjusted to school, based on the quality of their teacher, teacher aide and peer relationships. Next comes a case study for Liam, whose school adjustment could be regarded as successful in the sense that he had formed good relationships with his teacher and with his peers. However, unlike the other children in these case studies, Liam was found to be significantly insecure and dependent in his attachment relationship with his mother, and this makes his situation rather unusual. Additionally, in contrast to the other well-adjusted children, some of the factors and processes that helped to contribute to smooth transitions for the other children were absent for this child and his family.

5.7 Liam

Liam is a Caucasian boy aged five years six months and is the elder of two boys. He lives in an intact nuclear family with only his father employed as a blue collar worker. Although this is an urban family, Liam does not attend his local school, rather, he attends a rural State primary school some ten minutes' drive away. He has been at school about two and a half terms and has no teacher aide. His special needs are Asperger's syndrome/ASD.

As with Riley, Liam's mother described a difficult developmental history dating right back to the birth of her son. This child had begun to display some of the autistic tendencies as early as eighteen months of age and, like Riley, had screamed continually and frequently as

an infant and toddler. Liam had received a diagnosis of Asperger's Syndrome at about the age of three years and three months. Now, he exhibits a number of autistic characteristics, including difficulty coping with changes to his routines, or adapting to new situations. Like Callum and Riley, this child would frequently throw temper tantrums, mostly when he felt unable to cope with what was going on, and his mother referred to these as "melt-downs". However, unlike Callum and Riley, his speech/language was reported to have developed normally and, now, as a five-year-old, his language was reported (by his teacher) to be at the same level as other children of his age.

Most notable amongst Liam's characteristics is a hyper-sensitivity on many of his senses, and this appears to impact in a major way on many aspects of his life. For example, his auditory sense is such that this child does not cope well with loud, sudden or unusual sounds, and if the noise level in a particular situation becomes too high, Liam's reaction is to start screaming. This has had a particular impact in the classroom situation where, if the noise levels become too loud, his teacher reported that his response was either to bellow really loudly, or to put his hands over his ears. In addition, Liam's tactile sense was such that he hated the feel of certain fabrics or textures. Over the years, this had meant that his mother had experienced serious difficulty getting him to try on or wear new shoes, particularly sandals and, apparently, to Liam, this was like walking on broken glass. Also, this child had an aversion to zips, buttons or buckles on his clothing, all of which had impacted on his willingness to wear a uniform when he started school, a problem which was only resolved when his mother had removed the buttons and washed the uniform in fabric softener. Although this hyper-sensitivity did not appear to affect his visual or olfactory senses, Liam apparently experienced some difficulties with the taste or texture of certain foods. This mother reported: "We'd go to a shopping mall, go window shopping, and of course, that's just the worst place for him. It's total, what they call sensory overload and they get this totally overloading of the senses through sound, sight, touch, feel, people, strangers. And he'd just go off, a major melt-down". As discussed in Chapter Four, this hyper-sensitivity could be likened to the over-excitabilities of the gifted (see Dabrowski, cited in Silverman, 1993). This similarity seems quite possible, given the fact that Liam was described as a very bright child at the high-functioning end of the autism spectrum.

Although Liam's mother described him as a very difficult child, his teacher described him in quite positive terms. She reported him to be "gorgeous and endearing" and as a very bright child who was already reading when he started school. Because he was a visual learner, she had used lots of diagrams, symbols and pictures around her classroom when he had first transitioned, although he had never had the sets of photo visuals that some of the other children of this sample had used. She commented that Liam had coped really well with the transition to school because her class had only three other children in it when he first started although, as her class had grown in size, he had found it increasingly difficult to cope with the greater noise levels. In terms of his current reading level, Liam was reported to be decoding well above the rest of the class, although he apparently had some difficulty with his comprehension of what he was reading. In terms of his maths, Liam was described as being about average for this class, although his teacher commented that, if the concepts were too abstract, or if it was something she was unable to demonstrate with materials, Liam would be struggling to understand. Both Liam's mother and teacher concurred that, at school, this child worked hard to control his behaviour and to fit in with his classmates for the duration of the school day, a behaviour which his mother referred to as going into "guest mode". However, his mother also commented that, as soon as he arrived home, "the guest mode disappears, he lets it all out, and the bad behaviour starts all over again".

In the AQS, Liam achieved a security score in his relationship with his mother of $-.25$ ($p < .05$) and a dependency score of $.38$ ($p < .01$) (see Table 4.1). This indicates a child who is both insecure and dependent with his mother, and he stands out as quite different from the rest of the children of this sample. In her interview, this mother was asked some attachment-related questions, and her responses tended to confirm Liam's insecurity of attachment. For example, when in an unfamiliar setting, Liam's tendency was to insist on holding his mother's hand and would cling closely to her side, when his younger brother, who was only two years of age, was quite content to walk independently. In addition, this mother described an incident where she had been away for a few days, leaving her children with her mother. Apparently, Liam had coped quite well during her absence but, when she was reunited with him after this absence, he had become extremely distraught and had been very difficult to console. This is classic insecurity of attachment behaviour (see Ainsworth

et al., 1978; Main & Solomon, 1990). This mother reported that, as an infant or toddler, she had been unable to leave him with other people. Now, as a five-year-old, when meeting strangers for the first time, Liam would be shy, stand-offish, reserved, or would hide behind his mother.

During her interview, Liam's mother confessed to having suffered from clinical depression for a number of years. She believed that her depression had begun gradually around the same time that Liam's autistic behaviour had first manifested, and reported that she had spiralled further and further into depression, although she had been unaware of her depression at the time. Van Ijzendoorn and his colleagues (Van Ijzendoorn et al., 1992) conducted a meta-analysis in which they examined the effects of both maternal problems, such as depression, and child problems, such as disability, on security of attachment. They found that, while child problems were likely to result in higher percentages of insecurity of attachment in the mother-child relationship, maternal problems resulted in even greater proportions of attachment insecurity, particularly type D (disorganised) attachment. These authors suggested that, if mothers suffer from mental illness, their children cannot compensate for the resulting lack of maternal responsiveness and are vulnerable to insecure forms of attachment. They concluded that the mother plays a more significant role than does the child in shaping the quality of the child-mother attachment relationship. However, it cannot be assumed that maternal problems cause insecurity of attachment, as it is possible that an anxious or insecure attachment may affect the mother's mental health or caregiving behaviour (Van Ijzendoorn et al., 1992). More vulnerable parents may find meeting the attachment needs of children with disabilities particularly stressful.

Howe (2006) believes that a complex picture emerges where it is not the child's disability per se that determines insecurity of attachment but, rather, an interaction between the children with special needs and the parents' state of mind with respect to attachment. Transactions between parent and child vulnerability factors affect sensitivity, communication, and security of attachment. This author (Howe) goes on to say that studies of attachment in autistic children suggest that, while these children are capable of exhibiting attachment behaviours, they are less capable of more advanced attachment

abilities that involve social interaction, social cognition, emotional reciprocity, and theory of mind (for example, Rogers et al., 1991).

Pianta (1999) believes that relationships are multi-faceted, complex systems involving the features of two individuals, feedback mechanisms, and interactive behaviours. In an adult-child relationship, the responsibility is on the adult for the overall quality of the relationship and its influence on the child's development (Pianta). In the case of Liam, the AQS was performed by his mother, that is, it is *her* perspective of her own relationship with her son, and it must be remembered that this mother admitted to suffering from clinical depression. However, attachment security is thought to be relationship-specific, and if a child displays insecurity of attachment with one parent, he or she is not likely to exhibit insecure attachment with the other parent (Main & Solomon, 1990; Van Ijzendoorn et al., 1999).

The STRS and the PSM produced quite positive results. The STRS performed by Liam's teacher showed low conflict, high closeness and dependency, and the total scale score was also high. On this basis, Liam was placed in the teacher relationship cluster of low concern (see Table 4.3). In the PSM, Liam achieved a liking Z score of 0.89 and two positive nominations as 'most liked' in his class (see Table 4.4). On this basis, he was placed in the middle cluster of peer relationships, that is, those similar to the class mean (see Table 4.5). Thus, these results indicate that this child had a good relationship with his teacher, and reasonably positive relationships with his classmates.

Although this study found no association between children's attachment security with parents and their relationships at school with teachers and with peers, other research (for example, Cohn, 1990; Elicker et al., 1992; Granot & Mayseless, 2001) found that children who were insecurely attached with parents had poorer relationships with peers in early and middle childhood. The work of Howes and her associates (Howes, Hamilton, et al., 1994; Howes, Matheson, et al., 1994) showed that the child-mother relationship influences the child-teacher relationship which, in turn, influences child-peer relationships in early childhood settings. These authors concluded that the child's relationship with his or her teacher is a stronger predictor of their competence with peers at school than is his or her relationship with their parents. Not all insecurely-attached children are maladjusted in the

early grades (Pianta, 1999). This certainly seems to be the case for Liam, and it is possible that this child had formed a compensatory attachment with his teacher.

Although Liam's teacher had never directly discussed his special needs with the other children, she reported that his classmates were very aware of his differences. This had arisen as a result of many incidents that had occurred in the classroom which this child had not coped well with, and this teacher related some of these incidents. On these occasions, this teacher might send Liam out of the classroom to get a drink and, in his absence, she would explain to the class: "Liam's ears make the noise seem louder than it really is" or "Liam got upset because he wasn't sure what was happening", and this would be followed by some discussion amongst the class. This teacher commented that, as a result, the other children were very empathic with him and, if an incident arose, would often say: "I'll look after Liam". This teacher also reported a habit of Liam's that his classmates found to be quite endearing. Apparently, when one of the other children had been absent for a few days, on their return, Liam would say: "Oh, Josh, we missed you yesterday when you were away", and the other child would smile in response. To a certain extent, this was Liam parroting what the teacher would say. However, Liam would initiate these comments on a spontaneous basis, and the teacher reported that "the other kids love this about Liam, as none of the other children would bother to say such a thing". These incidents indicate, first, a teacher with a very positive attitude towards this child and his special needs and, second, favourable interactions and relationships between Liam and his peers.

