

1995

Exploring young children's knowledge of their social network, their social competence, and links to their social behaviour

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**EXPLORING YOUNG CHILDREN'S KNOWLEDGE OF
THEIR SOCIAL NETWORK, THEIR SOCIAL COMPETENCE,
AND LINKS TO THEIR SOCIAL BEHAVIOUR**

BY

Natalie C. LEITAO Dip. Ed.

**A Thesis Submitted in Partial Fulfilment of the
Requirements for the Award of**

Bachelor of Education (Honours)

at the Faculty of Education, Edith Cowan University

Date of Submission: 1st. December, 1995.

USE OF THESIS

The Use of Thesis statement is not included in this version of the thesis.

Abstract

The primary focus of this study is to explore young children's knowledge of their social network and their social competence and the links with their social behaviour. The secondary focus is to investigate ways in which young children may be helped to articulate such knowledge.

The six participants were pairs of five-year old children selected from three pre-primary classes located in a common school. Each pair comprised a socially able and a less socially able child as selected by their class teacher.

Self-reports, dialogue-interviews, video-taped vignettes and dolls were used to help the participants talk about their knowledge of their social networks and their social competence. Classroom observations were made to determine the extent to which children's reports aligned with their social behaviour.

Results showed that young children are able to articulate knowledge about the abstract concepts regarding their social world. The study found that the children who knew more about their social network also knew more about behaving in socially competent ways and exhibited a greater degree of those behaviours. The children who knew less about their social network also knew less about behaving in socially competent ways and exhibited a lesser degree of social competence.

Resulting implications include increasing teacher awareness of the kinds of social stresses facing many pre-primary children today, and implementing strategies in the classroom for maximising children's knowledge about their social networks and social competence.

I certify that this thesis does not incorporate without acknowledgement any material previously submitted for a degree or diploma in any institution of higher education; and that to the best of my knowledge and belief it does not contain any material previously published or written by another person except where due reference is made in the text.

Signature.

Date.....1/12/95.....

Acknowledgements

I wish to gratefully acknowledge those in my social network who lovingly and patiently encouraged and supported me in the completion of this thesis. My supervisor, Dr. Loraine Corrie, to whom I am most sincerely grateful for her professional guidance, continued motivation and her friendship. To my family and friends who have offered prayerful and other kinds of support. And especially to my long-suffering husband Rico, and two-year-old daughter Jessica who allowed and encouraged me to do my "uni work!"

To the principals, teachers and students who gave me the opportunity to learn from them, I offer my sincere thanks.

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Chapter One

Introduction

Errol sat quietly at the listening post, flicking through the story book in his lap. The headphones were in position, the tape-recorder play button was switched on. His teacher had moved away to work with a small group of children, presuming he and James would enjoy listening to the tape-recorded story for at least the next ten minutes. A minute or so passed. Errol continued to browse through the book, occasionally glancing up at James. James was fidgeting and began to look agitated. He called out to the teacher, "My headphones aren't working!" Upon inspection the headphones were found to be faulty. "How about you Errol? Can you hear anything?" Errol shook his head in reply. His headphones were checked and found to be faulty too. Working sets were located and brought to the boys. The tape was rewound and restarted. Together, Errol and James turned the book back to page one and listened as the story began.

Why is it that some young children, like James, will seek out help, while others, like Errol, will wait in silence until someone notices their need? Children's knowledge about their own social competence may influence their interaction with others (Antonucci, 1985). It seems reasonable to suggest that children's knowledge about their social network influences the choices they make about who to turn to for assistance, support and companionship. This study investigates young children's knowledge about their social network and their social competence, and explores links between this knowledge and their social behaviour at school.

Background To The Study

Previous research has investigated the role of social networks in promoting psychological and physical health in adults, adolescents and school-

aged children, but relatively little has been done to investigate what young children know about their social network and social competence and what difference this knowledge makes to their lives (Gamble & Woulbroun, 1995; Reid, Landesman, Treder & Jaccard, 1989; Lewis, Feiring, & Kotsonis, 1984). This lack of research has been due, in part, to the view that young children are cognitively unable to organise information about themselves (Harter & Pike, 1984). However, recent literature supports the notion that young children are able to provide accurate information about themselves, which opens up new opportunities for researchers to investigate young children's knowledge of their social networks, social competence, and the links to their social behaviour (Zelkowitz, 1989; Curry & Johnson, 1990).

Gamble and Woulbroun (1995), propose that children's knowledge of their social support may play a vital protective role for children exposed to stressful events. Understanding what young children know about their social network and social competence may be useful when assisting "at-risk" children to cope with stressful situations (Gamble & Woulbroun, 1995).

Gamble and Woulbroun (1995), conducted a study with young children to investigate their knowledge of social support. The study found evidence to support the assertion that young children's knowledge of their social network is related to their knowledge of their social competence and acceptance, however these researchers have called for further work in this area.

Purpose Of The Study

The primary purpose of this study is to explore 5-year-old children's knowledge of their social network and their social competence, and the links to their social behaviour in the pre-primary setting. The secondary purpose is to investigate the kinds of methods that enable children to articulate their knowledge concerning the abstract notions of a social network and social competence.

Research Questions

1. What do young children know about their own social network?
2. What do young children know about their own social competence?
3. Do young children behave in ways which reflect their knowledge of their social competence?
4. What techniques assist children to articulate knowledge about their social network and social competence?

Definitions Of Terms

Knowledge Of Social Networks refers to the concept, scheme or system of thought children hold about their social network.

Knowledge Of Social Competence refers to the concept, scheme or system of thought children hold about their social competence.

Social Network as described by Lewis (1982), concerns the "interconnection" between social beings (p. 6). An individual may be part of a social network in which members esteem one another and regularly spend time together. Members of the social network interconnect by seeking, receiving and providing assistance, support and companionship.

Social Competence, according to Kostelnik, Stein, Whiren and Soderman (1993), refers to:

a person's ability to recognise, interpret and respond to social situations in ways deemed appropriate by society. The acquisition of social competence begins in childhood and occurs as a result of both developmental and experiential factors. (p. 22)

Social Behaviour refers to the skills used when interacting with others.

The Significance Of The Study

An investigation into young children's knowledge of their social network and competence and links with their social behaviour may provide valuable insight into improving and maintaining aspects of children's psychological and physical health and well-being.

How well children cope with change and stress in their lives, and particularly with unexpected situations, depends on many factors (Ochiltree, 1990). Whether or not children are presently experiencing stressful situations, knowledge about their social networks and competence are factors which may have a bearing on their psychological and physical health and well-being during childhood and in their future years (Gamble & Woulbroun, 1995; Matson & Ollendick, 1988).

A stressful situation may occur with changes in family structure. In Western Australian society today a significant number of children experience some kind of family change which, though not necessarily negative, may result in an added degree of stress (Australian Bureau of Statistics, 1994; Kids Help Line, March 1995; Kids Help Line, August 1995). Relatively high numbers of children are identified as experiencing stressful situations such as social problems (interacting with others and coping with bullying and other forms of physical abuse), and mental health problems (Blackmore, Rohl, Tayler, Corrie, Milton, & Barratt-Pugh, 1995; Kids Help Line, 1995; Zubrick, Silburn, Garton, Burton, Dalby, Carlton, Shepherd, & Lawrence, 1995).

Family Change

Children must learn how to identify, interpret and react to social situations in appropriate ways in order for them to function effectively in the social world (Kostelnik et al. 1993). Due to recent familial and societal changes in Australia, many children today experience modifications to their social worlds which may not have typified the life of a pre-primary child 10 or 20 years ago. Teachers need to be aware of these changes and know how to respond in ways that assist children in identifying, interpreting and reacting to social situations in appropriate ways (Butterworth, 1989).

Family life in Australia has altered in recent times to encompass *de facto* living, divorce, remarriage, blended families and lone parenthood. The partnering of people with children from earlier marriages has been attributed,

in part, to the doubling of de facto couple families with children between 1982 and 1992. The number of one parent families has increased by 42% in the 10 years to 1992, totalling an estimated 619,400 families (Australian Bureau of Statistics, 1994). An awareness of these trends will assist teachers in responding to children's needs within different family contexts (Butterworth, 1989).

Many families today are on the move as a result of family or occupational change. Australians are reported to be, "the most mobile home-changers in the world", and Western Australians, "the most mobile in Australia" (Butterworth, 1989, p. 37). Moving house may be particularly stressful for young children when it involves leaving old friends and neighbours and establishing ties with people in new home, school and neighbourhood environments (Santrock, 1994). An understanding of the stress brought about by geographic mobility may assist teachers in supporting children as they cope with the resulting social changes.

An increasing number of mothers returning to the workforce and families with double incomes has resulted in many school-aged children taking on greater self-care responsibilities which, in some instances, has the effect of added stress (Kids Help Line Newsletter, March 1995). A survey conducted by Kids Help Line (KHL) found of the 200 children interviewed, all children under the age of 10 indicated they would prefer adult supervision to being home alone. More than a third said they were not able to contact their parents, and nearly three quarters reported having no planned strategies for dealing with emergencies such as fire, an accident or an intruder (Kids Help Line Newsletter, August 1995). It is suggested here that teachers assist these children to develop a knowledge of their social network and social competence which will assist them in coping with the responsibility of self-care.

Family circumstances change when family membership alters, families move house, or children take on greater self-care responsibilities. In such

instances, children may be required to adapt their knowledge of their social network and draw on their knowledge of their social competence. Children's knowledge of social networks and social competence may assist them in coping with expected and unexpected life adjustments and in establishing links with new network members as required.

Social Problems

Appropriate social functioning relates to many areas of a child's present and future life. Results of the Early Intervention research project which investigated teachers' concerns about 5 to 8-year-olds with various problems found that of the 878 children nominated, nearly half were identified as having a social problem (Blackmore et al. 1995). Information provided by the KHL phone counselling service suggests that children are concerned about their relationships with others. Since its inception in Western Australia in March 1993, KHL has received more than 178 problem calls from children every week. The September 1995 KHL Statistical Report for Western Australia indicated that consistent with calls made Australia-wide, "interpersonal relationships with family and friends concern young people in Western Australia more than any other problems, together accounting for almost a third of the calls" (Kids Help Line, 1995, p. 1). Other problems 5 to 18-year-olds ring KHL about include child abuse, intimate relationships, bullying and loneliness. This provides some indication of children's concerns about their personal relationships and coping abilities in stressful circumstances.

An enhancement of children's knowledge about their social networks and social competence may assist them in dealing with these sensitive interpersonal issues in an appropriate manner. For example, knowing who to turn to, and how to interact with others may be directly related to the development and maintenance of interpersonal relationships and to coping with bullying and other forms of abuse. Added support for this assertion is shown in North American studies that have found that rates of critical problems

which may occur in later life have been directly related to social competence levels (Matson & Ollendick, 1988). Such studies have shown that problems including juvenile delinquency, dropping out of school, bad-conduct charges from the military, and mental health problems were experienced by individuals with low social competence. A focus on social relationships and social skills during early childhood may be beneficial both in the short and long term. Results from this study may contribute information regarding the nature of such a focus.

Mental Health Problems

The report published by the Institute for Child Health Research in March 1995 drew attention to the significant number of Western Australian children with mental health problems (Zubrick et al. 1995). One in six children aged between 4 and 16 years of age were identified as having a mental health problem. An estimated total of 30,800 children with mental health problems were aged between 4 and 11. Two of the eight mental health problems specified were, "social problems", which referred to an individual's inability to get along with peers, adults and siblings, and "anxiety/depression", which referred to an individual feeling lonely, fearful, unloved and worthless (Zubrick et al. 1995, p. 37). Understanding how children's knowledge about their social networks and social competence has an impact on their lives may be beneficial in addressing these mental health problems.

Among the recommendations made in the child health report for protecting children's mental health was the provision of high quality pre-school education. Children who attended good pre-school programmes were found to achieve higher scores in primary school, were less likely to require special education, were more likely to complete secondary and tertiary education, and had lower pregnancy and crime rates compared with students who did not attend such programmes (Zubrick et al. 1995). One major aim of good early childhood programmes is to develop social skills (Black, Puckett & Bell, 1992).

Appropriate social behaviour contributes to the development of a healthy self-image through the resulting perceptions of being capable and valuable (Dubow & Ullman, 1989). Information gained from this study may have a positive impact on the development and implementation of high quality early childhood programmes used to teach young children about social relations and may contribute to a better understanding of children's social development.

A further recommendation made in the Child Health report (Zubrick et al. 1995) concerned the development of preventative programmes which are appropriate for use with whole classes of children. Life-skills programmes already in place which cater for adolescents include the teaching of social skills, coping strategies, stress management and procedures for non-violent conflict resolution. When developing similar life-skills programmes for the early childhood classroom, consideration must be given to the limited cognitive and linguistic abilities of younger children.

Summary

In considering the significance of this study, a number of areas of priority have been addressed. Children experience and endeavour to cope with various changes and stressful situations in their lives. It is suggested that developing children's knowledge about their social networks and competence will assist in improving and maintaining aspects of their psychological and physical health and well-being. More must be known about how children may be assisted in the articulation of their knowledge of social networks and social competence and about the links between their social knowledge and social behaviour in order that children develop inner resources and life skills which will enable them to respond appropriately and to cope in times of stress.

Chapter Two

Literature Review And Conceptual Framework

The focus of the present study is 5-year-old children's knowledge of their own social networks and social competence and the links with their social behaviour at school. Previous research has shown that knowledge of social networks has a significant effect on the lives of adults, adolescents and school-aged children. Researchers acknowledge the importance of young children's knowledge of their social network and social competence, particularly in safeguarding young children's socio-emotional and physical health, but little specific research has been done, resulting in calls for further research in this area (Reid et al. 1989; Lewis et al. 1984).