Prior to Liam's school transition, his family was not offered the opportunity of either a special transition meeting or extra school visits. His mother reported that her EI teacher had suggested that, as Liam's was an out-of-zone application to enrol at this school, they "should not make too much of a fuss about his special needs" as this might mean the school would refuse his application. Consequently, once Liam's application was accepted, his mother informed the school of his Asperger's Syndrome by way of his enrolment card. As a result of this information, Liam's teacher reported that she attempted to learn as much as possible about the condition before he transitioned, including attending a course on autism.

Liam and his family made only one pre-entry visit to the school and to the new classroom. Despite the lack of a special transition meeting, this mother reported that the level of

communication between them as a family and the school since the transition had been very satisfactory. At this child's transition, she had commented to his teacher: "If you have any problems or queries, please don't hesitate to ask. I'm an open book, twenty-four seven". At this point, the teacher had returned: "Likewise, I'm also an open book. If you ever have any problems, please come and discuss them with me". It was the job of Liam's father to drop him off at school in the mornings, and it was this father who accompanied this child on any class trips. At the other end of the school day, it was Liam's mother who collected him from school, and she reported that she would frequently stand and discuss her son's school day with his teacher for some time. Thus, although this family did not get the opportunity of a transition meeting and multiple school visits, there was some degree of the family and school working together in collaboration since his transition.

In sum, Liam's mother described him as a rather difficult child, and the AQS determined him to be insecurely attached in his mother-child attachment relationship. Conversely, his teacher described him in quite positive terms, and the standardised measures revealed him to have good relationships with his teacher and with his peers. In addition, there appears to be a degree of positivity towards this child in the attitudes and interactions occurring within the school environment. Although this child does not seem to possess the range of characteristics displayed by Seth, Hollie, or Chelsea, neither did he seem to exhibit either the characteristics or the behaviours of Jacob, Callum, or Riley. Although some of the beneficial transition factors and processes that occurred for some of the other children of this sample did not occur for this child and his family, nevertheless, there was a sense of family and school working together in cooperation and collaboration for this child. Thus, it is asserted here that, on the basis of his positive relationships at school with teacher and peers, Liam was well adjusted to school.

5.8 Summary and conclusion

In this chapter, a number of case studies have been presented and used to illustrate and exemplify the main themes of Chapter Four. The children chosen for the case studies were those who best illustrated these themes. They were also selected on the basis of whether they were well adjusted to school or not, and several factors contributed to this situation.

Seth, Hollie, and Chelsea were chosen for case studies to represent those children of this sample who were well adjusted to school. These children are viewed here as well adjusted on the basis of their positive relationships with their chief caregivers, their teachers and teacher aides, and with their peers. It appears that a major contributor to these good relationships has been the children's characteristics. These have influenced the nature of interactions and relationships between themselves, their parents, their teachers and teacher aides, and their peers. A case study was also presented for Liam and, although he exhibited insecurity of attachment with his mother, he experienced good relationships at school with his teacher and with his peers. On this basis, Liam is also viewed here as well adjusted to school.

Some of the themes that emerged most strongly in Chapter Four are illustrated by the case studies of these children. For all four children, there was a strong sense of the family and school working together in cooperation and collaboration to better meet the child's needs. Several factors and processes have contributed to this situation, including good communication and interaction before, during and following the transition. For Hollie, Chelsea, and Seth, the level of interaction and communication included the special transition meetings and extra school visits and, although Liam and his family were denied these opportunities, there appears to have been a high level of communication and collaboration occurring following the transition.

Jacob, Callum, and Riley were selected for case studies to represent those children whose adjustment to school was less successful. Jacob was found to have poor relationships with his teacher and his peers, Callum with his teacher, teacher aide, and his peers and, although Riley's teacher relationship was found to be reasonable, his peer relationships were extremely poor. A commonality that these boys appear to share is a range of characteristics or behaviours that interfered with their ongoing social interactions with others, particularly with those at school. These characteristics and behaviours have negatively impacted on the nature of interactions and relationships between themselves, their teachers and teacher aides, and their peers, even though each of these boys was found to be securely attached with their chief caregiver.

In contrast to Chelsea, Hollie, and Seth, there were several children in this sample for whom the level of communication and collaboration in the transition to school were less satisfactory, and this is exemplified by the case studies of Riley, Callum, and Jacob. Riley and his family participated in a special transition meeting and multiple school visits prior to his transition, but the level of communication and cooperation since the transition appear to have been quite minimal, although this appears to be through no fault of the school. The family of Callum also participated in a special transition meeting but were not given the opportunity of extra school visits, and the degree of interaction and collaboration since Callum's transition have, again, been quite low. For Jacob, the amount of collaboration and communication both before and after this child's transition have been quite poor although, again, this would not appear to be attributable to the school. It is asserted here that participation in these processes have been beneficial for the success of the transition to school for Seth, Hollie, Chelsea, and Liam, and the lack of involvement in these processes for Jacob, Callum, and Riley have been to the detriment of the school adjustment of these boys.

A possible explanation for the success of the children's school adjustment, or the lack thereof, could be the severity of their disabilities. That is, was the success of the children's adjustment related to the severity of their impairments? If one were to place these seven case study children on a continuum in terms of the severity of their impairments, it would be possible to see that Hollie and Riley might be placed at the mild end of this continuum, Jacob and Liam might fall somewhere in the middle, while Seth, Chelsea and Callum might be best placed at the severe end. If this continuum were to be compared with the nature of the children's school adjustment, it would be difficult to see a clear relationship between severity of disability and success of school adjustment. Some of the children whose impairments were at the more severe end of the continuum were actually well adjusted to school, for example, Chelsea and Seth, while others whose impairments were at the more minor end were less well adjusted, for example, Riley. Thus, it is possible to rule out severity of disability as an explanation for the success of school adjustment. However, this provides a positive and optimistic picture in terms of children with special needs starting school. That is, in an inclusive model of education, the results of this study provide

evidence that severity of disability should not impact negatively on the transition and adjustment to school of young atypical children.

This chapter presents case studies of seven of the children of this sample. The purpose of these case studies has been to draw together the strands of the last chapter, and to develop, expand on, and enrich the themes presented in Chapter Four. The next chapter, the Conclusion, presents a summary of the key findings, discusses the implications of this study for educational practice, and makes some recommendations for future research based on the results of this study. The chapter will end with some concluding statements.

CHAPTER SIX

CONCLUSION

This study investigated three inter-linked facets of the adjustment to school for young children with special needs. First, it examined the strategies that these children and their caregivers (parents and teachers) use when interacting with each other. Second, it assessed the relationship between children's attachment security with parents and their relationships with teachers, teacher aides, and with peers during their first year at school. Third, it investigated the processes and factors involved in the adjustment to school for this sample of young children with special needs. School adjustment is viewed here both in terms of the shorter term transition phase, and in terms of the relationships children form with teachers, teacher aides and peers as part of the longer term adjustment period. It is evident from the results of this study, as presented in Chapters Four and Five, that a number of themes seem to link those factors which influenced the transition and adjustment of the young children with special needs who participated in this study.

6.1 Summary of key findings

A common theme which runs through the results is the importance of the individual characteristics of the target children. These appear to have played a significant role in influencing both the patterns of the interactions and the nature of the relationships between the children, their parents, their teachers and teacher aides, and their peers (see Figure 6.1). In Chapter Four, it was the children's special needs that underscored many of the interviewees' responses, particularly the fears or concerns of the parents and teachers prior to the children's school entry, and the problems or difficulties encountered following the transition. However, this finding was put into context by considering the importance of differentiation in an inclusive/ecological model of education. That is, the use of differentiation practices by many of the classroom teachers in this study ameliorated many of the effects of the children's special needs (and differentiation will be discussed further below). As the function of educators in an inclusive model of education is to adapt, alter and improve the environment to meet the needs of individual students (Moore et al., 1999), the use of differentiation practices by many of the teachers in this current study was both appropriate and important for achieving this goal. In addition, in many cases, good levels of

communication and collaboration between parents, teachers and other professionals helped to resolve any difficulties brought about by the children's special needs following the child's transition.

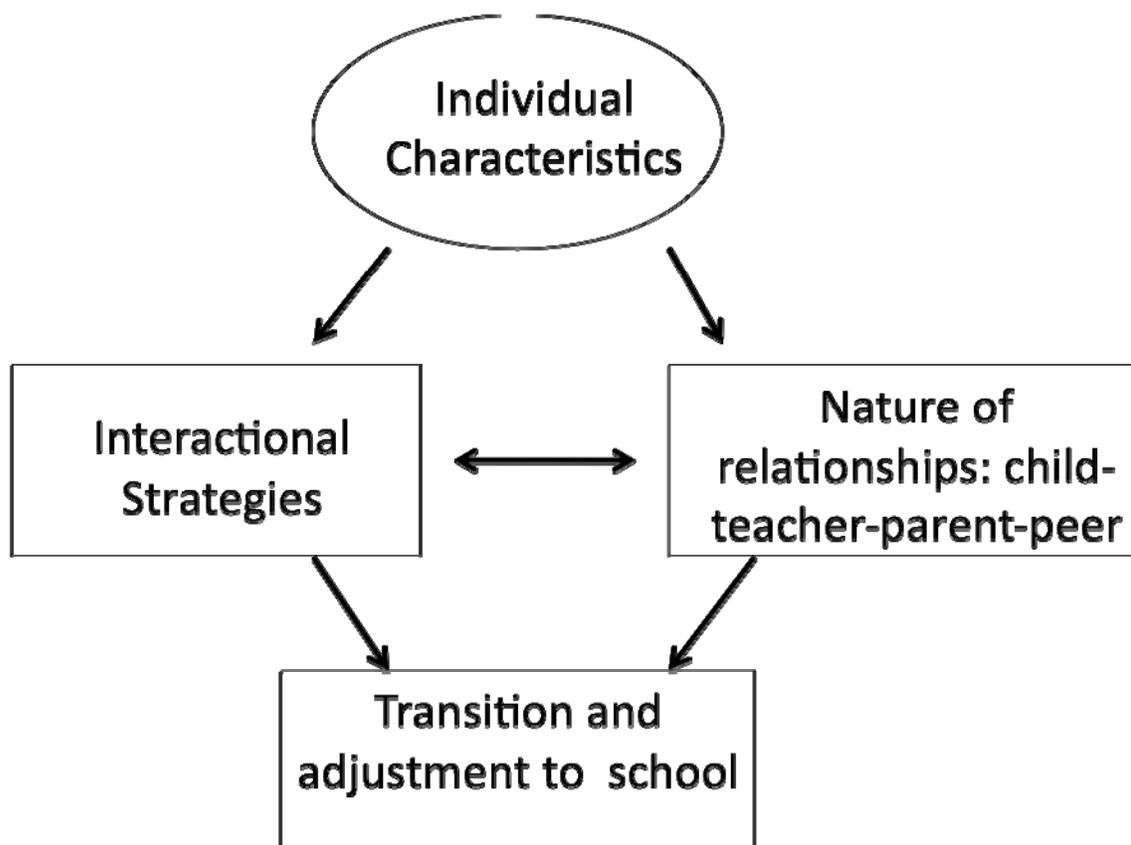


Figure 6.1. A model representing the processes involved in the adjustment to school for young children with special needs.