This chapter is presented in two sections. The first section is a review of the literature addressing theoretical and methodological aspects pertaining to the study. The second section of this chapter details the conceptual framework which was adopted.

Review Of Theory

Linking Knowledge Of Social Networks And Knowledge Of Social Competence

It has been established that the development of secure relationships (particularly in the home) is related to children's successful social interaction with others (Lieberman, 1977; Waters, Wippman, & Sroufe, 1979). It has also been suggested that secure relationships with others and positive interactions with others are indicators of high levels of social competence and adjustment in adult life (Bullock, 1993; Cassidy & Asher, 1992; LaFreniere & Sroufe, 1985; Oden & Asher, 1977).

Gamble and Woulbroun (1995) have established the importance of children's knowledge of their social networks and their knowledge of their social competence. Several different suggestions have been offered to

account for the relationship between knowledge of social networks and social competence. One suggestion is that children who already possess an accurate knowledge of their social network and know who to approach for support, engage in repeated and successful interactions with their social network members, and so may further develop their knowledge of social competence (Sarason & Sarason, 1985; Rubin & Ross, 1982). Another suggestion is that children who already possess an accurate knowledge of their social competence, by frequently and successfully interacting with others, are able to actively strengthen social network ties which serves to reinforce their knowledge of their social network (Sarason & Sarason, 1985). Yet another view offered here is that knowledge of one's social network and one's social competence develop simultaneously in a complementary fashion.

Previous Studies

Typically, previous studies of social networks have focused on the role of social networks in aiding and maintaining the socio-emotional and physical health of adults, adolescents and older children during times of stress (Hirsch, 1981; Eckenrode & Gore, 1981; Reid et al. 1989; Sandler, Wolchik, & Braver, 1985). Researchers have identified the need to know more about the role of social networks in safeguarding the socio-emotional and physical health of young children (Belle, Dill, & Burr, 1991), and this study seeks to begin to address that need.

Gamble and Woulbroun's (1995), study investigated young children's knowledge about their social networks, and found that young children are able to provide reliable and valid responses to questions about their social networks. The study found significant correlations between children's perceptions of their social network and their perceived competence and acceptance. However, the research design did not allow for exploration into the nature of the relationship, thus limiting opportunities for further investigation into the links between these areas (Gamble & Woulbroun, 1995).

Furman and Buhrmester (1985) studied children's perceptions of the personal relationships in their social networks. The participants (who ranged in age from 11 to 13) provided information about who they turned to for specific kinds of support. In assessing the similarities and differences in relationships, numerous trends were found. For example, children turned to parents most often for affection, teachers for instructional aid, and friends for companionship. Participants reported that their relationships with their parents were the most important, that conflicts occurred most often with their siblings, and that they perceived themselves to have more power in their relationships with other children than with adults. Furman and Buhrmester (1985) recommend that the relationship between children's networks and their socio-emotional adjustment should be studied to further an understanding of social networks. They also suggested studying a range of relationships simultaneously. The present study has incorporated both of these recommendations.

Research Design

Several studies of children's social networks have focused on two main components of support received. The first is the structural component which describes the physical make-up of a network with regard to the identification of network members who may be called upon for help. The second is the functional component which describes the kinds of support sought from network members (such as, practical, informational, emotional and recreational) and the degree of satisfaction received.

The functional component of social networks has featured in many of the studies carried out with pre-primary and middle school children, but this work has been criticised. Dubow and Ullman (1989) suggest that the distinctions made between the various functions of support have been constructed by researchers, and such views may not be shared by young children. The functional distinctions used by Furman and Buhrmester (1985),

and Gamble and Woulbroun (1995), are based on Weiss' theory of social provision, which was originally developed for adults and may not necessarily be relevant for children (Wolchik, Beals, & Sandler, 1989; Furman & Buhrmester, 1985). Dubow and Tisak (1989) express the following concern:

Children may not organise the social support construct by the types of behaviour provided by network members (such as, esteem, tangible aid, informational aid) but rather according to the source of the support (such as, family, peers, non-family adults). (p. 1413)

Cohen, Mermelstein, Kamarck, and Hoberman (1985), are critical of studies which fail to distinguish between structural and functional, even mixing the two together for scoring purposes "resulting in scores that have little conceptual meaning" (p. 74). The focus of the present study is on the structural component of children's social networks.

Social Development Theories

Social development research is grounded in several social and cognitive development theories. Attachment theory, as proposed by Bowlby and Ainsworth (Lewis, 1982), forms a basis for much social research. Attachment theory suggests children develop secure or insecure attachment to their mothers, or no attachment at all, depending on the frequency, reliability and appropriateness with which the children's needs are met. The quality of the attachment and the individual's personality traits determine the child's future social development, with a direct connection existing from one set of social experiences to the next. In highlighting the importance of the child-parent relationship, Feiring and Lewis (1984), state:

The quality of the interaction, such as the parents' responsiveness and sensitivity to the child's needs, is predictive of a secure child-parent relationship. The security of parent-child relationship may affect the child's social development inasmuch as secure children are more willing to interact with other persons. (p. 62)

Youniss (1980), highlights the similarity between the theories of Sullivan and Piaget who both view the child as a "seeker" of particular social needs, and adults and peers as the "suppliers" of those needs. At the initial stage of socialisation the child is seen as a recipient only. As the child matures and becomes able to perceive the needs of others, the second stage of co-operative socialisation is reached, when the child may be a contributor as well as a recipient through a collaborative, interactive process. Adults seek to nurture mature skills, and children, keen to engage in adult activities, impel their own development. This theory is consistent in part with Neo-Piagetian views of children "actively constructing their own development, through their interactions with the environment" (Davis, 1991, p. 16). This theory aligns with the Vygotskian notion that adults and experienced peers provide children with social guidance, assisting the internalisation of skills initially practised with support in order for the skills to be used by children independently (Rogoff, 1991). The concept of learning through interaction with others is supported by the symbolic interactionist view which asserts that an individual's social behaviour will be modified in response to the behaviours, attitudes and expectations of others present (Fine, 1981). Studies by Rubin (1982) have confirmed the importance of peer interaction in the development of social skills and competence.

Furman (1989), contends that most social development theories focus mainly on the needs or motives of the individual and fail to consider the implications of being a part of an ever-changing social network. Lewis et al. (1984) emphasise the importance of examining a child's total social experience rather than their involvement within isolated relationships, such as that between infant and mother.

In order to gain a fuller understanding of a child's social development, the focus on the child's interactions must go beyond that of the immediate family, extending into the wider social network of adults and peers, kin and

nonkin. Such a focus is provided in the social network systems model offered by Lewis (1982). The model is characterised by five features which are summarised as follows:

1. Elements - Networks are comprised of groups of elements. Elements may represent an individual member, a dyad (such as the mother and child relationship), and a triad (a relationship between three people).

2. Interconnection of elements - Elements are interconnected as they affect and are affected by each other. Individuals may affect and be affected by other individual members, as well as dyads and triads within the social network. For example, in a family network a child may affect the parents, the parents may affect the child, and the parents may affect each other. Further, the child may affect the mother-father relationship, and at yet another level, the mother-father relationship may affect the father-child relationship. The complexity of each situation increases with the number of elements which exist in a network.

3. Nonadditivity - Knowledge about all of the elements comprising a social network will not reveal everything about the total system. For example, the behaviour of people in a dyad may be different when they are alone compared with times when other members are present.

4. Steady State - While constantly undergoing forms of internal change and variance among its members and its environment, networks are able to simultaneously maintain themselves in what is described as a "steady state". For example, as children mature, their knowledge, skills and behaviour change, and interactions with others become modified, resulting in a degree of adaptation which allows the relationship to continue.

5. Goals - Networks possess a "purposeful quality" (Lewis, 1982, p. 201). The fact that the social network fulfils various functions, needs and goals, serves to sustain its very existence.

The social network systems model as offered by Lewis (1982), provides a suitable theoretical foundation for the present study because the focus is on the individual within their complex social network.

Investigating Children's Knowledge

The participants in this study are 5-year-old children. The practice of gathering abstract information from young children about themselves has been regarded as feasible only recently. Until recently, the prevailing view has been that young children are cognitively unable to demonstrate knowledge of the abstract notions related to social networks and social competence. However, Eder and Mangelsdorf (cited in Curry & Johnson, 1990), found that children as young as three-and-a-half already possess the necessary underlying constructs for organising information about themselves, and Zelkowitz (1989), demonstrated that 4 and 5-year-old children can offer reliable and useful information about the composition and support provisions of their social network. Gamble and Woulbroun (1995), suggest Piagetian influence in this area of research has precluded acknowledgement of young children's understanding of social roles or categories. Comments by Black et al. (1992) concerning new investigations into Piaget's ideas add support for this notion noting that children at the early pre-operational stage are "more competent in their cognitive development than Piaget suggested" (p. 330). Increasingly, young children's perceptions of their social worlds are being viewed as quite refined, with the understanding that pre-primary children are able to accurately assess and express how they perceive themselves and others (Curry & Johnson, 1990), and for this reason the present study investigates the knowledge of pre-primary children.

Dubow and Ullman (1989), suggested that obtaining information from children about themselves may be a means of procuring more accurate information because adults' perceptions of the child's social network may be incomplete. This notion is supported by Cohen et al. (1985) who state that the

buffering effect of social support during times of stress would be more sensitively indicated by children's perceptions than by the actual availability of support as seen objectively, for example, by an adult. The authors go on to say that such appraisals are "based on a person's beliefs about available support as opposed to its actual availability" (p. 75). Further, social knowledge is related to social behaviour. How children perceive and interpret a situation will determine how they will respond, and what is known from past experience guides how they will act and interact with others in a present situation (Bullock, 1993; Bye & Jussim, 1993).

This study investigates 5-year-olds' knowledge of social networks and competence. At 5 years of age, children are undergoing rapid language and conceptual development, which means that by the age of 5, children may have some skills necessary for using their knowledge of social networks and social competence (Wadsworth, 1989). For example, pre-operational children are beginning to classify objects and events, resulting in an ability to organise information about network members and identify those who may be turned to in specific circumstances. Children as young as 3 and 4 years of age have been reported to classify people and to develop expectations about what constitutes appropriate behaviour towards adults and other children (Edwards & Lewis, 1979). Pre-operational children begin to make inferences. As children consider approaching a certain network member, making inferences about that member's response may influence the child's decision in making the approach for help. By the age of 5, perspective-taking skills have begun to appear (Stone & Selman, 1982). As children become less egocentric, they are increasingly able to understand the view-points of others which promotes the development of prosocial behaviours (Black et al. 1992). The emergence of empathy and altruism are social competence skills which assist in one's ability to initiate and maintain interactions with others and resolve conflicts (Black et al. 1992; Zahn-Waxler, Iannotti & Chapman, 1982). Adult-like communication

skills appear in children as young as 4 years of age (Black et al. 1992). It is considered that it is appropriate to expect 5-year-old children to be able to provide information orally about their knowledge of their social network and social competence.

Review Of Methodology

In addressing how children's perceptions of their social worlds affect their development, Feiring and Lewis (1989), claim that researching children's viewpoints is "critical" (p. 146). Methods used to assess the self-understanding of young children are only beginning to be developed, and the present understanding is described by Curry and Johnson (1990), as often being "tentative and crude" (p.162). Gamble and Woulbroun (1995), state further investigations are needed to "fine-tune methods for probing young children's perceptions of their social worlds" (p. 21). This study employed various techniques to explore different ways to help children talk about their knowledge of their social network and social competence.

Previous Studies

In Gamble and Woulbroun's (1995) study, 4 and 5-year-old children responded orally to a sixteen-item questionnaire assessing four types of support (practical, informational, emotional and recreational). Examples of items included, "If you are hungry, is there someone who will find or fix something to eat?", and, "Who will play an outside game with you?"(Gamble & Woulbroun, 1995, p. 9). For each item, the participants were required to provide the name of one person who provided the specified support, and indicate on a three-point scale if the support was provided "a little", "sometimes", or "always". Each response was confirmed with the child using a visual cue consisting of three different sized circles with the largest representing the "always" selection. A second, similar visual cue was used by the children to rate feelings of satisfaction with the support received. Responses ranged from "not happy or satisfied", to "very happy or satisfied".

The Pictorial Scale of Perceived Competence and Acceptance for Young Children (Harter & Pike, 1984), was utilised to assess perceived competence and social acceptance. The test is pictorially based and is administered orally.

Gamble and Woulbroun (1995) employed data collection techniques which they thought were relevant for young children. The questionnaire items were selected due to their perceived relatedness to younger children's experiences. The simple sentence structure of the test-items, the visual cues, and the pictorial scale were considered appropriate for use with children in the pre-operational stages of thinking. The authors concluded "pre- and early elementary school-aged children can respond to questions about their social support networks in reasonably reliable ways" (Gamble & Woulbroun, 1995, p. 19).

Reid et al. (1989) conducted a study to evaluate the suitability of an instrument, "My Family and Friends", designed to assess "children's subjective impressions about social support" (p. 896). The participants were older than those in the current study (6 to 12-year-olds compared with 5-year-olds), however, the study and its findings are relevant to research with pre-primary children. Reid et al. interviewed the participants using semi-structured dialogues and developed concrete props to assist the children in discussing abstract concepts of social support. The dialogue-interview format is based on the Vygotskian principle which recognises that dialogues, rather than monologues, successfully encourage the collaborative participation of children during interviews. The dialogues focus on children's perceptions of social support and incorporate a social situation (for example, "When you want or need help with doing your home-work, which person do you go to the most often?"), a ranking task to indicate the order that network members would be approached for help (for example, with home-work), and a satisfaction question (for example, "When you go to [specific person] for help, how helpful is she/he?") (Reid et al. 1989, p. 901).

The use of concrete props by Reid et al. (1989) included personalised name cards to identify members of a child's social network, a slotted board for the child to rank name cards in the order in which network members were approached for support, and a large, marked barometer with a moving level indicator for the child to manipulate when expressing their level of satisfaction with different members who provided various kinds of support. The dialogue structure and concrete props were successful in finding out information concerning the children's own beliefs and understandings about their social worlds, were suited to young children's cognitive processes, and reduced distractibility and sustained attention and motivation during the interview.

In response to the need for self-report measures of social support for children, Dubow and Ullman (1989), devised the Survey of Children's Social Support (SOCSS). The instrument is suitable for use with middle primary children. The SOCSS comprises three separate self-reports to measure different aspects of social support, namely the perceived frequency of available support (Scale of Available Behaviours or SAB), the subjective appraisals concerning support from family members, teachers and peers (APP), and network size (NET). Items are read aloud to the participant who then makes a written response using a 5-point scale of "never", "hardly ever", "sometimes", "most of the time", and "always", and by naming members of their social network. In assessing the effectiveness of SOCSS, the authors reported that children were able to make reliable responses, indicating that the measure was "a promising research instrument" (p. 62), providing support for the use of self-report measures with children.

A longitudinal study conducted by Belle et al. (1991) examined the suitability of an adapted version of The Network Orientation Scale for use with children aged 7 to 12 years. The scale is used to determine an individual's network orientation as being either positive or negative. The format is a self-report in which respondents agree or disagree with each of the 20 statements.

Item examples in Belle et al. include, "You can never trust people to keep a secret", and, "Friends often have good advice to give" (p. 365). The authors recommend against using the scale with children younger than 10 years of age due to a reported lack of internal consistency. Possibly the wording of the items is considered to be beyond the comprehension of children younger than 10 years of age, but with modification it may be suitable for use with younger children.

In addition to using The Network Orientation Scale, Belle et. al. (1991) reported using the Children's Inventory of Social Support (CISS) to elicit children's responses regarding family and non-family members who provide various kinds of support. Visual props were reported to be used to focus attention on network members and to assist with rating feelings of satisfaction, however, the authors did not elaborate on the nature or use of the props.

In response to the perceived effectiveness of particular data collection methods used by the various authors reviewed, several ideas were adopted for use in the present study. To assist the participants in the articulation of their knowledge about their social networks, a visual prop as suggested by Belle et al. (1991) was used to focus children's attention on their network members. The prop consisted of paper gingerbread people coloured in by the children to represent members of their network. Questionnaire items, similar to those used by Gamble and Woulbroun (1995), and Reid et al. (1989) were incorporated in a dialogue-interview format as advocated by Reid et al. In addition, video-taped vignettes were developed for use as concrete props to trigger responses to the questions asked. The concrete props were anticipated to fulfil the criteria described by Reid et al. because they were suited to young children's cognitive processes, and they would help sustain children's attention and motivation during the interview.

To assist the children in the articulation of their knowledge about their social competence, the present study used self-reports, as promoted by

Gamble and Woulbroun (1995), Dubow and Ullman (1989), and Belle et al. (1991). In addition, the dialogue-interviews and concrete props were used to investigate aspects of social competence.

Conceptual Framework

The conceptual framework developed for the present study is detailed in Figure 2-1. The framework draws on three concepts to investigate children's knowledge about their social networks and social competence. Specifically, the three concepts are;

- a) social knowledge,
- b) social competence, and
- c) young children's ability to report their knowledge.

The study's secondary focus is to explore ways in which young children may be helped to articulate such knowledge.

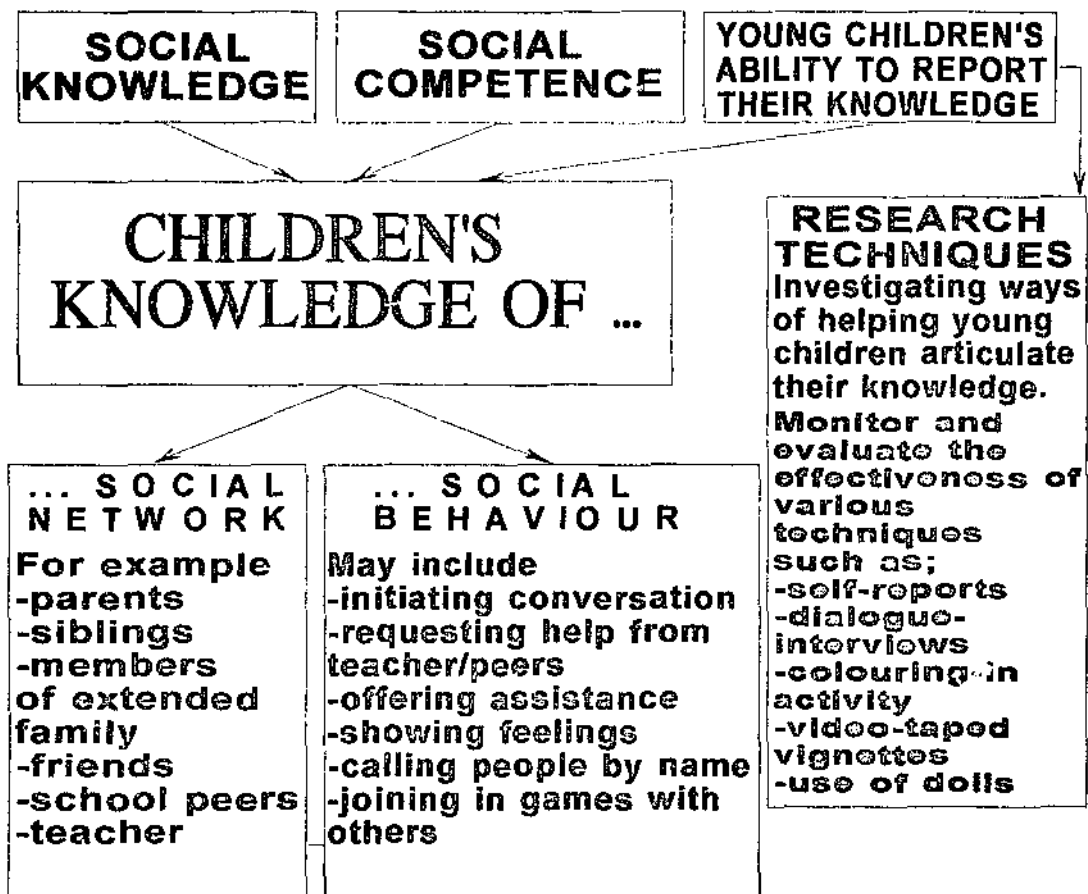


Figure 2-1. Conceptual Framework.

Social Knowledge

Social knowledge is defined here as the scheme, or framework which individuals construct by selecting and processing information from the social environment concerning their own social ability (self-knowledge) and expected and accepted patterns of behaviour in given circumstances (social behaviour) (Augoustinos & Innes, 1990; Bye & Jussim, 1993).

Bye and Jussim (1993), suggest the acquisition of social knowledge is determined by one's exposure to environmental factors. This notion aligns with the Vygotskian socio-cultural theory which proposes that children learn about culturally appropriate behaviour through their interaction with their environment, and particularly through adult guidance (Cole, 1985). This position is supported by Piagetian theory which holds children construct social knowledge through their interactions with adults and peers (Wadsworth, 1989). Such interaction is encountered within one's social network.

Social Competence

Various theories exist to explain the development of children's social competence. The emphasis of the social network systems model, as already detailed, is not on the individual within isolated, dyadic relationships, but on the individual within a complex network of members who interact with each other and continually influence one other (Lewis, 1982). The social network systems model provides a suitable backdrop for the present study which focuses on the individual within their own multi-faceted, dynamic social environment.

Young Children's Ability To Report Their Knowledge

In light of recent findings which implicate the importance, validity and reliability of gathering information from young children, children's perceptions of their social network and social competence have been sought in the present study.

Investigating Ways Of Helping Young Children Articulate Knowledge

The present study incorporated the use of self-reports (one pictorial), dialogue-interviews, and concrete and visual props, all of which were deemed suitable for use with pre-primary children in anticipation of their levels of cognition, interest and attention.

Summary

Links have been found between children's knowledge of their social networks, social competence, and social behaviour. Relatively little attention has been given to research in this area with pre-primary children, despite being recognised as an area of importance, particularly with regard to safeguarding young children's socio-emotional and physical health (Gamble & Woulbroun, 1995; Bye & Jussim, 1993). The present study arose in response to the call for further investigations to explore the links between young children's knowledge of their social network and social competence. In addition, the present study has responded to the need for further investigation into the development of techniques which assist young children to articulate their knowledge of their social worlds.

Chapter Three

Method

Design

The present study explored the knowledge of six children concerning their social network, social competence, and links to their social behaviour, in a qualitative fashion. The study investigated methods of enabling children to articulate their knowledge. Data collection techniques incorporated self-reports, dialogue-interviews, and observation. Triangulation between data sets assisted in checking internal validity (Burns, 1994). A diagrammatic representation of the research design is shown in Figure 3-1.

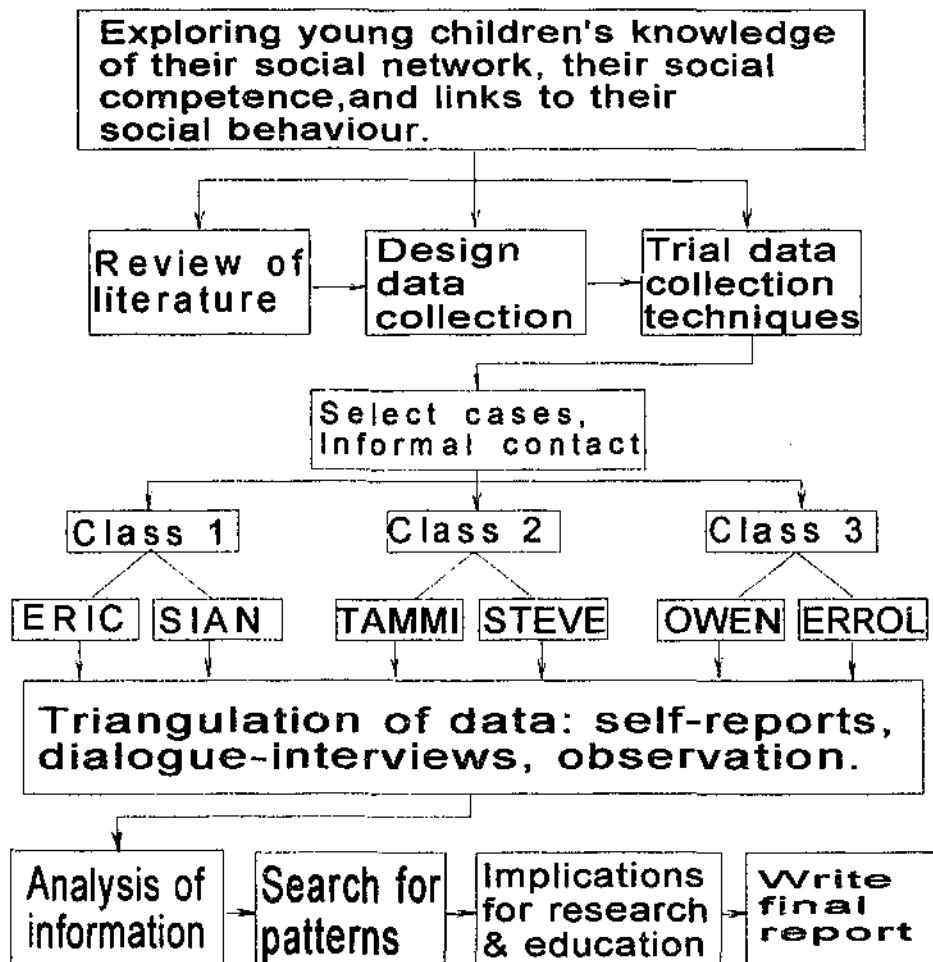


Figure 3-1. Research Path.

Social Abilities Of Participants

The six participants were pairs of 5-year-old children selected from three pre-primary classes located in one school. Three class teachers were each asked to select from their class a child whom they considered to be socially able, and a child whom they considered to be comparatively less socially able. Four boys and two girls were subsequently selected to participate in the study.

The "Vineland Adaptive Behaviour Scales: Classroom Edition" (Sparrow, Balla, & Cicchetti, 1984) was used to check the appropriateness of the teachers' selection of participants with respect to social ability. The assessment was deemed appropriate for use as it is easily completed by the class teachers, and adaptive levels and age equivalents are available for Australian children. As the purpose of the present investigation is to focus on the social abilities of the participants, the socialisation domain alone was used, and this is permissible in accordance with the manual (Sparrow et al. 1984).

The socialisation section of the assessment consists of 53 items grouped under three subdomains described in the Vineland Manual as follows:

- Interpersonal Relationships (how the individual interacts with others)
- Play and Leisure Time (how the individual plays and uses leisure time)
- Coping Skills (how the individual demonstrates responsibility and sensitivity to others).

Scores were recorded on a 3-point scale and assigned to either "observed performance" or "estimated performance". A score of 2 indicated the child usually performed the activity described by the item, a score of 1 indicated a transitional state where the item was sometimes or partly performed, and 0 indicated the child never or rarely performed the activity. Raw scores were calculated for each of the participants and standard scores obtained using norms based on Australian data. Adaptive levels and age

equivalents were assigned to each participant. The Vineland assessment confirmed the validity of the teacher's selection of participants with one child from each pair being identified as more socially able than their partner, thus allowing for a degree of contrast as pairs from their particular classes, and as a total group of 6 participants.

As the pairs of children were from the same school, it is reasonable to assume they were of a similar socio-economic background, but this factor was not controlled. Factors such as size and composition of the families of the participants, and differences in gender and ethnicity were not controlled. The characteristics of each classroom ecology was neither investigated nor controlled. These factors may be regarded as limitations of the study.