In Chapter Five, the salience of individual characteristics took another form. Here, it was child temperament, personality traits or behaviour that influenced the patterns of interactions between the participants, and the nature of relationships between these participants. An example of this can be seen in Seth, a child who was described by his teacher and teacher aide as happy, smiley, compliant, confident, and a pleasure to teach. These characteristics endeared him to others, and meant that others at school responded positively to him. This, in turn, resulted in Seth having good relationships with his teacher, teacher aide, and with his peers. Another example can be seen in Hollie, a child who was described by her teacher and teacher aide as positive, smiley, determined, and independent, with a great sense of humour. Again, these characteristics appear to have endeared Hollie to

others at school, and have meant that those at school engaged with her in positive ways. In turn, this has resulted in good relationships with her teacher, teacher aide and with her peers.

On the other hand, there were other children in this sample who possessed a range of characteristics or behaviours which tended to interfere with good, ongoing social interactions with their teachers, teacher aides and with their peers, although these children were securely attached with parents. An example can be seen in Jacob, who was described as unsmiley, non-compliant, distant and unaffectionate with his teacher, and aggressive and hostile with his peers. This seems to have interfered with the ability of others at school to engage with him in positive ways and this, in turn, has impacted on his relationships with his teacher and with his peers. Another example can be seen in Callum, who was described by his teacher and teacher aide as loud, noisy, disruptive, non-compliant, and often engaging in temper tantrums. Again, this has had the effect of interfering with the ability of others at school to respond to him positively. This, in turn, has influenced his relationships with his teacher, teacher aide and with his peers. Thus, although child characteristics may not have directly influenced school adjustment, they may have indirectly played a role in that they affected the nature of relationships and interactions between themselves and others which, in turn, impacted on their adjustment to school.

Another important theme which runs through the results is the reciprocal nature of the interactions that have occurred between the target children, their parents, their teachers, and their peers. In Chapter Four, it can be seen that the nature of the interactional strategies used by the participants contributed to influencing the formation of the relationships of these participants, and vice versa. Examples can be seen where some children and their caregivers used a rich and diverse range of interactional strategies, and this appears to have played a role in predicting positive relationships between the various participants. On the other hand, in the case of a few children and their caregivers, a more limited range of interactional strategies was being used, contributing to less than favourable relationships between the various parties. Hanson (1996a) suggested that children with special needs may have fewer or different cues for interacting with attachment figures. This may have been the case for a small minority of these children. However, on balance, it would appear

that, where interactional differences did occur, the children's caregivers were able to adapt to these differences, and where differences did occur, they did not indicate deviance or dysfunctional interactions (Hanson, 1996a).

These interactions have important implications for the formation of attachment relationships. Hanson (1996a) suggests that when the child has a disability, there is potential for disruption in the interactional processes in the formation of attachment security between the parent and the child. For example, good vision is a critical factor in the ability to smile, the ability to elicit a smile in others, and in the discrimination of familiar versus non-familiar people. This would imply that, if a child has a severe vision impairment, the development of attachment security and of interactions may be at risk for disruption or delay. However, the results of this study indicate that, while some of the visually-impaired children of this sample were insecurely attached, namely, Sophie and Flynn, others were quite securely attached, namely, Seth, Sasha, Marcus, Jacob, and Chelsea. Thus, it would appear that, although good vision clearly contributes to the formation of attachment security, the results of this study would suggest that it is not a critical component.

In turn, the nature of the interactional strategies and the nature of relationships have influenced the child's transition and adjustment to school (see Figure 6.1). As part of the shorter term school transition phase, several factors and processes were examined, and some were found to be more significant than others. For example, in the period preceding the child's entry to school, the amount of interaction and the quality of communication between family and school contributed to the level of preparation for school. For example, organising transition meetings to which all the stakeholders were invited, including the child, the family, preschool staff, school staff, plus any other professionals involved in the child's life, proved to be an invaluable opportunity for everyone involved to have their input. In addition, when schools permitted the children and their families the opportunity of multiple pre-entry school visits, this not only helped to familiarise the child with the school and classroom environment and routines, it also gave parents and teachers further opportunities to meet and communicate. Although this study found little evidence of continuity and liaison between the preschools and the schools, some studies (for example,

Fowler et al., 1991; Wartmann, 2000) have also recommended good communication and information-sharing between these two types of setting, thus fostering strong liaison and continuity.

Furthermore, in the period following the child's school entry, several factors helped to facilitate a smooth and successful transition to school. For example, in those cases where good, ongoing interaction and communication occurred between parents and school staff, this had led to high levels of cooperation and collaboration between families and schools. In turn, this resulted in positive relationships between home and school. The reverse was also true. In those cases where there were low levels of interaction and collaboration occurring between families and school personnel, there were also less favourable relationships between the school and home. Thus, the nature of the interactions between the target children, their parents, and their schools could be seen as a reciprocal process, and appears to have been a contributing factor in the shorter term of the child's transition, and in the longer term of the adjustment to school.

Other factors following the child's school entry have played a significant role in determining a smooth school transition. For example, the use of differentiation practices has proved to be effective and valuable for some of the children of this sample. Differentiation is the process by which teaching methods, curriculum objectives, resources, assessment methods, and learning activities are planned to cater for the needs of individual students (George, 2003). The practice of differentiation is making the whole curriculum accessible to all individuals in ways which meet their learning needs, and differentiation is valuable for the mixed ability groupings of primary schools (George). Examples of differentiation being put into practice include the use of sets of visuals for the children with Autism Spectrum Disorder (ASD). Other examples are evidenced in Seth's teacher gathering his reading group around his closed circuit television (CCTV) in order that the whole group should read from the CCTV. In addition, many of the teachers of the children with low vision employed techniques to facilitate the children's learning, such as darkening the lines in the children's exercise books for them to write on or allowing them to use felt pens instead of pencils for their handwriting. These are all valuable examples of making the curriculum accessible in ways that meet the learning needs of all students (see George,

2003). They are also examples of teachers adapting the environment to meet the needs of individual students, which is the function of educators in an inclusive model of education (see Moore et al., 1999).

Figure 6.1 presents a model representing the processes involved in the adjustment to school for young children with special needs as occurred in this current study. This model reflects and highlights the ecological systems model of Bronfenbrenner (1979). In particular, it reflects the inter-relationships of the mesosystem between the microsystems of the home and school. Additionally, Figure 6.1 highlights Bronfenbrenner's model with the element of child characteristics. Bronfenbrenner (1979) said that children's biological and social characteristics, their habits and their temperament influence those around them, as well as being influenced by those around them. This is particularly evident in this current study.

To investigate the longer term phase of children's adjustment to school, their relationships with teachers, teacher aides and peers were assessed, and this study examined the association between these relationships at school and children's attachment security at home with parents. Similar research has hitherto been conducted with normal populations, but to date, no such research has been conducted in samples of children with special needs. In addition, there appears to be little, if any, research on attachment security in heterogeneous samples of children with special needs. Although this study found no association between these three sets of relationships, some of the children of this sample were determined to be well adjusted to school on the basis of positive relationships with teachers, teacher aides and peers. Other children were judged to be less well adjusted to school on the basis of these relationships.

Positivity in the child-teacher/teacher aide relationship and the child-peer relationship appears to have translated into positivity in relationships between the family and the school. Conversely, negativity in these relationships appears to have translated into negativity in the relationship between school and home. However, it is also possible that the effect was in the opposite direction. That is, positivity or negativity in the home-school relationship

may have affected relationships between the children and their teachers, or between the children and their peers.

In Chapter Five, the possibility of a relationship between severity of disability and success of school adjustment was discussed. However, as some of the more severely impaired children were well adjusted to school, such as Chelsea and Seth, while others were less so, such as Callum, it would be difficult to see any clear relationship between severity of disability and success of school adjustment. This provides an optimistic view for the future of inclusive education, in that the results of this study suggest that severity of impairment need not necessarily impact negatively on the success of school adjustment for young children with special needs.

6.2 Implications for practice

This study found practices and processes that worked well for families and schools in the transition to school for young children with special needs, although these practices and processes were not always being applied in a widespread, consistent fashion. Bourke and her colleagues (Bourke et al., 2002) commented that there is currently no national strategy for the transition to school of young children with special needs in New Zealand. This current study advocates for such a national, written policy for this transition which is so important in the lives of children, their families and their schools. Such a national transition policy should incorporate several factors and features (see below).