A profile of each participant is provided in Table 3-1 which includes details of family compositions. Pseudonyms have been adopted to maintain confidentiality of the participants, their family and friends.

Table 3-1

Profile Of Participants

Class	Name	Age	Vineland Assessment		Family Members
			Age Equivalent	Skill Level	
1	Eric	5.2	7.1	Adequate	M▲
	Sian	5.0	3.7	Adequate	M F ▲ ● ▲
2	Tammi	5.3	12.0	Moderately High	M F 0 0 ●
	Steve	4.9	2.8	Moderately Low	M F ▲▲▲ 0
3	Owen	5.1	8.0	Adequate	M F 0 ▲▲
	Enrol	5.5	2.9	Moderately Low	M F ▲▲▲

Key: M = Mother, F = Father, ▲ = male sibling, 0 = female sibling,

▲ = male participant and ● = female participant

The age equivalencies allocated within the socialisation domain of the Vineland assessment resulted in one child from each pair being categorised as more socially able than their partner. The five categories of social skills identified in the Vineland assessment are, high, moderately high, adequate, moderately low, and low. With regard to Eric and Sian, both were assessed as having an "adequate" level of social skills, however, Sian was just inside the cut-off point for inclusion in this category (Sparrow et al. 1984).

Eric and Sian are in class one. They are both of English-Australian background. Eric is an only child who lives with his single mother. Sian lives with both parents, an older brother Neil (6) and a younger brother Mark (3).

Tammi and Steve are in class two. They are both of English-Australian background. Tammi lives with her mother and father, and two older sisters, Tess (9) and Beth (7). Steve lives with both parents, an older brother Paul (13), a younger brother Miles (3) and a new-born sister.

Owen and Errol are in class three. Owen is of English-Australian background. He lives with both parents, an older sister Claire (7) and a younger brother Chris (1). Errol lives with both parents. His mother is from the Middle-East and his father is English-Australian. Errol lives with two older brothers, Kurt (9) and Brett (6).

Each of the three pairs of children represent a more socially able child and a less socially able child as verified using the Vineland assessment. Of the six participants, Eric, Tammi and Owen were categorised as being more socially able, and will be referred to collectively as Group One. The other participants, Sian, Steve and Errol were categorised as being less socially able and will be referred to collectively as Group Two.

Ethical Considerations

Parents of the children to be filmed for the preparation of the video-taped vignettes were informed in writing about the study and the intended use of the video-tape, and invited to allow their children to take part in the filming.

Written authorisation was received from those parents who permitted their children to be filmed. The identities of those appearing on the video-tape, while difficult to conceal, have been protected inasmuch as individual names of the children and the name of the co-operating school will not be disclosed.

Following the selection of the six participants for the present study, written permission was requested and received from their parents. It was not anticipated that participation in the study would result in any negative effects for the participants.

Tools For Data Collection

Inherent in gauging young children's perceptions is the challenge of using research methods which are meaningful to the children and appropriate to their levels of interest and cognition. In recent times, instruments have been developed and tested for 6 to 12-year-old children, however, researchers have called for the refinement of methods used to explore pre-primary children's perceptions of their social worlds (Reid et al. 1989; Dubow & Ullman, 1989; Gamble & Woulbroun, 1995). For this reason different techniques were employed in this study to explore ways of helping children talk about the abstract concepts of social networks and social competence. Using a variety of data collection methods also enhanced the likelihood of obtaining information that was typical and comprehensive.

In preparation for data collection, the different methods were trialled with three socially able children aged 3, 4 and 5. These rehearsals allowed the investigator to become familiar with the administration of the data collection methods, and to recognise and improve on the areas which needed fine-tuning.

During the data collection process, consideration was given to the perceived effectiveness of the various methods being used. Table 3-2 provides a summary of the data collection methods used.

Table 3-2

Data Collection Methods

<u>Purpose</u>	<u>Tool</u>
Explore knowledge of social competence	Self-report: Pictorial Scale Self-report: MESSY Dialogue-interviews: Video-taped vignettes, and dolls
Explore knowledge of social network	Colouring-in activity: Gingerbread people Dialogue-interviews: Video-taped vignettes
Explore links between social knowledge and social behaviour	Observation schedules Field notes
Effectiveness of data collection methods	Anecdotal records

Explore Knowledge Of Social Competence And Social Network

All participants were seen individually twice. The first session was between 15 to 20 minutes duration. The second session, held during the following week, was between 20 and 30 minutes duration. All discussions, interviews and observations took place within familiar surrounds in an attempt to maintain ease of the participants.

Self-report: Pictorial Scale

Self-reports are a useful means of tapping children's self-perceptions. Dubow and Ullman (1989), included in their investigation an examination of children's perceptions of social acceptance and self-worth on the premise that "the receipt of social support provides the individual with information that he or she is cared for and valued by others" (p. 53). The resulting moderate correlations with perceptions of social support were interpreted as supporting the hypothesis. Similarly, the study by Gamble and Woulbroun (1995), found evidence for a relationship between characteristics of children's social support and their perceptions of competence and acceptance. For these reasons, an assessment was sought to determine children's perceptions of their own social competence. In noting the limited availability of measures for assessing the

social-emotional functioning of pre-primary children, Gamble and Woulbroun (1995), conclude the version of The Pictorial Scale of Perceived Competence and Social Acceptance for Young Children (Harter & Pike, 1984) to be the closest assessment available.

The Pictorial Scale is a fixed answer, self-report which incorporates a domain-specific approach to analyse two factors. The first factor is perceived competence which has subscales for cognitive competence, and physical competence. The second factor is perceived social acceptance which has subscales for peer acceptance and maternal acceptance. Gamble and Woulbroun (1995), utilised three of the four subscales as they related to their study. For the purpose of the present investigation, the third subscale was used to gauge children's perceptions of their acceptance by peers.

The six items featured were, "has lots of friends", "others share their toys", "others sit next to you", "gets asked to play with others", "has friends on the playground", and "has friends to play with". Each item was discussed using a pair of pictures drawn side by side on a single page. Within each pair, one picture depicted a most accepted target child engaged in the specified activity. The participants were invited to indicate which of the two pictures was most like them. A sample item is presented in Figure 3-2. The picture on the right depicts the most accepted target child with five other children holding hands in a circle. The picture on the left shows the target child and just one other child holding hands. The participant was told, "This boy (on the right) has lots of friends to play with. This boy (on the left) doesn't have very many friends to play with. Which of these boys is most like you?" To further refine his choice the participant was directed to two circles beneath the picture and asked to indicate whether he was a lot like the target child in the picture (the big circle), or just a little bit like the target child (the smaller circle).

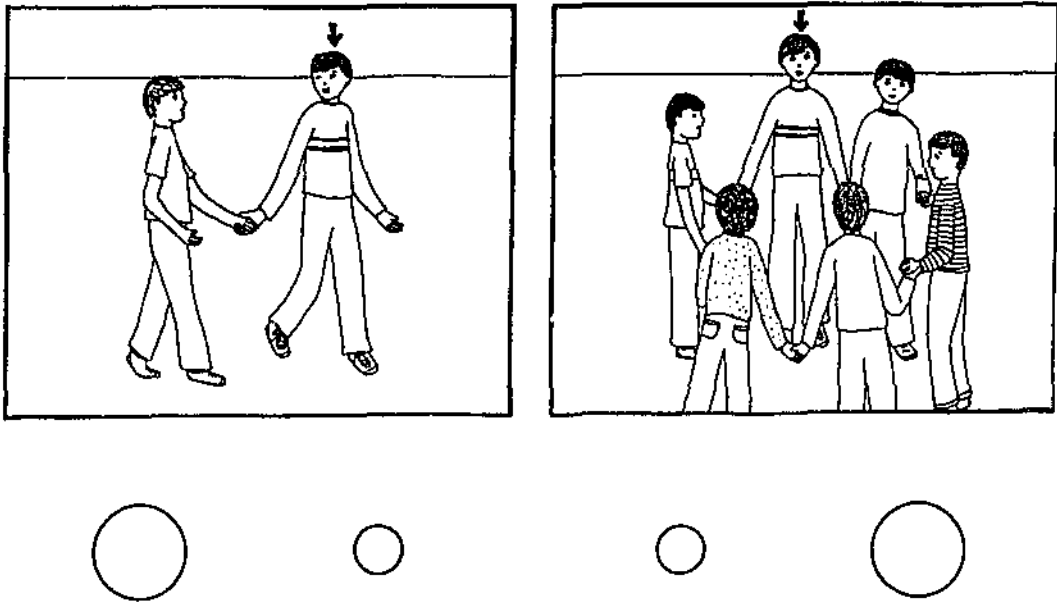


Figure 3-2. Sample Item.

Two complete sets of pictures were prepared, one for boys and one for girls so that the gender of the target child would match that of the participant. The order of pictures were so arranged that the most accepted target child was depicted on the right of the page three times and on the left of the page three times. A 4-point scale was used for scoring, where a score of 4 indicated the "most accepted by peers" response and a score of 1 the "least accepted" (Harter & Pike, 1984). The scores were not intended to be used for statistical analysis, but to allow triangulation with other data collected.

Self-report: MESSY

Matson and Ollendick (1988), designed a self-report checklist, namely, the Matson Evaluation of Social Skills with Youngsters, or MESSY (1988), specifically for assessing children's "social interpersonal functioning" (p. 28). The authors claim the MESSY has been heavily researched and found to be a valid and reliable measure for evaluating a range of verbal and non-verbal social interactive behaviours. Items featured in the MESSY self-report require yes/no answers and include items within the categories of Appropriate Social

Skill, Inappropriate Assertiveness, Impulsive/recalcitrant and Miscellaneous Items. As the participants could not yet read, the 30 items were read aloud by the investigator, and explained further as necessary. Sample items include, "Do you look at people when you talk to them?", "Do you help a friend who is hurt?" and "Do you annoy people to make them angry?".

Quantification of the answers was not a priority of the study, hence the MESSY scores were not used for statistical purposes. However, the items were considered important for structuring the self-report and leading into the area of children's knowledge about social competence. The MESSY items were used to compile an observation schedule to guide observations.

Dialogue-interviews: Video-taped vignettes and dolls

Interviews have long been regarded as an effective means of eliciting information from others. The interview method is considered particularly appropriate for research with children. A primary reason for adopting the interview method in the present study was that in the absence of well-developed literacy skills, talking face-to-face was considered the best way to obtain comprehensive data from the young respondents. Further benefits in using the interview method were its flexibility (the investigator would be able to detect when a question had not been fully understood and could repeat or re-word the question as necessary), and its capacity to allow observation of non-verbal communication (Kerlinger, 1986; Burns, 1994).

The dialogue-interview format advocated by Reid et al. (1989) was employed in the present study to encourage the active collaboration of the children being interviewed. The dialogue-interview format featured open-ended questions related to the children's own experiences.

Renshaw and Asher (1982), report hypothetical-situations methodology to be an appropriate tool for exploring children's social knowledge. In consideration of young children's cognitive processes, the notion of using video-taped vignettes to trigger responses to questions about hypothetical

social situations was deemed appropriate by the investigator. Kerlinger (1986), advocates the use of vignettes in educational research, suggesting that with imagination and ingenuity, the construction of vignettes may closely resemble actual social situations, may be of interest to the participants, and may allow judicious exploration of delicate issues. Eight video-taped vignettes were prepared specifically for the participants in the present investigation to observe and discuss. In keeping with the dialogue-interview format, the related discussion points were semi-structured and open-ended, and required the participants to draw on knowledge of their own social network and their own social competence.

The video-taped vignettes were made by the researcher who filmed 5-year-olds in a pre-primary classroom. The children on the video-tape and the children participating in the study were from different schools, and neither group were known to the other. The vignettes showed pre-primary children engaged in various indoor and outdoor activities that involved social interaction. The vignettes were not contrived situations, but incidences caught on film as they occurred naturally. In an attempt to maintain the spontaneity of the social interaction of the children being filmed, actual footage was limited to those incidences which happened to take place during filming. Specifically the incidences recorded on film showed pre-primary children playing outside, sharing a birthday cake, playing inside, sharing toys, coping when things went wrong, seeking help to do something new, showing something special to someone, and playing pretending games together.

After each vignette was shown, the participants were encouraged to comment on what they saw, and to nominate people from school and from home who would typically share experiences such as those depicted on the video. Both the vignettes and related discussions included some items from Gamble and Woulbroun's (1995), questionnaire. Examples of the directing questions include, "If you are hungry who will help you find or fix something to

eat?", "Who will play a pretending game with you at school? ... at home?", and "What do you do if you have been playing a pretending game for a while and you have had enough of that and want to do something different?".

Four small dolls, two male and two female, were made available to assist the children in providing their responses. The children were invited to use the dolls to play out their imagined social interactive behaviour if they themselves were involved in the nominated situations. The use of play techniques, such as that with dolls, is advocated by Kerlinger (1986), as a useful research tool. By manipulating and interacting with the dolls, the participants were able to express themselves spontaneously, and in so doing, provide the investigator with an insight into their knowledge about their social network and their social competence.

Care was taken during the dialogue-interviews to discern whether children's answers of "no-one" or "I do not know" were indicative of a lack of knowledge about their social network and their social competence, or a misunderstanding of the situation being discussed. The investigator regularly checked for clarity of understanding when questions were asked, and reworded or further explained questions as necessary. Time was allowed for children to think about each situation before making a response, and responses were confirmed with the child to ensure he or she had been understood correctly.

Following viewing of the video-taped vignettes and play with the dolls, the investigator verbally presented a further 11 scenarios and invited the children to nominate people they knew who would help them in the specified situations. Throughout the dialogue-interviews, no right or wrong answers existed as the purpose was to investigate the participants' social knowledge.