In the preparation for school, it is important for the planning to begin well in advance (see also Render et al., 1994). Assembling a collaborative team of personnel to plan and coordinate this transition is essential (see also Conn-Powers et al., 1990), and this team should incorporate not only staff from the sending early childhood centre and the receiving primary school, but also other professionals involved in the child's life. In this current study, this included any of the following (as appropriate): Early Intervention (EI) teachers, Resource Teachers – Vision (RTV), speech/language therapists (SLT), occupational therapists, and physiotherapists. Students with diverse learning needs frequently need support from professionals other than their teachers (Mentis et al., 2005). A collaborative consultation model can provide a framework for practitioners, and this is an interactive

process which enables groups of people with diverse expertise to generate creative solutions to mutually-defined problems (Mentis et al). In addition, family involvement in every step of the process is crucial (see also Chandler, 1993; W. L. Fox & Ross-Allen, 2001), and families should also participate in the decision-making. After all, it is the family who knows the child the best. In some cases, it could be one of the child's parents who assumes the role of key worker in the planning and preparation for the transition.

It is also evident from this study that it is vital to set up meetings, to which this whole team of personnel is invited, to plan and coordinate the transition. For those children of this study who participated in this process, only one of these special transition meetings occurred and, for some of the children, there were no meetings at all. Based on the results of this study, it is asserted here that these meetings are essential for all children with special needs making the transition. An essential component of these meetings is the presence of the child and their family, and this may be the first opportunity for the staff of the new school to meet the child. The main function of these meetings is to discuss the child's needs for the period before, during and following their entry to school.

Additionally, it is recommended that children and their families should be permitted multiple pre-entry visits to their new school, as part of the preparation process. It is recognised by some authors (for example, Wartmann, 2000) that children with special needs may require a longer period to become familiar with the classroom and school before they start. The purpose of these visits is for the child to become acquainted with the school and classroom environment, and with the classroom rules and routines. These visits should begin some six weeks or so in advance of the child's first day, should be of varying lengths of time and be gradually increased, and should take place at different times of the school day, including over breaks. Thus, by the time the child starts, he or she will have experienced virtually a whole day. It is asserted here that providing opportunities for children and their families to become familiar with school and classroom environments, rules and routines is essential for children with special needs, but is especially crucial for those with visual impairments and those with ASD, because of the nature of their disabilities. In this current study, in the case of Callum, a child with severe ASD and some difficulties coping with changes to his routines, he made only two of these pre-entry visits

and, as a consequence, experienced a long and difficult adjustment period. On the other hand, in the case of Seth, a child with a severe vision impairment, he was provided with multiple opportunities to familiarise himself with the school and classroom routines and environment, and these proved to be invaluable to his school transition. However, for schools to allow multiple pre-entry visits to take place, in the absence of national mandatory policies for this transition, this is entirely dependent on the cooperation of the schools.

In their evaluation of New Zealand's *Special Education 2000* (SE 2000) policy, Bourke and her associates (2002) found parental concern about the lack of liaison and continuity between early childhood centres and primary schools. In this current study, the only evidence of liaison between these two types of setting was in those cases where special transition meetings had occurred in the child's preschool which, therefore, involved the early childhood centre staff. Thus, one of the recommendations of this study is that there should be an increase in the consistency of communication, information-sharing, and cooperation between these educational settings (see also Kleinhammer-Tramil & Rosenkoetter, 1994; Newman, 1996). One way to achieve this would be by increasing the incidence of the transition meetings, and increasing the consistency of holding the meetings at the children's preschools, thus giving early childhood staff an opportunity to have their input. Another way to achieve this would be for New Entrant teachers to visit the child with special needs at their preschool prior to the child's entry to school and, in some cases, it may be necessary for teachers to make more than one of these visits. The purpose of such visits is to meet the child if they have not already done so, to observe them interacting with their peers, and to observe them operating within the preschool environment, particularly to observe how they function in large group situations and how they cope with rules and routines. In addition, this would provide further opportunities for communication and information-sharing between early childhood and school staff, thus increasing the continuity and liaison between these two types of setting.

In this current study, in the period following the children's entry to school, there was considerable evidence of New Entrant teachers using differentiation practices in their classrooms. As discussed earlier in this chapter, many teachers made adaptations to both

their curriculum and to the physical environment of their classrooms to cater for the individual needs of some of the children of this sample. An example of differentiation being put into practice was the use of sets of visuals for the children with ASD. However, such practices were not always being used consistently, and a recommendation of this study is that such differentiation practices should be applied more consistently, depending on the specific needs of individual learners. One way to achieve this would be through the process of Individual Educational Plans (IEP).

One of the key findings of this study was that the nature of interactions contributed to distinguishing those children who were well adjusted from those who were less well adjusted to school. That is, for some children, high levels of interaction and communication between families and school personnel before, during and after the child's school entry led to good, ongoing cooperation and collaboration which, in turn, resulted in positive relationships between the home and the school. However, for other children, this strong sense of families and schools working together in a cooperative, collaborative team effort to meet their child's needs was noticeably absent. Thus, an important goal would be to improve the consistency of communication, cooperation and collaboration between families and school personnel. This would require recognition that the home-school relationship is less than favourable, or that the levels of contact and interaction need to be improved. In this study, there were instances of parents describing their child's school as having a "closed door policy" while, in other cases, schools encouraged families to approach them with any problems, but these families infrequently took up this offer. For communication and collaboration to improve, it requires school staff to be open, approachable, and willing to discuss problems with parents, or it may even necessitate teachers making the first move in approaching the family. It may also mean encouraging parents to be proactive and forthcoming with school staff, and it may even require families to become strong advocates on their child's behalf. Thus, for levels of communication and collaboration to improve, this requires both families and school personnel each taking some responsibility for this to occur.

In sum, several suggestions have been made here to put the findings of this study into practice. These include drawing up a national, mandatory policy for the transition to school

for young children with special needs. It also includes careful planning and preparation for the transition, incorporating assembling a collaborative team of personnel, holding transition meetings to which all the stakeholders in the child's life are invited, and allowing multiple opportunities for the child and their family to visit their new school setting prior to starting. Other suggestions include improving the level of continuity and liaison between preschools and schools, including ensuring that preschool staff are invited to the transition meetings, the sharing of information about the child between the two settings, and asking New Entrant teachers to visit the child in their early childhood centres. Most significantly, this study makes a strong recommendation for good, ongoing levels of communication and collaboration, particularly between families and schools, but also between all the professionals involved in the child's life.

6.3 Future research directions

The key findings of this study suggest a number of possible directions for future research. One of the main focuses of this study, as part of the children's longer term adjustment to school, was to assess their relationships with teachers, teacher aides and peers, and to examine for associations between these relationships and their relationships at home with parents. In this study, no such associations were found which may be due to the small size of the sample. Small samples limit the power of statistical tests (Liebert & Liebert, 1995), and constrains the ability to obtain statistical significance. This suggests that conducting similar research with larger samples may possibly obtain such associations. Thus, future research could examine the association between the child-parent, the child-teacher, and the child-peer relationship in larger samples of children with special needs, as part of their adjustment to school.

The heterogeneous nature of the sample of this study is representative of what regular class teachers could expect to find in their classrooms in an inclusive era of education. In terms of gender, this sample was reasonably representative of the wider special needs population of New Zealand, in that 76.5% were males. Bourke and her colleagues (Bourke et al., 2002) reported that 69% of all students receiving assistance through the various SE 2000 initiatives were males. However, in terms of race/ethnicity, this sample was less representative, in that only one child (5.8%) was a New Zealand Maori. Bourke and her

associates reported that, through all the SE 2000 initiatives, Maori students are disproportionately represented. For example, 27% of students under Resource Teachers – Learning and Behaviour (RTLB) and 33% of students in the Severe Behaviour Initiative (SBI) are Maori, although only 20% of all learners in New Zealand schools are Maori. These factors constrain one’s ability to generalise the findings of this study to the wider special needs population of New Zealand. Thus, one recommendation for future research would be to conduct a similar study in a sample which is more widely representative of the population of learners with special needs of New Zealand.

One of the research topics addressed by this study was the strategies that young children and their caregivers use when interacting with each other. This issue was investigated solely by the interview process, that is, parents and teachers were interviewed about the strategies used either by or with the target children, and they were also asked to compare these strategies with those of the typically-developing (TD) children in the same family or class. However, at no stage were direct observations made of the parent-child or teacher-child dyadic interactions on the basis of these strategies. Observations of parent-child or teacher-child dyads in naturalistic settings such as the family home or school have the potential to validate the participants’ interview responses. Thus, a recommendation for future research would be to conduct direct observations of these teacher-child and parent-child dyadic interactions to examine for further evidence of these interactional strategies being put into practice. McCollum and Ostrosky (2008) discuss several studies which link mutual responsiveness and synchrony in parent-child interactions with higher levels of peer competence. Sensitivity and contingent responsiveness to a child’s cues are thought to be critical to establishing a synchrony, whereas directiveness and control are believed to disrupt synchrony (McCollum & Ostrosky). Thus, one of the focuses of such observations would be the mutual responsiveness and synchrony in these parent-child interactions to examine for linkages with the children’s competence with peers.

As mentioned above, in this current study, parent and teacher interviewees were asked to compare the interactional strategies used by or with the target children with those of TD children in the same family or class. In the future, observations of parent-child and teacher-child dyadic interactions could extend to include the TD siblings or peers of the target

children in order for the parents and teachers to make such comparisons between the two groups. For this to occur, each target child could be matched to a comparison TD child, and these matched comparisons would then comprise a control group.

In this current study, in order to examine the target children's relationships with their classmates, a peer sociometric measure was conducted. Additionally, parents, teachers and teacher aides were asked for their perceptions of these relationships. The results showed that the parents' perceptions of these relationships did not always match the peers' perceptions, as evidenced by the peer measure. In particular, in some cases, the parents' perceptions of their child's peer relationships were more favourable than was indicated by the results of the peer sociometric measure. As above, one way to confirm or disconfirm these perceptions would be to conduct direct observations of the target children interacting with their classmates, particularly in the context of the classroom or playground. Thus, one goal for future research would be to conduct such direct observations.