The inclusion of the video-taped vignettes and dolls provided the participants with concrete props, as recommended by Reid et al. (1989) to reduce distractibility and sustain attention and motivation during an interview.

An audio taping of each session was arranged to record children's responses verbatim, and to capture other relevant information as it was offered. Taping children's responses allowed the investigator to participate fully in the dialogue, and attend to non-verbal communication. Field notes were made immediately following each session to record details of non-verbal communication observed and to record information regarding each child's responsiveness to the data collection methods used.

Colouring-in activity: Gingerbread people

Outlines of gingerbread people were prepared for the children to colour-in so as to make the figures represent social network members who provided various kinds of help. While the children coloured-in they were encouraged to talk about their network members and the kinds of help received.

Explore Links Between Social Knowledge And Social Behaviour

The observations took place over four weeks following the self-reports dialogue-interviews. Each child was observed for the duration of one hour once a week, making a total of four hours of observation for each child. An observation schedule was compiled based on questions featured in the MESSY self-report. Frequency counts were made of the targeted behaviours and field notes taken to describe general aspects of social behaviour displayed by the participants as they interacted with others. The eight social behaviours targeted were, use of eye contact, interrupting others, saying "thankyou", offering help, telling others what to do, initiating conversation, using other's names and joining in games.

Observation

Non-participant observations were made to examine the children's social behaviour. The investigator minimised interactions with the participants and their peers as far as possible during the periods of formal observation to lessen the confounding influence of the observer's presence in the classroom and in the playground.

Effectiveness Of Data Collection Methods

Ongoing anecdotal records were kept concerning the perceived efficacy of the various methods of data collection.

Procedure

The investigator initially met with the class teachers to explain details of the study and provide information regarding administration of the Vineland assessment. The following week the teachers selected children to participate in the study and completed the Vineland assessment. The Vineland scores were calculated by the investigator who then arranged to meet individually with the mothers of the prospective participants to discuss the study in terms of what would be expected of the children, and to answer any other queries. Permission slips were returned to the investigator over the following two weeks.

Prior to formal contact with the participants, the investigator spent a total of eight hours at the pre-primary centre in order to interact informally with the children and develop some degree of familiarity. Two hours were spent in each of the three classrooms where the investigator joined in play, assisted with jigsaw puzzles and read stories informally. The remaining time was spent outdoors in the playground which is shared by all three classes. When it was time to engage in formal data collection, the participants seemed willing and co-operative.

First Session

The aim of the first session was to ascertain the participants' knowledge of their own social competence. Initially the participants were required to respond to the adapted version of The Pictorial Scale of Perceived Competence and Social Acceptance for Young Children (Harter & Pike, 1984), and then to the MESSY questions (Matson & Ollendick, 1988). The session finished with the colouring-in activity. The children were invited to colour the

gingerbread people outlines so that the figures represented people they knew who helped them in various ways.

Second Session

The aim of the second session was to further ascertain the participants' knowledge of their social competence, and their social network. The session began with a discussion of the figures coloured at the end of the last session. The figures were used as a visual prop to orient the participants to the task of thinking about the different people they knew who provided various kinds of help. Up until then the concept of "providing help" had been used generally with no specific instances being discussed. The children were invited to add more figures during the session as they wished.

The session proceeded with the dialogue styled interview. The video-taped vignettes were shown to the children and the dolls made available for use during the ensuing discussions.

Observation Sessions

The observation periods were conducted in a variety of contexts at different times of the day for a total of four hours for each child. Table 3-3 provides a summary of the classroom contexts during which observations were made.

Table 3-3

Observation Periods

Classroom	Name	Session	Time	Contexts	
1	Eric	1	9:45-10:45	Sandpit play, fruit time and poetry.	
		2	8:45-9:45	Library (story time), greetings and movement to music.	
		3	9:45-10:45	Sandpit play, indoors group discussion (families) and fruit time.	
		4	8:45-9:45	Library (watched video) and greeting/news.	
	Sian	1	8:45-9:45	Library (watched video), greetings/news and outdoor play.	
		2	9:45-10:45	Outdoor play, sandpit play and fruit time.	
		3	8:45-9:45	Library (story time), greetings/news and outdoor play.	
		4	9:45-10:45	Group discussion (fire safety), directed outdoors movement, indoors singing (whole class) and fruit time.	
	2	Tammi	1	11:45-12:45	Indoor play, lunch time and sandpit play.
			2	8:45-9:45	Floor puzzles, singing (whole class), group discussion (dinosaurs) and story time.
			3	11:45-12:45	Drawing activity, lunch time, sandpit play and watched video.
			4	10:45-11:45	Sand-pit play, outdoor play and craft activity indoors.
Steve		1	10:45-11:45	Outdoor play and indoor play.	
		2	9:45-10:45	Craft activity and indoor play.	
		3	10:45-11:45	Sandpit play, outdoor play, bread dough and indoor play.	
		4	11:45-12:45	Play-dough, lunch time and outdoor play.	
3	Owen	1	9:55-10:45	Indoor play, singing (whole class) and fruit time.	
		2	10:45-11:45	Singing (whole class), sandpit play and story time.	
		3	9:45-10:45	Indoor play and news.	
		4	11:00-12:00	Fruit time, gluing activity, indoor play, dental visit and lunch time.	
	Errol	1	8:55-9:55	Floor puzzles, greetings/news, news story writing (whole class) and letter writing (individual).	
		2	11:45-12:45	Story time, lunch time, outdoor play and play-dough.	
		3	8:45-9:45	Floor puzzles, greetings/news, listening post and indoor play.	
		4	8:50-9:50	Floor puzzles, greetings/news, news story writing (whole class) and craft activity (in small groups).	

Data Analysis

Data resulting from the Vineland assessment (Sparrow et al. 1984), and Pictorial Scale (Harter & Pike, 1984), were analysed in accordance with the procedures prescribed by the authors.

A count was made of the MESSY (Matson & Ollendick, 1988) responses received that indicated social competence as identified by the authors. The children's results were compared and contrasted.

A comparison was made between the children of the people they chose to depict using the gingerbread figures.

Information articulated by the children during the dialogue-interviews about their knowledge of their social networks was used to compile pictorial representations of the six individual networks in the form of sociograms.

Observation records in the form of frequency counts and field notes were made to obtain a "snapshot" of the children's social behaviour, and to align this with the children's knowledge of their social competence.

A study was made of all the data on an individual basis to explore specific aspects of children's knowledge of their social network and social competence, and on a group basis to determine any commonalities between the six participants.

In order to explore the effectiveness of the methods of data collection, an analysis was made of anecdotal records compiled during the period of data collection.

Chapter Four

Results

This chapter reports the results obtained from the data collection while bearing in mind the research questions.

Children's Knowledge Of Their Social Network

The methods used to assist the participants in the articulation of their knowledge about their own social network included a colouring-in activity and dialogue-interviews. These methods were used to elicit responses from the children regarding the people they knew who would be available and approachable in various situations, that is, those people identified by each child as being members of their social network. In order to explore network size, one particular focus is on the number of people nominated by each participant.

Colouring-in Activity: Gingerbread People

An introductory colouring-in activity was used to focus the children's thoughts about the people in their social network. The children coloured in prepared outlines of gingerbread people to represent the people they knew who helped them in various ways. With the exception of Eric (an only child living with his single mother), all participants used four gingerbread people outlines to depict members of their immediate family only, which included both parents and two siblings. Steve (the child with three siblings), did not include his new born sister. Eric coloured six gingerbread people outlines, choosing to depict his mother, three of his cousins, Deni, Debbie, Kate, and two friends from school, Frank and Keith. It is interesting to note that no limitations were given to the number of "people" to be coloured, yet Eric alone included people from outside his immediate family.

Dialogue-interviews: Video-taped Vignettes

The video-taped vignettes were presented to the children for observation and discussion. A review of the responses given by the children revealed the composition of each one's network as it related to the vignettes presented. (A complete list of the vignettes and the related questions are detailed in Appendix A. A table of the children's responses is provided in Appendix B)

Group One (More socially able children)

ERIC

Eric nominated a total of eight people who comprised his social network at school, namely, Frank, Keith, Rory, Adam, Sian, Leah, and his two teachers. He also made use of the plural terms "teachers", "friends" and "everyone". If things went wrong, Eric said he would go to the teachers and his friends for help. Eric also nominated his friends as being people who would help him to learn how to do something new. "Everyone" was the answer given for who Eric would show something new or special to and to whom he would tell some exciting news.

The six people who made up his social network at home were his mother, Aunty Nina, and cousins Debbie, Deni, Kate and Bradley. His mother was mentioned most often, followed by his cousin Debbie. Eric used the terms "friends" and "everyone" when he described his home network. Eric answered he would show something new to his friends, and that he would tell exciting news to everyone. The only questions to which Eric answered, "no-one" were, "Who might give you a hug at school?", and "Who plays with you when you play outside at home?".

TAMMI

Tammi named seven people as being a part of her social network at school. These included her peers Zoe, Laura, Erin, Una, Kathy, the class teacher and the teacher's aide. Tammi used the plural term "teachers" to refer

to those who would help at school if she had a bad cold or stomach ache. Other plural terms used were, "My friends", for the people she would share her birthday cake with and, "All the kids", for the people to whom she would tell exciting news.

Tammi included all members of her immediate family in her social network at home. On occasions Tammi referred to her siblings Tess and Beth as "my sisters", and sometimes as "the kids". Tess, the elder of the two was mentioned slightly more often than Beth. Tammi's only answer of "no-one", was to indicate that she did not go to play at anyone's house, however she did say that her friends Ursula and Kaye came over to play at her house. With the exception of Tammi's father, all members of her total social network were female.

OWEN

Owen made reference to three people in his social network at school, specifically, Dean, Nicholas and his class teacher. The response, "no-one" was given when asked who at school would give him hugs, and who at school would he want to talk to if he was feeling angry about something.

The four people mentioned as part of Owen's social network at home were his parents, his sister Claire, and his friend Dennis who, "lives over the road." Owen did not mention his younger brother at all. When asked to think about home based situations, Owen once mentioned "no-one" in relation to who he would talk to if he was feeling angry about something.

Group Two (Less socially able children)

SIAN

Sian named 10 people in her social network at school. These people included her younger brother Mark, the class teacher, and peers Leah, Mandy, Ben, Emily, Delia, Terry, Sonia and Violet. Subsequent enquiry revealed Sonia and Violet did not attend Sian's school. There appeared to be some confusion as Sian mentioned them regularly as being part of her social

network both at school and at home. Clarification with Sian's mother confirmed that Sonia and Violet used to live in the same street as Sian's family, and the girls did often play with Sian, however, Sonia and Violet had moved away some months before and Sian had not had any contact with them since. In spite of this fact, Sian referred to the girls often during the discussion, both individually and together, as people she played with and turned to both at school and at home. Sian named her brother Mark as being someone at school who gives her a hug. Sian included "everyone" in her social network at school when asked who she would share her birthday cake with. When asked who she would show something special to, Sian replied, "don't know", and when asked who she would go to if she was angry and wanted someone to talk to she said, "no-one".

With regard to her social network at home, Sian regularly mentioned her parents, her brothers Neil and Mark, and her friends Sonia and Violet. She included her school friend Emily as someone who comes to play at her house. As with the parallel school-based question, Sian said she would speak with no-one if she was at home and felt angry about something.

STEVE

Steve mentioned 11 people who comprised his social network at school, namely, Trent, Kevin, Seth, Barry, Erin, Clint, Laura, Kathy, Tammi, the class teacher and the teacher's aide. On four occasions he also included various children on the video-tape, the specific instances being when considering who he would share birthday cake with; who would help with sorting out a problem; who would help him to do something new; and who would play a pretending game with him. Steve gave the answer, "no-one" when asked who from school would say nice or good things about him, who would help him to get dressed, and who would give him a hug. For five of the school based and one of the home based questions, Steve initially responded with, "I don't know", and/or "no-one". Following further explanation of the

questions Steve was able to name people for each of the situations. In one instance he corrected his own answer before further clarification of the question was provided.

When discussing people who comprised his social network at home, Steve included his parents, his brothers Paul and Miles, school friends Barry and Trent, and his pre-primary teacher. He mentioned a non-school friend, Matthew, as someone who came to play. When Steve named his teacher as the person at home to whom he would tell exciting news, clarification of his answer was sought. He made no further comment, however, to neither justify nor alter his answer. Of the three instances when Steve responded with "No-one", he once provided an alternative answer following clarification of the question. Thus the situations in which Steve felt he had "no-one", were when someone might say good or nice things about him (as with the parallel school based question), and when he had a secret. Steve did not include mention of his new born sister at any point during the discussions.

ERROL

Errol gave two different responses to indicate who the people were in his social network at school. He said he would share his birthday cake with "everyone", and that he would go to the "teacher" for help if someone was annoying him, and if he wanted to show something he had made well. Errol also said "the teachers", would help him if he hurt himself. Errol referred to his teachers solely by occupation and not by name. When asked the names of his teachers, he replied, "don't know". When asked who he would want to talk to if he was feeling sad about something, Errol said, "stay by myself". When considering people to turn to for the remaining eighteen situations, Errol replied "no-one", and "I don't know".

Errol nominated a total of six people who made up his social network at home. These included members of his immediate family, his grandmother, and a friend of the family who comes to play with Errol and his brothers. The

plural term, "everyone" was used to describe with whom the birthday cake would be shared. Both brothers were named as people he would play with (after stating, "sometimes I play by myself"). Errol nominated his mother as the person who would be shown something he had made well, and who would assist him to get dressed. Both parents were nominated as people who would help if he hurt himself and if he was hungry, and as people he would tell a secret to and receive a hug from. Errol also mentioned his grandmother as being someone who hugged him. For the remaining 15 situations discussed, Errol indicated he would either stay by himself, turn to "no-one", or that he did not know to whom he could turn.