Dockett and Perry (1999, 2003a, 2005) have extensively discussed the importance and value of obtaining the perspectives of children on their own transition to school. These authors suggest a number of strategies for gaining children's views, including interviewing the children, and asking them to make drawings or take photographs. In this current study, obtaining the children's perspectives on their own transition was beyond the scope of this study. Because of the nature of their disabilities, it would have been very difficult for some of the target children to participate in some of the procedures suggested by these authors. However, for another group of the target children, it would have been quite possible for them to participate in procedures such as interviews. Therefore, a goal for future research on school transitions for young children with special needs would be to interview the target children to gain their experiences and perspectives on their own transition.

In sum, this section suggests a number of possible directions that future research could take on the topic of the adjustment to school for young children with special needs. For the quantitative part of such studies, where three sets of relationships are assessed, one suggestion would be to incorporate a larger sample of learners with special needs in an effort to achieve statistical significance. Another goal would be to select a sample which is more widely representative of the population of special needs learners of New Zealand. To

investigate the interactional strategies used either by or with children with special needs and their primary caregivers, direct observations are recommended, and these observations could include the TD siblings or peers of the target children in order to make comparisons. Another suggestion for future research is to conduct observations of the target children's interactions with their TD peers in naturalistic settings such as in the classroom or playground. Finally, future research on this topic should consider the worth of obtaining the target children's perspectives on their own transition to school.

6.4 Conclusion

This study examined several inter-related facets of the adjustment to school for a sample of young children with special needs. In the shorter term of the school transition phase, several factors and processes emerged as important in determining those children who were well adjusted from those who were less so, not the least being the levels of communication and collaboration between the families and the schools. In the longer term, adjustment was viewed in terms of the relationships children formed at school with teachers, teacher aides, and with peers. Although no association was found between these relationships and children's attachment security with parents at home, many children were deemed to be well adjusted on the basis of these relationships at school. The individual characteristics of the target children played a major role in influencing both the patterns of interactions and the nature of relationships between the children and the other participants. In turn, the nature of the relationships between the children and other participants influenced the nature of relationships between the families and their schools. Finally, the nature of both the interactions and the relationships then influenced both the children's transition and adjustment to school.

In terms of the contribution to knowledge, the originality of this study lies in the conceptual contribution to the field of attachment theory. This study is original in that it looks at attachment security with parents and how this is associated with relationships with teachers, teacher aides, and with peers for children with special needs. Although no such association was found, it is possible that this is due to the insufficient statistical power resulting from the small sample size. However, it is also possible that this is a true lack of association reflecting the differences between this sample of children with special needs and studies of

typically-developing children. Although no such association was found, this original study adds to and extends the existing body of knowledge.

In Chapter Four, Bowlby's (1973) concept of internal working models (in attachment theory) was discussed in relation to the results of this study. This is the notion that young children's early attachment experiences lead them to have expectations about relationships in subsequent situations. Some of the children of this current study, for example, Seth and Hollie, were not only found to be securely attached with mothers, but were also found to have close relationships with their teachers, teacher aides, and with their peers. This would tend to support Bowlby's concept of the inner working model, that is, for these children, secure attachments with parents predicted positive relationships with others in the school setting. On the other hand, Liam was found to be insecurely attached with his mother and, yet, his relationship with his teacher was found to be quite positive. Thus, this suggests that Bowlby's (1973) concept of the internal working model may be more flexible and less fixed than Bowlby believed, or that, for some children, other factors may have been at play.

To date, there appears to have been little research conducted on attachment relationships in heterogeneous samples of atypical children, and it would seem from the results of this study that it is eminently possible to carry out such research. In the past, it was more common to study attachment security in children of specific disability groupings, and this was more in line with the medical model. However, in the current era of inclusion, studying attachment security in heterogeneous samples is more appropriate, and may be the way forward for the future. The heterogeneous nature of this current sample is more in line with what regular class teachers could expect to encounter in their classes in an inclusive model of education, and is also in line with the mixed ability groupings encountered in most primary school classrooms (see George, 2003). Thus, it is asserted here that the results of this study provide increased support for the concept of inclusion.

One of the key findings of this study was that child characteristics played a major role in their influence on both the patterns of interactions and the nature of relationships that occurred between the various participants of this study. As discussed earlier, some children displayed a range of characteristics which endeared them to other people at school and enabled those people to engage with them in positive ways, while other children exhibited a

set of characteristics which interfered with the ability of others to respond to them positively. Here, 'characteristics' referred to temperament, disposition, or personality traits. It is important to note that all children in general, not just those with special needs, are characterised by a wide variety of personality traits although, in this current study, the children's characteristics or behaviours may have been exacerbated by the nature of their disabilities. However, it is asserted here that children with special needs may be more similar than they are different to typically-developing children, and this is an argument in support of the full inclusion of atypical children in regular classes.

In conclusion, this study focused on three inter-related facets of the transition and adjustment to school for young atypical children. First, it examined how the patterns of interactions of these children and their caregivers may have contributed to their attachment behaviour. Second, it assessed the attachment security of these children at home with parents and how this may have affected their relationships at school with their teachers, teacher aides and peers. Third, it focused on examining the factors and processes that occurred during their transition to school, and on how the patterns of interactions and relationships may have affected their transition and adjustment. In an inclusive era, it is important to investigate the factors and processes that promote the success of inclusion. The results of this study have widespread benefits for these children, their families and their schools, and make an important contribution to supporting and strengthening the inclusion movement.

APPENDICES



APPENDIX A: PARTICIPANT INFORMATION SHEET FOR PARENTS

Project Title: Attachment theory and the Adjustment to School for Young Children with Special Needs

Researcher's Name: Janice Schischka

To: The parent or caregiver of child with special needs

I am a student in the Faculty of Education at the University of Auckland and am undertaking research for my degree (Doctor of Philosophy). As a person with special needs (I myself have a visual impairment) with a long association in the field of education, I am interested in the adjustment to school for young children with special needs. One of the areas of concern that has been raised is the transition to school for young children with special needs. Another area of concern that has been identified in the research is how relationships with typically-developing peers and with teachers may help/hinder the successful adjustment to school for children with special needs and, in turn, their meaningful inclusion in regular classes. This comes at a time when inclusion is a commonly-accepted practice in New Zealand schools. My research intends to look at the processes involved and has the potential to benefit not only the children themselves, but also you as parents and their schools.

You have been selected as the parent/primary caregiver of a child with special needs who has just started or is about to start school, and I am writing to ask you to participate in my study. Your participation is entirely voluntary, and you are not obliged to participate if you don't wish to. Please

note that this letter is being sent to you on my behalf by the Vision Education Agency/Ministry of Education – Special Education. I have no knowledge of your name or contact details, nor any information about your child until you sign the enclosed consent form and return it to me.

In my study, I wish to interview you as the parent/primary caregiver of a child in their first year of primary school. The interview will include questions about your child's adjustment to school. If the information you provide is reported or published, this will be done in a way that does not identify you as its source. Also, your child will not be identified in any way. Second, you will be asked to sort a pile of cards with questions on them describing your child's current behaviour at home. Third, your child's class teacher will be asked to fill out a form about their relationship with your child. The teacher will also be interviewed about your child's adjustment to school. If there is a teacher aide present in your child's classroom who works with your child, he or she will also be interviewed and be asked to complete the relationship scale. Finally, I would like to carry out a task with all the children

in your child's class, including your child. In this task, every child in the class will be asked whom their friends are and whom they most like to play with. Your child will not be named or singled out in any way, in order to protect his or her anonymity amongst their classmates.

Your part in this research will be carried out in your home, and will involve me as researcher visiting you at home. It will involve two visits about two days apart. The interview will take approximately half an hour, and you will be asked to sort the relationship cards on two separate occasions. Each of these sortings will take between half and one hour. The other parts of the study will be carried out at school in the child's classroom, and will not involve you.

Your child's class teacher and teacher aide will be asked to give their consent to take part in this study, and the school principal will also be asked to give consent for the study to take place at this school. The parents of your child's classmates will also be asked to give their consent for their children to take part in the study. Your family's involvement will only proceed if you and each of these other parties give consent to be involved. Your family's participation in this study will not affect either your child's grades at school or their relationship with the school.

You are free to withdraw from this research project at any time without giving a reason. You are also entitled to withdraw any of your data at any time up until December 31, 2006. You may be provided with a brief summary of results of this study if you request this.

It will be necessary to tape our interview with an audio-recorder. Interview tapes will only be heard and transcribed by me as sole researcher, and will be stored for six years in a locked cabinet on the University of Auckland premises. After this time, all interview tapes will be destroyed by erasing.

All other hard copy data will also be stored in a locked cabinet at the University of Auckland, and these will be stored separately from all Consent Forms to protect participants' confidentiality. They will be stored for six years and after this time, they will be destroyed by shredding. Other data, including transcripts, will be stored electronically with a password known only to the researcher for six years and after this time, will be deleted.

If you have any questions about this project or what is required of your family, please feel free to contact me. If you are willing to take part in this project, please sign the attached consent form and return it to me.

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For ethical concerns, contact: The Chair, University of Auckland Human Participants Ethics Committee, Office of the Vice-Chancellor, Alfred Nathan House, 24 Princes St., Auckland.

**APPROVED BY THE UNIVERSITY OF AUCKLAND HUMAN PARTICIPANTS
ETHICS COMMITTEE ON 14/10/04 TO 14/10/07 FOR 3 YEARS. REFERENCE
NUMBER 2004/320**



APPENDIX B: CONSENT FORM FOR PARENTS

THIS CONSENT FORM WILL BE HELD FOR A PERIOD OF SIX YEARS

Project Title: Attachment theory and the Adjustment to School for Young Children with Special Needs

Researcher's Name: Janice Schischka

I have read the Participant Information Sheet, and have understood it. I am prepared to take part in this research project, have had the opportunity to ask questions, and have had my questions answered. I understand that I am free to withdraw from this project at any time, and that I am free to withdraw my data up until 31 December, 2006.

- I understand that my interview with the researcher will be audio-taped, and I agree to this
- I understand that my child will take part in the classroom part of this project, and I give my consent for this
- I understand that all hard copy data from this project will be stored in a locked cabinet on University premises for a period of six years, and after this time, will be destroyed. All electronic data will be stored with a password known only to the researcher for a period of six years, and after this time, will be deleted
- I understand that my decision to allow or not allow my child to participate in the study will not affect either their grades or our relationship with the school
- I understand that if I request a brief summary of the results, i will be given this

Name of Parent.....

Signature..... Date...../...../.....

My contact details, including my child's name, are on attached sheet.

APPROVED BY THE UNIVERSITY OF AUCKLAND HUMAN PARTICIPANTS ETHICS COMMITTEE ON 14/10/04 TO 14/10/07 FOR 3 YEARS. REFERENCE NUMBER 2004/320

Child's name

Address

.....

.....

Phone (.....).....Mobile

Email

(Please fill out the spaces where applicable).



APPENDIX C: PARTICIPANT INFORMATION SHEET FOR PRINCIPALS

Project Title: Attachment theory and the Adjustment to School for Young Children with Special Needs

Researcher's Name: Janice Schischka

To: The Principal and Board of Trustees

I am a student in the Faculty of Education at the University of Auckland and am undertaking research for my degree (Doctor of Philosophy). As a person with special needs (I myself have a visual impairment) with a long association in the field of education, I am interested in the adjustment to school for young children with special needs. One of the areas of concern that has been raised is the transition to school for young children with special needs. Another area of concern that has been identified in the research is how relationships with typically-developing peers and with teachers may help/hinder the successful adjustment to school for children with special needs and, in turn, their meaningful inclusion in regular classes. This comes at a time when inclusion is a commonly-accepted practice in New Zealand schools. My research intends to look at the processes involved and has the potential to benefit not only the children themselves, but also their parents and their schools.

Your school has been selected to take part in my study because you have(child's name) enrolled at your school, and I am writing to ask if I can carry out my study in your school. Your school's participation is entirely voluntary, and you are not obliged to participate if you don't wish to. The family of this child has already been approached and has given their consent for their child to be involved in this study.

Your school's part in my study will involve only (child's name)'s class. It will involve his or her class teacher, the teacher aide if there should be one present in that classroom, and all the children in that class. First, I would like to interview the teacher about the child's adjustment to school as a first-year child, and the teacher will also be asked to fill out a form assessing their relationship with this child from the teacher's perspective. The teacher aide will also be invited to take part in the same process. Both teacher and teacher aide will also be provided with Participant Information Sheets and Consent Forms for their permission to participate in my study. The confidentiality of the school and of all participants will be protected at all times, and if the study is reported or published, it will be done in a way that does not identify your school or the staff as its source. Secondly, I wish to administer a peer sociometric measure to the children of that class. In order to protect the identity of (child's name) amongst his or her classmates, this child will not be named or singled out in any way and, therefore, it will be necessary to administer this measure to



every child in the class, including (child's name) themselves. Here, the children will be asked on an individual basis whom their friends are, and whom they most like to play with. The parents of every child in the class will be provided with Participant Information sheets and Consent Forms so they can consent to their child's participation, and the teacher will be asked to send these information sheets and consent forms home to parents on my behalf.

The interview with the teacher will be conducted at school in a room suitable for this purpose, such as in their classroom. It will take approximately half an hour, and will be carried out at a time that is convenient for the teacher, such as at the end of the school day. The teacher will be asked to complete the relationship form at their own convenience, and will take approximately 10 minutes of their time. I wish to administer the peer sociometric measure during the school day, and to do this, I will be interviewing each child in the class individually. In order not to disrupt the class programme or routines, I wish to do this away from the classroom, such as in a vacant room nearby, and this will be done at a time to fit in with the class programme. This will involve every child in the class whose parents give their consent for their child to participate, and will take each child approximately five minutes to perform.

All participants are free to withdraw from this research project at any time without giving a reason. They are also entitled to withdraw any of their data at any time up until December 31, 2006. If the school consents to participate in this study, it may be provided with a brief summary of results, if you request this.

All hard copy data will be stored in a locked cabinet on University of Auckland premises, and these will be stored separately from all Consent Forms to protect participants' confidentiality. They will be stored for six years and after this time, they will be destroyed by shredding. Other data, including transcripts, will be stored electronically, with a password known only to the researcher, for six years, and after this time, will be deleted.

Any child not participating in this study will remain in the classroom and continue with their work while the peer sociometric measure is being administered. I would like your assurance that whether children participate in this study or choose not to participate, this will not affect their grades or their relationship with the school.

If you have any questions about this project or what is required of your school, please feel free to contact me. If your school is willing to take part in this project, I would like you to sign the enclosed Consent Form and return it to me in the envelope provided.



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APPROVED BY THE UNIVERSITY OF AUCKLAND HUMAN PARTICIPANTS ETHICS COMMITTEE ON 14/10/04 TO 14/10/07 FOR 3 YEARS. REFERENCE NUMBER 2004/320



APPENDIX D: CONSENT FORM FOR PRINCIPALS/BOARDS OF TRUSTEES

THIS CONSENT FORM WILL BE HELD FOR A PERIOD OF SIX YEARS

Project Title: Attachment theory and the Adjustment to School for Young Children with Special Needs

Researcher's Name: Janice Schischka

I have read the Participant Information Sheet, and have understood it. I am prepared to allow my school to take part in this research project, have had the opportunity to ask questions, and have had my questions answered. I give my consent for the researcher to have access to the teacher, teacher aide and to the pupils of this class. I understand that I am free to withdraw my school from this project at any time, and that I am free to withdraw my school's data up until 31 December, 2006.

- I give my assurance that a parent's decision to allow or not allow their child to participate in this study will not affect the children's grades or their relationship with the school
- I understand that if I request a brief summary of the results, i will be given this
- I understand that all hard copy data from this project will be stored in a locked cabinet on University premises for a period of six years, and after this time, will be destroyed. All electronic data will be stored with a password known only to the researcher for a period of six years, and after this time, will be deleted

Name of School.....

Name of Principal.....

Email.....

Phone ().....

Signature of Principal.....

Date...../...../.....

APPROVED BY THE UNIVERSITY OF AUCKLAND HUMAN PARTICIPANTS ETHICS COMMITTEE ON 14/10/04 TO 14/10/07 FOR 3 YEARS. REFERENCE NUMBER 2004/320



APPENDIX E: PARTICIPANT INFORMATION SHEET FOR TEACHERS

Project Title: Attachment theory and the Adjustment to School for Young Children with Special Needs

Researcher's Name: Janice Schischka

To: The class teacher

I am a student in the Faculty of Education at the University of Auckland and am undertaking research for my degree (Doctor of Philosophy). As a person with special needs (I myself have a visual impairment) with a long association in the field of education, I am interested in the adjustment to school for young children with special needs. One of the areas of concern that has been raised is the transition to school for young children with special needs. Another area of concern that has been identified in the research is how relationships with typically-developing peers and with teachers may help/hinder the successful adjustment to school for children with special needs and, in turn, their meaningful inclusion in regular classes. This comes at a time when inclusion is a commonly-accepted practice in New Zealand schools. My research intends to look at the processes involved and has the potential to benefit not only the children themselves, but also their parents and their schools.

You have been selected to take part in my study because you have (child's name) enrolled in your class, and I am writing to ask if I can carry out my study in your class. Your participation is entirely voluntary, and you are not obliged to participate if you don't wish to. The family of this child has already been approached and has given their consent for their child to be involved in this study.

Your part in my study involves you and all the children in your class. First, I would like to interview you as the class teacher of (child's name) about his or her adjustment to school as a first-year child. Also, I would like you to fill out a form which asks you to assess your relationship with this child from your own perspective. If there should be a teacher aide present in the classroom who works with this child, he or she will be asked to take part in the same process. Your confidentiality will be protected at all times, and if the study is reported or published, it will be done in a way that does not identify you as its source. Second, I wish to administer a peer sociometric measure to the children of your class. In order to protect the identity of (child's name) amongst his or her classmates, this child will not be named or singled out in any way and, therefore, it will be necessary to administer this measure to every child in the class, including (child's name) themselves. Here, the children will be asked on an individual basis whom their friends are, and whom they most like to play with. The parents of every child in the class will be provided with Participant



Information Sheets and Consent Forms so they can consent to their child's participation, and you will be asked to send out these information sheets and consent forms to parents on my behalf. No child in the class will be named or singled out by the researcher in any way, in order to protect his or her confidentiality.

Your interview will be conducted at school in a room suitable for this purpose, such as in your classroom. It will take approximately half an hour, and will be carried out at a time that is convenient for you, such as at the end of the school day. You will be asked to complete the relationship form at your own convenience, and will take approximately 10 minutes to perform. I wish to administer the peer sociometric measure during the school day, and to do this, I will be interviewing each child in the class individually. In order not to disrupt the class programme or routines, I wish to do this away from the classroom, such as in a vacant room nearby, and this will be done at a time to fit in with the class programme. This will involve every child in the class whose parents give their consent for their child to participate, and will take each child approximately five minutes to perform.

You are free to withdraw from this research project at any time without giving a reason. You are also entitled to withdraw any of your data at any time up until December 31, 2006. You may be provided with a brief summary of results of this study if you request this.

It will be necessary to tape our interview with an audio-recorder. Interview tapes will only be heard and transcribed by me as sole researcher, and will be stored for six years in a locked cabinet on the University of Auckland premises. After this time, all interview tapes will be destroyed by erasing.

All other hard copy data will also be stored in a locked cabinet at the University of Auckland, and these will be stored separately from all Consent Forms to protect participants' confidentiality. They will be stored for six years and after this time, they will be destroyed by shredding. Other data, including transcripts, will be stored electronically, with a password known only to the researcher, for six years, and after this time, will be deleted.

Any child not participating in this study will remain in the classroom and continue with their work while the peer sociometric measure is being administered. The principal has given his/her assurance that whether children participate in this study or choose not to participate, this will not affect their grades or their relationship with the school.