Summary of responses

As shown in Table 4-1, the total number of members nominated by children in Group One (the more socially able group) ranged from three to eight for their social network at school, and four to six for their social network at home.

Table 4-1

Group One Responses

	Number of Members in Social Network at School	Number of Members in Social Network at Home	Total Members
Eric	8	6	14
Tammi	7	6	13
Owen	3	4	7

Table 4-2 shows the total number of members nominated by children in Group Two (the less socially able group) ranged from two to eleven for their social network at school, and six to eight for their social network at home.

Table 4-2

Group Two Responses

	Number of Members in Social Network at School	Number of Members in Social Network at Home	Total Members
Sian	10	7	13**
Steve	11	8	16*
Errol	2	6	8

**Four names were repeated once each.

* Three names were repeated once each.

As shown in Tables 4-1 and 4-2, Steve (Group Two) included the greatest number of members in his total social network, followed by Eric (Group One), Tammi (Group One) and Sian (Group Two), Errol (Group Two) and Owen (Group One).

An overall inference made is that the children in Group Two did not have as clear an understanding of the roles played by their social network members as children in Group One. For example, Sian made numerous references to Violet and Sonia as being members of her social network at school and at home. In actuality, the girls had never attended Sian's school, and were neighbours who had moved away from Sian's street some months before. Sian has had no contact with them since. Similarly, Steve made numerous references to the children on the video-tape as being people with whom he would interact at his school, yet the children on the video-tape were from another school and not known to him. Steve included his teacher in his social network at home. In addition, Errol's most frequently recorded responses were "I don't know" and "no-one". He used "I don't know" a total of 11 times for his social network at school, and 9 times for his network at home. Sian and Steve had answered with "I don't know" once each. The response was not used at all by the children in Group One. Errol's response of "no-one" occurred eight times for his social network at school, and seven times for his

social network at home. While all other participants gave an answer of "no-one" at some stage during the discussion, it was only used by each of them once or twice.

Sociograms

Information given by the participants regarding their social networks is represented pictorially in sociograms (Figures 4-1 through to 4-6). Four concentric circles have been drawn with the participant's name in the centre. The names of network members are recorded within particular circles to represent how frequently the participant reported his or her association with them based on the situations discussed during the viewing of the video-taped vignettes. Network members who were nominated 15 times or more have been included in the innermost circle. Those members nominated between 10 and 14 times have been included in the second circle. Members nominated between 5 and 9 times have been included in the third circle, and those nominated less than 5 times have been included in the fourth circle. At a glance it is possible to discern the frequency with which participants reported to rely on their various network members. Hence network members situated towards the centre of the sociogram are seen as comparatively closer and more important to the participant, and those situated further away from the centre as successively less close.

As shown in Figure 4-1, Eric nominated his mother most often, followed by his cousin Debbie and school friends Frank and Keith.

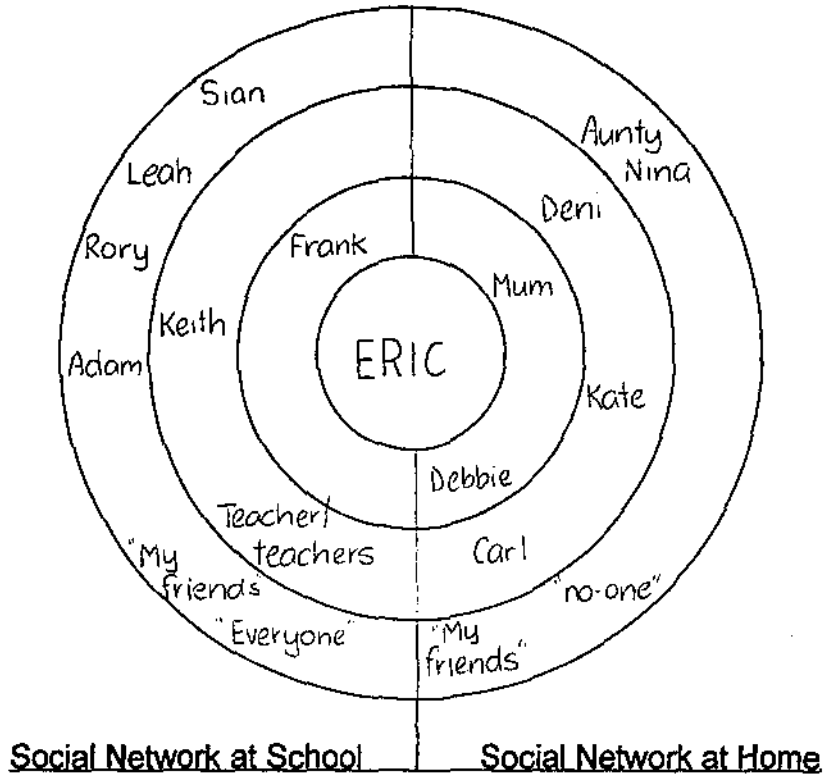


Figure 4-1. Sociogram Of Eric's Social Network.

KEY	
Circle	Total Nominations
1st.(inner-most)	15 or more
2nd.	10 -14
3rd.	5 - 9
4th.	0 - 4

As shown in Figure 4-2, Tammi nominated her sisters most often, referring to them by their individual names, and as "my sisters" and "the kids". Tammi's mother, school friend Zoe and her teacher were the people next most frequently nominated.

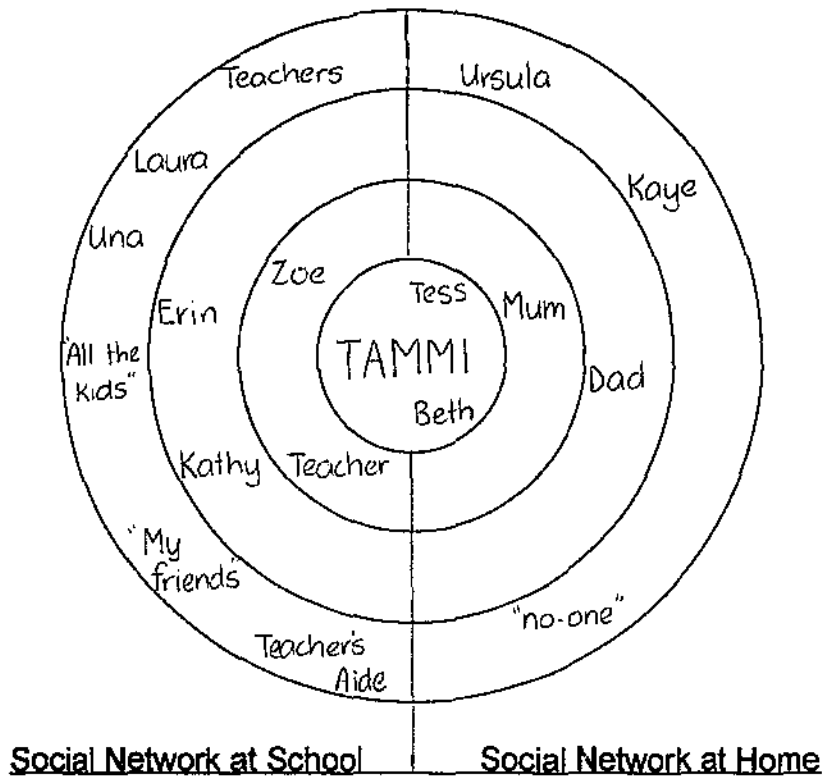


Figure 4-2. Sociogram Of Tammi's Social Network.

KEY	
<u>Circle</u>	<u>Total Nominations</u>
1st.(inner-most)	15 or more
2nd.	10 -14
3rd.	5 - 9
4th.	0 - 4

As shown in Figure 4-3, Owen nominated his school friend Dean most often, followed by his mother, father, teacher and neighbour Dennis.

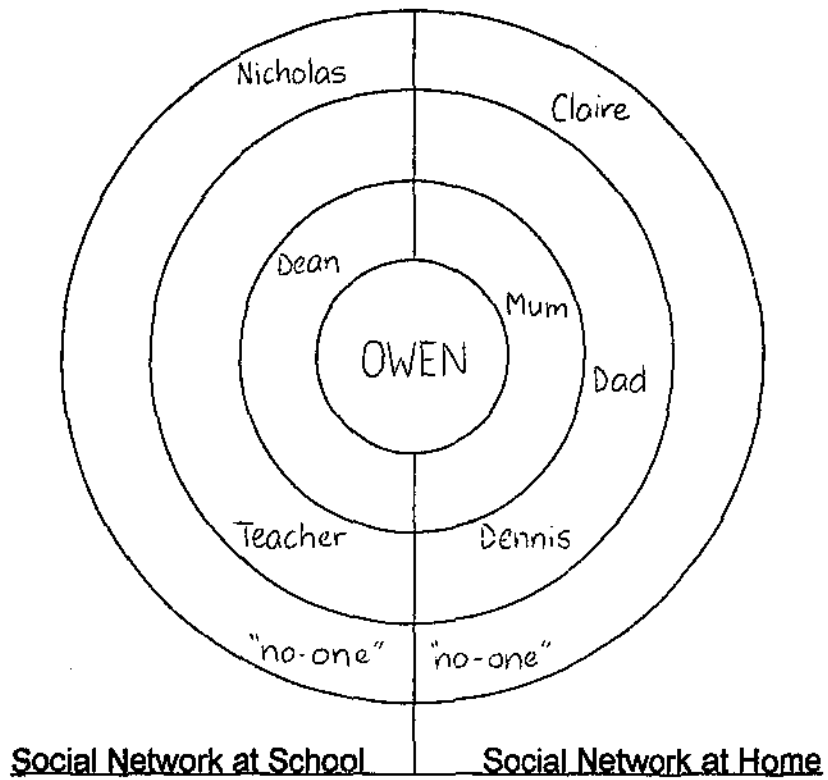


Figure 4-3. Sociogram Of Owen's Social Network.

KEY	
Circle	Total Nominations
1st.(inner-most)	15 or more
2nd.	10 -14
3rd.	5 - 9
4th.	0 - 4

As shown in Figure 4-4, Sian nominated her school friend Leah most often, followed by Violet, Sonia, her brothers and her parents.

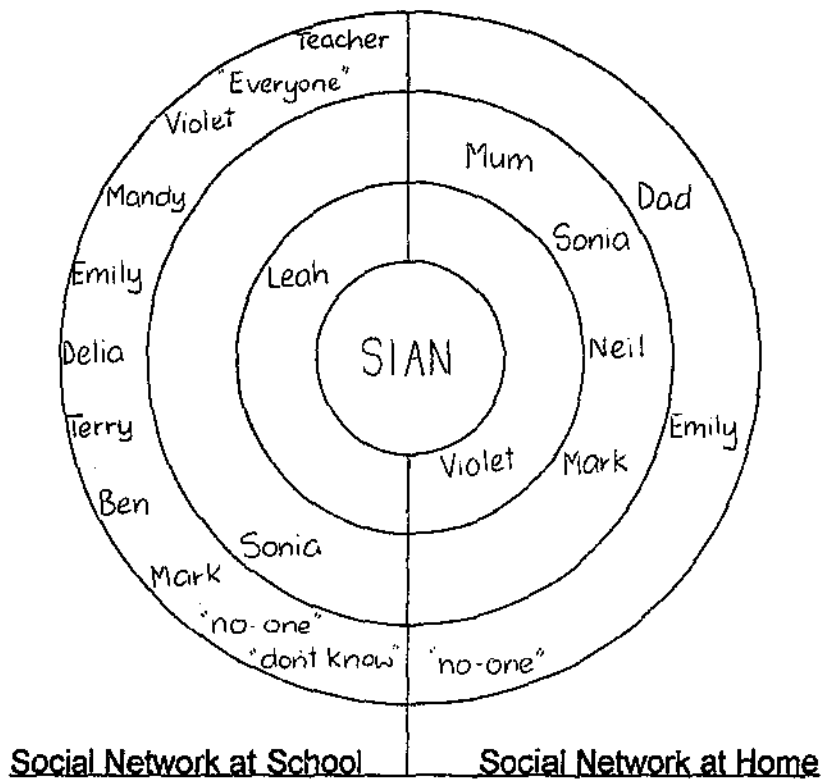


Figure 4-4. Sociogram Of Sian's Social Network.

KEY

<u>Circle</u>	<u>Total Nominations</u>
1st.(inner-most)	15 or more
2nd.	10 -14
3rd.	5 - 9
4th.	0 - 4

As shown in Figure 4-5, Steve nominated his school friend Trent most often, followed by his parents, brothers, teacher and two other friends.

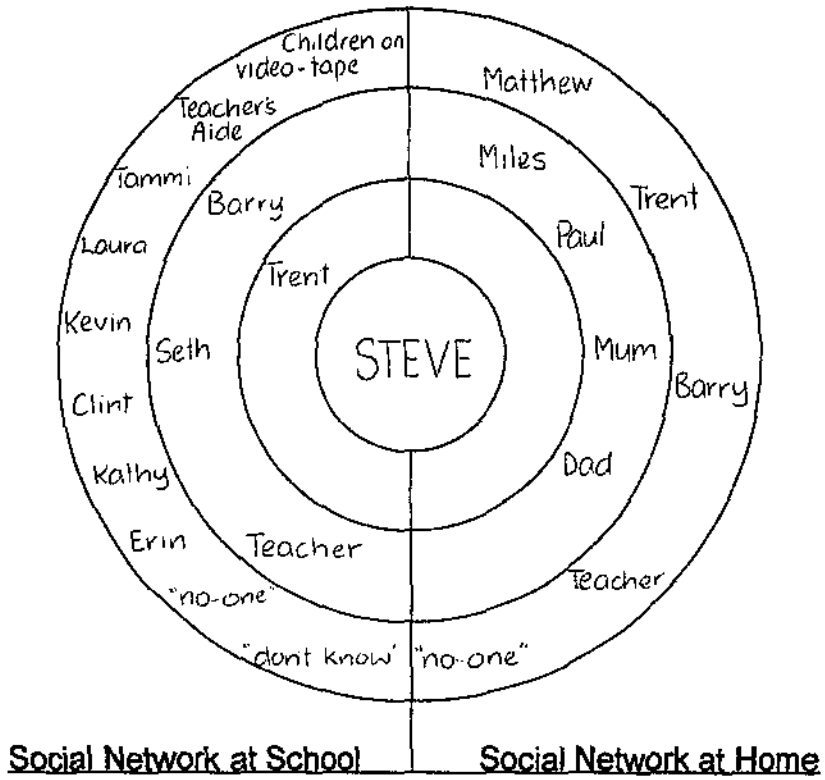


Figure 4-5. Sociogram Of Steve's Social Network.