If you have any questions about this project or what is required of you, please feel free to contact me. If you are willing to take part in this project, I would like you to sign the enclosed Consent Form and return it to me in the envelope provided.

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For ethical concerns, contact: The Chair, University of Auckland Human Participants Ethics Committee, Office of the Vice-Chancellor, Alfred Nathan House, 24 Princes St., Auckland.

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APPENDIX F: CONSENT FORM FOR TEACHERS

THIS CONSENT FORM WILL BE HELD FOR A PERIOD OF SIX YEARS

Project Title: Attachment theory and the Adjustment to School for Young Children with Special Needs

Researcher's Name: Janice Schischka

I have read the Participant Information Sheet, and have understood it. I am prepared to take part in this research project, have had the opportunity to ask questions, and have had my questions answered. I understand that I am free to withdraw from this project at any time, and that I am free to withdraw my data up until 31 December, 2006.

- I understand that if I request a brief summary of the results, I will be given this, and that my school is also able to request a summary of results
- I understand that my interview with the researcher will be audio-taped, and I agree to this
- I understand that all hard copy data from this project will be stored in a locked cabinet on University premises for a period of six years, and after this time, will be destroyed. All electronic data will be stored with a password known only to the researcher for a period of six years, and after this time, will be deleted

Name of Teacher.....

Signature..... Date...../...../.....

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APPENDIX G: PARTICIPANT INFORMATION SHEET FOR TEACHER AIDES

Project Title: Attachment theory and the Adjustment to School for Young Children with Special Needs

Researcher's Name: Janice Schischka

To: The teacher aide

I am a student in the Faculty of Education at the University of Auckland and am undertaking research for my degree (Doctor of Philosophy). As a person with special needs (I myself have a visual impairment) with a long association in the field of education, I am interested in the adjustment to school for young children with special needs. One of the areas of concern that has been raised is the transition to school for young children with special needs. Another area of concern that has been identified in the research is how relationships with typically-developing peers and with teachers may help/hinder the successful adjustment to school for children with special needs and, in turn, their meaningful inclusion in regular classes. This comes at a time when inclusion is a commonly-accepted practice in New Zealand schools. My research intends to look at the processes involved and has the potential to benefit not only the children themselves, but also their parents and their schools.

You have been selected to take part in my study because you have been working with (child's name), and I am writing to invite you to participate in my study. Your participation is entirely voluntary, and you are not obliged to participate if you don't wish to. The family of this child has already been approached and has given their consent for their child to be involved in this study.

If you consent to participate in my study, I would like to interview you as the teacher aide of (child's name) about his or her adjustment to school as a first-year child. Also, I would like you to fill out a form which asks you to assess your relationship with this child from your own perspective. Your confidentiality will be protected at all times, and if the study is reported or published, it will be done in a way that does not identify you as its source. In order to protect the identity of (child's name) amongst his or her classmates, this child will not be named or singled out in any way.

Your interview will be conducted at school in a room suitable for this purpose, such as in your classroom. It will take approximately twenty minutes, and will be carried out at a time that is convenient for you, such as at the end of the school day. You will be asked to complete the relationship form at your own convenience, and will take approximately ten minutes to perform.

You are free to withdraw from this research project at any time without giving a reason. You are also entitled to withdraw any of your data at any time up until December 31, 2006. You may be provided with a brief summary of results of this study if you request this.

It will be necessary to tape our interview with an audio-recorder. Interview tapes will only be heard and transcribed by me as sole researcher, and will be stored for six years in a locked cabinet on the University of Auckland premises. After this time, all interview tapes will be destroyed by erasing.

All other hard copy data will also be stored in a locked cabinet at the University of Auckland, and these will be stored separately from all Consent Forms to protect participants' confidentiality. They will be stored for six years and after this time, they will be destroyed by shredding. Other data, including transcripts, will be stored electronically, with a password known only to the researcher, for six years, and after this time, will be deleted.

If you have any questions about this project or what is required of you, please feel free to contact me. If you are willing to take part in this project, I would like you to sign the enclosed Consent Form and return it to me in the envelope provided.

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APPENDIX H: CONSENT FORM FOR TEACHER AIDES

THIS CONSENT FORM WILL BE HELD FOR A PERIOD OF SIX YEARS

Project Title: Attachment theory and the Adjustment to School for Young Children with Special Needs

Researcher's Name: Janice Schischka

I have read the Participant Information Sheet, and have understood it. I am prepared to take part in this research project, have had the opportunity to ask questions, and have had my questions answered. I understand that I am free to withdraw from this project at any time, and that I am free to withdraw my data up until 31 December, 2006.

- I understand that if I request a brief summary of the results, I will be given this, and that my school is also able to request a summary of results
- I understand that my interview with the researcher will be audio-taped, and I agree to this
- I understand that all hard copy data from this project will be stored in a locked cabinet on University premises for a period of six years, and after this time, will be destroyed. All electronic data will be stored with a password known only to the researcher for a period of six years, and after this time, will be deleted

Name of Teacher Aide

Signature..... Date...../...../.....

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APPENDIX I: PARTICIPANT INFORMATION SHEET FOR PEERS

Project Title: Attachment theory and the Adjustment to School for Young Children
 Researcher's Name: Janice Schischka

To: The parent of a Year One child

I am a student in the Faculty of Education at the University of Auckland and am undertaking research for my degree (Doctor of Philosophy). I have a long association in the field of education. I am interested in the adjustment to school for young children and, in particular, in their socialisation patterns in the context of the first year classroom. I am writing to all the parents or caregivers of children in the class of . . . (teacher's name) to ask you to allow your child to participate in my study.

To do my research, I wish to talk to each child in this class individually about whom their friends are, and whom they most like to play with. This will be done at school during the school day. In order not to disrupt the class programme or routines, I will talk to each child away from the classroom in a vacant room nearby, such as another classroom. This will be done at a time to fit in with the teacher's programme, and it will take each child approximately five minutes to do this task. The child will then return to the classroom and to their work.

As this research will be conducted away from the classroom, any child who does not take part in this study will simply carry on with their work in the classroom during the course of the research. The principal has given his or her assurance that whether your child participates or chooses not to participate, this will not affect either their grades at school or their relationship with the school.

Your child's identity will be protected at all times. If the study is reported or published, this will be done in a way that does not identify your child as its source. Any child who takes part in my study will receive a small gift in thanks for their participation.

You are free to withdraw from this research project at any time without giving a reason. You are also entitled to withdraw any of your child's data at any time up until December 31, 2006.

All hard copy data will be stored in a locked cabinet on University of Auckland premises, and these will be stored separately from all Consent Forms to protect participants' confidentiality. They will be stored for six years and after this time, they will be destroyed

by shredding. Other data will be stored electronically, with a password known only to the researcher, for six years, and after this time, will be deleted.

If you have any questions about this project or what is required of your child, please feel free to contact me. If you are willing to take part in this project, please sign the attached Consent Form and return it to (teacher's name) by (suggested date).

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ETHICS COMMITTEE ON 14/10/04 TO 14/10/07 FOR 3 YEARS. REFERENCE
NUMBER 2004/320**



APPENDIX J: CONSENT FORM FOR PEERS

THIS CONSENT FORM WILL BE HELD FOR A PERIOD OF SIX YEARS

Project Title: Attachment theory and the Adjustment to School for Young Children
Researcher's Name: Janice Schischka

I have read the Participant Information Sheet, and have understood it. I am prepared to allow my child to take part in this research project, have had the opportunity to ask questions, and have had my questions answered. I understand that I am free to withdraw my child from this project at any time, and that I am free to withdraw my child's data up until 31 December, 2006.

- I give my consent for my child to take part in this study
- I understand that all hard copy data from this project will be stored in a locked cabinet on University premises for a period of six years, and after this time, will be destroyed. All electronic data will be stored with a password known only to the researcher for a period of six years, and after this time, will be deleted
- I understand that my decision to allow or not allow my child to participate in the study will not affect either their grades or our relationship with the school
- I understand that if I request a brief summary of the results, i will be given this

Name of Child.....

Signature of Parent..... Date...../...../.....

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APPENDIX K: ATTACHMENT Q-SET ITEMS ADAPTED FROM VERSION 3.0 (WATERS, 1987) FOR THE PURPOSE OF PARENTAL ADMINISTRATION.

1. My child readily shares with me or lets me hold things if I ask to.
2. When my child returns to me after playing, he is sometimes fussy for no clear reason.
3. When he is upset or injured, my child will accept comforting from adults other than myself.
4. My child is careful and gentle with toys and pets.
5. My child is more interested in people than in things.
6. When my child is near me and sees something he wants to play with, he fusses or tries to drag me over to it.
7. My child laughs and smiles easily with a lot of different people.
8. When my child cries, he cries hard.
9. My child is light-hearted and playful most of the time.
10. My child often cries or resists when I take him to bed for naps or at night.
11. My child often hugs or cuddles against me, without me asking or inviting him to.
12. My child quickly gets used to people or things that initially made him shy or frightened him.
13. When my child is upset by me leaving, he continues to cry or even gets angry after I have gone.
14. When my child finds something new to play with, he carries it to me or shows it to me from across the room.
15. My child is willing to talk with new people, show them toys, or show them what he can do.
16. My child prefers toys that are modelled after living things (e.g. dolls, stuffed animals).
17. My child quickly loses interest in new adults if they do anything that annoys him.
18. My child follows my suggestions readily, even when they are clearly suggestions rather than orders.
19. When I tell my child to bring or give me something, he obeys.
20. My child ignores most bumps, falls or startles.
21. My child keeps track of my location when he plays around the house.
22. My child acts like an affectionate parent toward dolls, pets or infants.
23. When I sit with other family members, or am affectionate with them, my child tries to get my affection for himself.
24. When I speak firmly or raise my voice at him, my child becomes upset, sorry, or ashamed about displeasing me.
25. My child is easy for me to lose track of when he is playing out of my sight.
26. My child cries when I leave him at home with babysitter, father, or grandparent.
27. My child laughs when I tease him.
28. My child enjoys relaxing in my lap.
29. At times, my child attends so deeply to something that he doesn't seem to hear when people speak to him.
30. My child easily becomes angry with toys.