KEY	
Circle	Total Nominations
1st.(inner-most)	15 or more
2nd.	10 -14
3rd.	5 - 9
4th.	0 - 4

As shown in Figure 4-6, Errol mentioned his mother six times, resulting in her being included in the third circle. The two innermost circles remained void of any personal names. Errol most often indicated he did not know or knew no-one who he could turn to or approach in the given circumstances. No friends were named as being a part of his social network at school. The friend nominated for home was a boy known to the family who came to play with Errol and his two brothers.

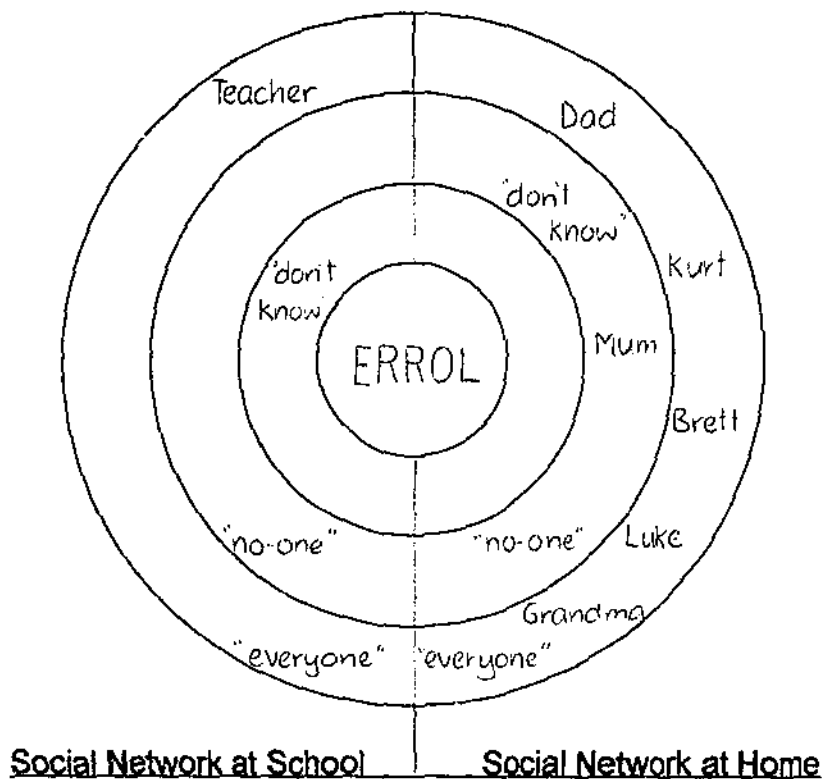


Figure 4-6. Sociogram Of Errol's Social Network.

KEY	
Circle	Total Nominations
1st. (inner-most)	15 or more
2nd.	10 -14
3rd.	5 - 9
4th.	0 - 4

A comparison of the participants' sociograms shows only Tammi had social network members included in all four circles of the sociogram. Eric, Owen, Sian and Steve had social network members in the second, third and fourth circles. Errol had one social network member in the third circle, with the remaining members in the fourth circle.

The single network member nominated most often by each child is listed below in Table 4-3. Of the children in Group One, Tammi's most frequently nominated person was her sister and Eric's most frequently nominated person was his mother. Both were from home-based social networks. The person nominated most often by Owen was someone from his social network at school, namely, his friend Dean. Of the children from Group Two, both Sian and Steve nominated a school friend most frequently. Errol answered "don't know" and "no-one" most frequently. Of the people nominated by Errol, his mother was mentioned most often, yet far less often when compared with the nomination of mothers by the other participants.

Table 4-3

Network Member Nominated Most Frequently

<u>Group</u>	<u>Member</u>	<u>Frequency</u>	<u>Sociogram Circle</u>	<u>Social Network Origin</u>
One				
Eric	Mum	14	2nd.	Home
Tammi	Tess (Sister)	18	1st.	Home
Owen	Dean (Friend)	13	2nd.	School
Two				
Sian	Leah (Friend)	12	2nd.	School
Steve	Trent (Friend)	10	2nd.	School
Errol	Mum	6	3rd.	Home

Table 4-4 lists the five most important people as identified by the participants and represented in the sociograms. All included parents, siblings, peers and teachers. In the absence of siblings, Eric's inclusion of his cousin may equate with the same.

Table 4-4

Five Most Frequently Named People

Eric	Group One		Sian	Group Two	
	Tammi	Owen		Steve	Errol
mother	sister	peer	peer	peer	mother
cousin	sister	mother	peer	father/	father
peer	mother	father	peer	brother	teacher
peer	peer	teacher	brother	peer/	brother/
teacher	teacher	peer	brother/ mother	teacher	brother

All participants included their teachers in their social network at school. The children in Group One referred to their teachers more often than did the children in Group Two as shown in Table 4-5.

Table 4-5

Nomination Of Teachers

Group	Frequency	Sociogram Circle
One		
Eric	9	3rd.
Tammi	11	2nd.
Owen	8	3rd.
Two		
Sian	4	4th.
Steve	7	3rd.
Errol	3	4th.

All participants, except Errol, included peers as members of their social network at school. The peer mentioned most frequently by each participant (excluding Errol) featured in each case in the second circle of the sociogram.

Table 4-6 shows this information and the total number of peers nominated by each participant.

Table 4-6

Nomination Of School Peers

Group	Peer Nominated Most Frequently	Frequency	Sociogram Circle	Total Number of Peers Named
One				
Eric	Frank	10	2nd.	6
Tammi	Zoe	13	2nd.	5
Owen	Dean	13	2nd.	2
Two				
Sian	Leah	12	2nd.	9
Steve	Trent	10	2nd.	9
Errol	No-one	-	-	0

Nomination of parents varied greatly, as shown in Table 4-7. The children in Group One all had their mothers in the second circle of their sociograms. Eric and Tammi nominated their mothers 14 times (15 being the cut-off point for the first circle). Both Tammi's sociogram and Owen's sociogram included their fathers in the third circle. Eric, who lives with his mother, was the only child who did not refer to a father. Of all the participants Steve was the only one to nominate his father more often than his mother. Both of his parents are shown pictorially as being in the third largest circle. For the other children in Group Two, both Sian's sociogram and Errol's sociogram have "Mum" in the third circle, and "Dad" in the fourth circle.

Table 4-7

Nomination Of Parents

Group	Mother		Father	
	Frequency	Sociogram Circle	Frequency	Sociogram Circle
One				
Eric	14	2nd.	0	Not applicable
Tammi	14	2nd.	7	3rd.
Owen	10	2nd.	9	3rd.
Two				
Sian	8	3rd.	3	4th.
Steve	7	3rd.	9	3rd.
Errol	6	3rd.	4	4th.

There does not appear to be a pattern for the nomination of siblings, as shown in Table 4-8. "Sibling 1" on the table denotes the elder and "Sibling 2" the younger of the siblings that were referred to by the participants. Tammi's sociogram was the only one to have siblings included in the first circle. Eric, the only child in his family, did not have siblings to refer to. The sociograms for the remaining four participants include siblings in the third and fourth circles. Neither Owen nor Steve mentioned their youngest siblings during the discussion.

Table 4-8

Nomination Of Siblings

Group	Sibling 1		Sibling 2	
	Frequency	Sociogram Circle	Frequency	Sociogram Circle
One				
Eric *	-	-	-	-
Tammi	18	1st.	15	1st.
Owen	1	4th.	0	-
Two				
Sian	9	3rd.	8	3rd.
Steve	6	3rd.	8	3rd.
Errol	2	4th.	2	4th.

* Eric is an only child.

In addition to members of their immediate families, all participants referred to other people within the home environment with whom they spent time or from whom they received help. No pattern emerges as Table 4-9 shows.

Table 4-9

Nomination Of People Apart From Members Of Immediate Family

Group	Person Nominated Most Frequently	Frequency	Sociogram Circle	Total of Non-nuclear family People Named
One				
Eric	Debbie (Cousin)	13	2nd.	5
Tammi	Ursula/Kaye (Friends)	1	4th.	2
Owen	Dennis (Neighbour)	7	3rd.	1
Two				
Sian	Violet (Ex-neighbour)	10	2nd.	3
Steve	Trent (School friend)	3	4th.	4
Errol	Grandmother/ Luke (Family friend)	1	4th.	2

Summary of responses

Based on results, the children in Group One have a clearer understanding of the roles played by their network members than do the children in Group Two. The children in Group One nominated teachers and mothers more frequently than did the children in Group Two. Steve (Group Two) nominated his father more frequently than his mother. The other children (except Eric in Group One) nominated their fathers less often than their mothers. All participants included parents, siblings, peers and teachers in the group of five people nominated most frequently. The single member nominated most frequently by Eric and Tammi (both in Group One) and Errol (Group Two) came from the home social network. Owen (Group One), Sian and Steve (both in Group Two) most frequently nominated a member from their school social network. The school peer nominated most frequently by the participants (with the exception of Errol in Group Two), featured in the second

circle of the sociograms. No pattern emerged with the nomination of siblings or people apart from immediate family members.

Children's Knowledge Of Their Social Competence

Self-report: Pictorial Scale

The Pictorial Scale of Perceived Competence and Social Acceptance for Young Children (Harter & Pike, 1984) was used to gauge children's perceptions of their acceptance by peers. On the 4-point scale, a score of four indicated a child's perception of being most accepted by peers, and a score of one indicated their perception of being least accepted by peers.

Group One (More socially able children)

Of the children in Group One, Eric scored four for every item indicating, according to the test, he felt most accepted by his peers in each of the six given situations. Tammi scored mainly on the most accepted side with two scores of four and three scores of three. However, she did feel less accepted by peers with regard to others sharing toys and equipment with her. Owen finished with two scores of three, and four scores of one suggesting he felt least accepted by peers when it came to playing with others indoors and out, and concerning others wanting to sit next to him. In Table 4-10 the overall scores tend to show Eric and Tammi perceived themselves as being most accepted by peers, and Owen perceived himself as being least accepted by peers.

Table 4-10

Group One: Pictorial Scale Of Social Acceptance Scoring Sheet

Item	Eric	Tammi	Owen
1. Friends to play with	4	3	1
2. Others share	4	2	3
3. Others sit next to you	4	3	1
4. Gets asked to play by others	4	4	3
5. Has friends on playground	4	3	1
6. Friends to play indoor games with	4	4	1
Total Score	24	19	10
Average Score	4.00	3.17	1.67

Note. Maximum score = 24.

Group Two (Less socially able children)

Of the children in Group Two, Sian had four scores of four indicating she felt most accepted by peers except when it came to others sharing with her and having friends on the playground. Similarly, Steve's scores put him in the most accepted by peers bracket with the exception of item 4 where his response was that he hardly ever got asked by others to play. Errol's scores were mixed. Three scores indicated he felt most accepted by peers, and three scores indicated the opposite. In Table 4-11 the overall scores tend to show Sian and Steve perceived themselves as being most accepted by peers, and Errol perceived himself as being paradoxically both most and least accepted by peers.

TABLE 4-11

Group Two: Pictorial Scale Of Social Acceptance Scoring Sheet

Item	Sian	Steve	Errol
1. Friends to play with	4	4	4
2. Others share	2	3	4
3. Others sit next to you	4	3	2
4. Gets asked to play by others	4	1	3
5. Has friends on playground	1	4	1
6. Friends to play indoor games with	4	4	2
Total Score	19	19	16
Average Score	3.17	3.17	2.67

Note. Maximum score = 24.

Self-report: MESSY

The Matson Evaluation of Social Skills with Youngsters, or, MESSY (Matson & Ollendick, 1988) was used to further explore children's knowledge of their own social competence. The participants responded to 30 items by replying "yes" if the statement described them, and "no" if it did not. For analytical purposes the items have been categorised as either an appropriate social skill, inappropriate assertiveness, impulsive/recalcitrant behaviour or a miscellaneous item. For full details of the interview items and the participants' responses refer to Appendix C.

Of the 16 responses given within the area of Appropriate Social Skill, there were 7 common items to which all six children gave an affirmative answer. These were:

- Do you look at people when you talk to them?
- When someone does something for you do you say "thankyou", and does it make you feel happy?
- Do you know how to make friends?
- Do you stick up for your friends?
- Do you call other people by their names?
- Do you ask if you can help someone?
- Do you feel good if you help someone?

Of the remaining items within the area of Appropriate Social Skills, Sian gave no negative answers, Eric and Tammi each gave one negative answer, Owen gave two negative answers and Steve and Erroi each gave four negative answers. The negative responses are summarised in Table 4-12.