31. My child wants to be the centre of my attention. If I am busy or talking to someone, he interrupts.
32. When I say “no” or punish him, my child stops misbehaving (at least at that time). Doesn’t have to be told twice.
33. My child sometimes signals to me (or gives the impression) that he wants to be put down, and then fusses or wants to be picked right back up.
34. When my child is upset about me leaving him, he sits where he is and cries. Doesn’t go after me.
35. My child is independent with me. Prefers to play on his own; leaves me easily when he wants to play.
36. My child clearly shows a pattern of using me as a base from which to explore.
37. My child is very active. Always moving around. Prefers active games to quiet ones.
38. My child is demanding and impatient with me. Fussing and persists unless I do what he wants right away.
39. My child is often serious and business-like when playing away from me or alone with his toys.
40. My child examines new objects or toys in great detail. Tries to use them in different ways or to take them apart.
41. When I say to follow me, my child does so.
42. My child recognises when I am upset. Becomes quiet or upset himself. Tries to comfort me. Asks what is wrong, etc.
43. My child stays closer to me or returns to me more often than the simple task of keeping track of me requires.
44. My child asks for and enjoys having me hold, hug, and cuddle him.
45. My child enjoys dancing or singing along with music.
46. My child walks and runs around without bumping, dropping, or stumbling.
47. My child will accept and enjoy loud sounds or being bounced around in play, if I smile and show him it is supposed to be fun.
48. My child readily lets new adults hold or share things he likes, if they ask to.
49. Runs to me with a shy smile when new people visit the home.
50. My child’s initial reaction when people visit the home is to ignore or avoid them, even if he eventually warms up to them.
51. My child enjoys climbing all over visitors when he plays with them.
52. My child has trouble handling small objects or putting small things together.
53. My child puts his arms around me or puts his hand on my shoulder when I pick him up.
54. My child acts like he expects me to interfere with his activities when I am simply trying to help him.
55. My child copies a number of behaviours or ways of doing things from watching my behaviour.
56. My child becomes shy or loses interest when an activity looks like it might be difficult.
57. My child is fearless.
58. My child largely ignores adults who visit the home. Finds his own activities more interesting.
59. When my child finishes with an activity or toy, he generally finds something else to do without returning to me between activities.

60. If I reassure him by saying “it’s okay” or “it won’t hurt you”, my child will approach or play with things that initially made him cautious or afraid.
61. Plays roughly with me. Bumps, scratches, or bites during active play. (Does not necessarily mean to hurt me).
62. When my child is in a happy mood, he is likely to stay that way all day.
63. Even before trying things himself, my child tries to get someone to help him.
64. My child enjoys climbing all over me when we play.
65. My child is easily upset when I make him change from one activity to another.
66. My child easily grows fond of adults who visit our house and are friendly to him.
67. When our family has visitors, my child wants them to pay a lot of attention to him.
68. On the average, my child is a more active type person than me.
69. Rarely asks me for help.
70. My child quickly greets me with a big smile when I enter the room. (Shows me a toy, gestures, or says “Hi, Mum”).
71. If held in my arms, my child stops crying and quickly recovers after being frightened or upset.
72. If visitors laugh at or approve of something my child does, he repeats it again and again.
73. My child has a cuddly toy or security blanket that he carries around, takes to bed, or holds when upset.
74. When I don’t do what my child wants right away, he behaves as if I am not going to do it at all.
75. At home, my child gets upset or cries when I walk out of the room. (May or may not follow me).
76. When given a choice, my child would rather play with toys than with adults.
77. When I ask my child to do something, he readily understands what I want. (May or may not obey).
78. My child enjoys being hugged or held by people other than his parents and/or grandparents.
79. My child easily becomes angry at me.
80. My child uses my facial expressions as a good source of information when something looks risky or threatening.
81. My child cries as a way of getting me to do what he wants.
82. My child spends most of his play time with just a few favourite toys or activities.
83. When my child is bored, he comes to me looking for something to do.
84. My child makes at least some effort to be clean and tidy around the house.
85. My child is strongly attracted to new activities and new toys.
86. My child tries to get me to imitate him, or quickly notices and enjoys when I imitate him on my own.
87. If I laugh at or approve of something my child has done, he repeats it again and again.
88. When something upsets my child, he stays where he is and cries.
89. My child’s facial expressions are strong and clear when he is playing with something.
90. If I move very far, my child follows along and continues his play in the area I have moved to. (Doesn’t have to be called or carried along, doesn’t stop play or get upset).

APPENDIX L: INTERVIEW QUESTIONS FOR PARENTS

SECTION A:

1. Can you tell me a little bit about your child?
2. How did you feel upon learning the diagnosis of’s (child’s name) special needs?
3. In what ways did your family have to adapt to your child’s special needs, for example, when he or she was learning to crawl/walk?
4. Did you have to make any modifications to the physical layout of the house to accommodate for’s (child’s name) needs? If so, what were they?
5. Did you have to make any adaptations to the family’s routines to accommodate for his/her needs? If so, what were they?

SECTION B:

6. Did he/she attend some form of early childhood centre prior to starting school?
7. How well did that work for you? Was that a good experience for you, and for your child?
8. Tell me about (child’s name)’s first day at school. How did it go?
9. How did you feel on your child’s first day? And how did you feel maybe a week later?
10. Did you do any particular preparation to get him/her ready for starting school? What kinds of things did you do to get him/her ready to start school?
11. Did you have any fears or concerns about your child starting school prior to his or her school entry? If so, what were they?
12. Did you get any opportunities to meet with and talk with either the new teacher or school principal before he or she started school? If so, what did you discuss with them?
13. Did you encounter any problems or difficulties after he/she started? If so, what were they?
14. How do you feel about the teacher aide situation? Is this working for you and for your child?
15. Do you have any issues with the school and the way they are managing your child’s special needs?
16. How much contact or interaction do you have with the school, particularly in order to meet your child’s special needs?

Section C:

17. Does he/she have any particular ways or strategies for interacting with you? Can you think of anything that this child might do when interacting with you that might be different to what the other children in the family do?
18. Do you yourself have any particular strategies for interacting with your child? If so, what are they? Are these strategies different to what you would use with the other children in the family?
19. Are you aware of him/her using their other senses to a greater extent to compensate for their special needs?
20. Is he/she able to gain eye contact with you?
21. Does he/she use smiling in the same way or to the same extent as other children do?
22. Does he/she readily display their feelings through their facial expressions?

23. How does he/she react or respond on separation, for example, when left at school or at another family member's home? What about when you and their Dad go away on a trip for a couple of days? Is their reaction the same?
24. How does he/she react or respond when reunited with you after a period of separation, for example, when you go to collect him/her from school? What about when you and his/her father have been away on a trip for a couple of days? Is their reaction the same?
25. How does he/she react or respond when hurt or injured? Does he/she let people other than Mum or Dad comfort him/her when upset or injured?
26. How does he/she react or respond when disciplined?
27. How does your child react/respond to new people or strangers?

Section D:

28. Tell me about your child's relationship with his/her teacher. How would you describe it?
29. How would you describe your child's relationship with his/her teacher aide?
30. Do you have a sense of how your child is fitting in and adjusting to the classroom in terms of their relationships with the other children?

APPENDIX M: INTERVIEW QUESTIONS FOR TEACHERS

* questions which were also asked of teacher aides

SECTION A:

- *1. How do you enjoy working with(child's name)?
- *2. Do you think the other children in this class are aware of his/her special needs?
- *3. Do you find some children in your class TO BE QUITE empathic or supportive of this child? If so, which ones? Do you find girls or boys to be more empathic?
- *4. In the classroom work situation, are there some children who are quite comfortable about working with this child? If so, which children? Do you find boys or girls are more likely to work with him/her?
- *5. Do you find some children in your class are happy to talk with and share experiences with HIM/HER? If so, which ones? Do you find girls or boys are more comfortable with this?**
- *6. Do you find some children are happy to play with this child, either in the classroom or in the playground? If so, which ones? Are boys or girls more likely to play with him/her?
- *7. Are there ever any occasions when he/she becomes aggressive or hostile towards other children in the class? If so, is this directed towards certain children?
- *8. Does he/she ever act in a shy or withdrawn manner with the other children? If so, which ones?

SECTION B:

- 9. If you could think back to the time before this child entered your class, were you made aware of his special needs prior to his/her entry? How were you made aware?
- 10. Did you have any FEARS OR concerns about working with him/her prior to his/her entry? If so, what were they?
- 11. Once (child's name) entered your class and got settled in, did you encounter any problems or difficulties having him/her in your class? If so, what were they?
- 12. Were they problems that you had anticipated beforehand, or did you experience these difficulties after he/she started in your class?
- 13. Did you have to make any adaptations or modifications to your classroom environment to cater for HIS/HER special needs? If so, what were they?
- 14. Did you have to make any adaptations or modifications to your programme or curriculum to cater for HIS/HER special needs? If so, what were they?
- 15. Do you have the same expectations of him/her in terms of his/her behaviour as you do of the other children in the class?
- 16. Do you have the same expectations in terms of their learning as you do of the other children in the class?
- 17. How do you feel about the current teacher aide situation? Is this working for you?

SECTION C:

- 18. Does he/she have any particular ways or strategies for interacting with you, given that he/she has special needs? Can you think of anything that he/she does when interacting with you that might be different to what the other children in the class do?

19. Do you yourself have any particular strategies for interacting with this child? Can you think of anything different that you do when interacting with this child?
20. Are you aware of this child using their other senses to a greater extent to compensate for their special needs?
21. Is he/she able to gain eye contact with you?
22. Does he/she use smiling in the same way or to the same extent as other children do?
23. Does he/she readily display their feelings through their facial expressions?
24. How does he/she react or respond when disciplined?

SECTION D:

- *25. How would you describe your relationship with this child?
26. How would you describe this child's relationship with their teacher aide?
- *27. (For teacher aide alone) How would you describe this child's relationship with his/her teacher?

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