TABLE 4-12

Summary Of Negative Responses For Appropriate Social Skills

Group One Name (More socially able children)		Group Two Name (Less socially able children)	
Eric	-did not help a friend who was hurt	Sian	(No negative answers)
Tammi	-did not walk up to someone and start a conversation	Steve	-did not feel happy when someone did something well -did not look at people when they were speaking -did not feel sorry when he hurt someone -did not join in games with other children
Owen	-did not have many friends -did not tell people they looked nice	Errol	-did not help a friend who was hurt -did not cheer up a friend who was sad -did not walk up to someone and start a conversation -did not join in games with other children

Of the eight responses given in the area of Inappropriate Assertiveness there were six common items to which all the children gave the identical answer of "no". These items were:

- Do you tell lies to get something you want?
- Do you annoy other people to try and make them angry?
- Do you hurt other people's feelings on purpose? (to make them sad)
- Do you tease or make fun of others?
- Do you make sounds that annoy other people? (eg: burping, sniffing)
- Do you speak too loudly?

Of the remaining two items within this area, Sian and Steve (both of Group Two) indicated they would behave inappropriately. Specifically Sian said that she did take or use things that were not hers without permission, and Steve indicated that he did slap or hit people when they made him angry.

The third category of Impulsive/recalcitrant Behaviour had just three items. All six participants indicated they were not "bossy" kind of people who told other people what to do rather than asking them. Of the remaining two items, Errol and Sian (both of Group Two) reported impulsive/recalcitrant behaviour. Specifically, Sian said that she interrupted and spoke when someone else was speaking, and Errol indicated that he grizzled or complained very often, and that he interrupted and spoke when someone else was speaking.

There were three items under the fourth heading of Miscellaneous. Eric and Owen (both in Group One) said that they did not say or do things that made other people laugh. Steve (Group Two) said that he was afraid to speak to people, and Errol (Group Two) said that he did not like to be alone sometimes.

Responses show that the children from Group One, and Sian from Group Two provided most of the responses which indicated they perceive themselves to be quite socially competent. Steve and Errol from Group Two provided fewer of these responses, indicating their perception of their social competence to be slightly lower than that of the other participants. These results are summarised in Table 4-13.

Table 4-13

MESSY Responses Received Indicating Social Competence

Category	Group One			Group Two		
	Eric	Tammi	Owen	Sian	Steve	Errol
1 Appropriate Social Skills (16)	15	15	14	16	12	12
2 Inappropriate Assertiveness (8)	8	8	8	7	7	8
3 Impulsive/recalcitrant Behaviour (3)	3	3	3	2	3	1
4 Miscellaneous (3)	2	3	2	3	2	2
Total	28	29	27	28	24	23

Note. Maximum score = 30.

Dialogue-interviews: Video-taped Vignettes

While watching the video-taped vignettes, the children were invited to comment on various situations in which they might find themselves. The nominated situations included:

- playing with others (joining in someone else's play and withdrawing from a game)
- requesting a piece of birthday cake being shared by a friend
- being annoyed by someone
- sharing toys or equipment (both as the person making the request and as the person being asked by another)
- requesting help from an adult
- attracting someone's attention.

For each of the imagined situations the children were encouraged to use the dolls to act out their responses. The children in Group One used the dolls for seven of their eight responses which was more often than did the children in Group Two. Sian and Steve utilised the dolls for five of their eight

responses. Errol did not use the dolls at all, preferring to respond by using words alone.

The eight questions asked and the participants' various responses are detailed in the tables numbered 4-14 through to 4-21.

Table 4-14

Question 1: "What happens when you no longer want to play by yourself and you want to join in and play with some other children?"

Group	Response
One	
Eric	(Used dolls) "Hello, can I come in? Do you want to come and play with me?"
Tammi	(Used dolls) "Can I please play?"
Owen	(Used dolls) "I want to play with you."
Two	
Sian	"I don't know ... go up and down the slide."
Steve	"Play with them." (Picked up doll) "He'll say, 'Bye-bye'." (The investigator rephrased the situation. Steve pretended the doll was himself talking to his friends) "Do you want to watch T.V?"
Errol	No response was given, verbal or otherwise, in spite of attempts by the investigator to improve the explanation of the nominated situation and encourage Errol to comment.

Table 4-15

Question 2: "If your friend was sharing their birthday cake at school and you missed out on getting a piece but you knew there was still some left over, what would you do?"

Group	Response
One	
Eric	(Used dolls) "Please may I have some cake? Thankyou."
Tammi	"Can I please have some?"
Owen	"Can I have some cake?"
Two	
Sian	"Get some, ask the lady."
Steve	(Used dolls) "Please ... I want to have some cake."
Errol	"Please can I have some?"

Table 4-16

Question 3: "What happens if someone comes up and starts to annoy you?
What do you say and do?"

Group	Response
One	
Eric	(Used dolls) "Get off!"
Tammi	(Used dolls) "Can you please not interrupt?"
Owen	"I'd dob." (When asked who to, Owen named his teacher.)
Two	
Sian	(Used dolls) "Don't do that ... don't do that. Please don't do that."
Steve	(Used dolls) "Go away." (The investigator asked if he would do anything. Steve responded, "Play with them.")
Errol	"[I would] Just move away." (When asked if he would say anything Errol shook his head to indicate "no".)

The participants were asked to nominate the toy they most enjoyed. Reference was made to that toy in the following two situations.

Table 4-17

Question 4: "If someone was using the [name of toy] and you wanted a turn, how do you go about having a turn? What do you say and do?"

Group	Response
One	
Eric	(Used dolls) "Frank, may I please have some blocks?"
Tammi	(Used dolls) "Can I please use it a little bit?"
Owen	"I'd go and tell the teacher if I can have a shot."
Two	
Sian	(Used dolls) "Please can I have a turn?"
Steve	"I want to share ... I want to play with you."
Errol	"Don't know."

Table 4-18

Question 5: "What if you were playing with the toy and another child came to ask you for it, what would you say and do?"

Group	Response
One	
Eric	"Yes."
Tammi	"Yes."
Owen	"Yes."
Two	
Sian	"Yes."
Steve	(He did not answer directly, but through conversation agreed he would share the toy.)
Errol	"I'll give it to him."

Table 4-19

Question 6: "How do you ask someone to help you when you are not sure what to do?"

Group	Response
One	
Eric	"Please can you help me?"
Tammi	"Can you help me?"
Owen	Omitted
Two	
Sian	"I can help you." (Clarification of the situation was given to explain Sian was the one who wanted help.) "I'm stuck."
Steve	"Um ... you can play." (The situation was explained further, however Steve was unable to give a further response.)
Errol	"Don't know." (Following further discussion and attempted clarification of the situation Errol repeatedly shrugged his shoulders to indicate he did not know what to say or do.)

Table 4-20

Question 7: "If you want to talk to the teacher but she doesn't know you are standing there, what could you say or do?"

Group	Response
One	
Eric	"I wait until she is finished, then look at her and talk."
Tammi:	"I would say, 'Can I show you something?', but I won't butt in."
Owen	(Used dolls) "Teacher ... look what I made."
Two	
Sian	"Tap her on the bum [sic]." (When asked what she would do if that did not work, Sian said she would "Turn around", indicating she would move to stand in front of her teacher.)
Steve	Showed the action of tapping a person. When asked what else he could do Steve said, "Go ahind [sic] her ... tap her."
Errol	"Do something else ... a puzzle."

Table 4-21

Question 8: "What do you say or do when you have been playing a game with your friends for a while and you want to do something else?"

Group	Response
One	
Eric	(Used dolls) "Do you want to play something else? ... Building something with the blocks?"
Tammi	(Used dolls) "Do you want to come over and do jigsaws with me?"
Owen	(Used dolls) "I don't want to play this game any more."
Two	
Sian	(After further explanation of the situation, Sian used the dolls and answered.) "I want to do a puzzle, you want to help me to do a puzzle?"
Steve	"I move away ... play with something else."
Errol	"Don't know." (The investigator tried to use the dolls again and elicited a response.) "I don't want to play."

Summary Of Responses

Members of Group One were able to provide clear examples of appropriate social behaviour for all of the nominated situations. At no time was clarification of the investigator's questions nor further explanation of the children's responses required.

Members of Group Two required further explanation for a number of the situations being discussed and did not always respond with appropriate forms

of behaviour. For example, before answering question 6, the children watched a boy on the video who was at an activity centre with a few of his friends. The commentary for the vignette went along the following lines "...This boy has come to do some craft. The other children are cutting out paper teddy bears and gluing clothes on them. Do you see them? This boy has come to do the activity, but he is not sure what to do. Can you see? He is looking at what the other children are doing ... then looking at his paper and scissors. He is really not sure what to do. (Video was paused). If you are not sure about how to do something, who do you go to for help? (Child named someone from their social network). How do you ask someone like (person's name) to help you?" For this particular question, the responses from Group Two were as follows. Sian initially responded with, "I can help you." Clarification of the situation was provided, with an emphasis on Sian being the one who was to ask for help. She then offered the response, "I'm stuck", which may be a relevant comment to make, but was not a specific request for help. Perhaps Sian felt her cue would be sufficient to elicit the help she needed. In any respect, Sian's response could not be considered entirely appropriate.

Steve's answer to question 6 was, "Um ... you can play." No further response was forthcoming, in spite of attempts to clarify the situation. Errol's reply was "Don't know." During further explanation of the situation Errol repeatedly shrugged his shoulders and offered no other comments.

Another example of Group Two providing responses of socially inappropriate behaviour is seen in question 7. The children were asked what they would say and do if they wanted to talk to the teacher, but she was unaware of their need. Sian and Steve both said they would tap her from behind. Sian indicated that she would also move to stand in front of her teacher. Errol replied that he would "do something else", such as a puzzle. None of these behaviours would guarantee securing the teacher's attention. By contrast, all of the children in Group One demonstrated they would wait for

an appropriate pause and then speak directly to the teacher. They also included a visual point of contact that would be made with the teacher.

In summary, the various responses given by the participants showed that they were able to provide information about their social behaviour in relation to the nominated situations. Errol was the only participant who was unable to supply information for all of the situations. As shown in Table 4-22, the children in Group One provided all socially competent responses, and the children in Group Two provided less examples of socially competent behaviour.

Table 4-22

Number Of Responses Describing Socially Competent Behaviour

Group	Number of Responses Provided
One	
Eric	8
Tammi	8
Steve	7 *
Two	
Sian	5
Steve	3
Errol	4

Note. Maximum score = 8.

* Question 6 was omitted.

Table 4-23 shows the children's responses for the three forms of assessment which describes their knowledge of social competence as high or low. Overall Eric and Tammi described themselves as being more socially able, Steve and Errol described themselves as being less socially able, and Owen and Sian were mid-way between the two groups.

Table 4-23

Compilation Of Responses Indicating Knowledge Of Social Competence

<u>Group</u>	<u>Pictorial Scale</u>	<u>The MESSY</u>	<u>Vignettes</u>
One			
Eric	High	High	High
Tammi	High	High	High
Steve	Low	High	High
Two			
Sian	High	High	Low
Steve	High	Low	Low
Errol	Low	Low	Low

Links Between Knowledge And Behaviour

Observations focused on participants' behaviour with respect to responses made by the participants about their knowledge of their own social competence. Observation methods included using observation schedules to make frequency counts of targeted behaviours related to the MESSY self-report, and recording field notes of general social behaviour observed. The results will now be discussed and aligned with the children's reports of their behaviour.

Observation Schedules

Observations were made of the participants' behaviour to determine the extent to which children's reports aligned with classroom reality from the observer's point of view. Observation schedules were compiled based on questions featured in the MESSY self-report. The first set of social behaviours targeted for observation were:

- use of eye contact (while speaking and while being spoken to)
- interrupting when others were talking
- saying, "thankyou"
- making an offer to help someone in need

Appendix D details the complete observation schedules for weeks one and two.

The second set of social behaviours targeted for observation were:

- telling others what to do (rather than asking them)
- initiating conversation
- using names
- joining in games

Appendix E details the complete observation schedules for weeks three and four.

Eye-contact

All six participants indicated in the MESSY self-report that they used eye contact when speaking to others. Observations revealed all the participants used eye-contact more often than not, confirming the response given during the interview. Table 4-24 shows a summary of the occurrence of the targeted behaviour.

Table 4-24

Instances When Eye-contact Was Used While Speaking

<u>Group</u>	<u>Eye-contact was used</u>	<u>Eye-contact was not used</u>
One		
Eric	20	1
Tammi	24	3
Owen	27	11
Two		
Sian	21	1
Steve	26	9
Errol	9	3

All the participants except Steve (Group Two) said they looked at people when they were being spoken to. These responses were confirmed during observation as summarised in Table 4-25. Of the 21 times an adult or peer spoke to Steve he did not engage in eye-contact for 13 of those times. The remaining five participants used eye-contact more often than not, with Sian and Tammi being observed as using eye-contact in every instance.

Table 4-25

Instances When Eye-contact Was Used While Being Spoken To

<u>Group</u>	<u>Eye-contact was used</u>	<u>Eye-contact was not used</u>
One		
Eric	15	1
Tammi	21	0
Owen	14	4
Two		
Sian	14	0
Steve	8	13
Errol	10	2

Interrupting others

Responses by Tammi and Owen (both of Group One) were consistent with observations made of their behaviour. Sian and Errol (both of Group Two) indicated during the MESSY self-report that they interrupted and spoke when someone else was talking, but the children were not seen interrupting others. Such an observation neither refutes nor confirms their interview response. Interruptions took place when Eric (Group One) interrupted the teacher twice, and Steve (Group Two) interrupted the teacher's aide who was speaking with another student. These observations did not conform with their interview responses.

Saying "thankyou"

All six participants indicated they said "thankyou" when someone else did something for them. With the exception of Errol (Group Two), all children

neglected to say "thankyou" at least once. Errol, seemingly, did not have occasion to say "thankyou" thereby neither confirming nor discrediting his interview response. The instances when the participants had occasions to say "thankyou" but did not, included receiving a piece of fruit, a drink of water, a pencil, help to cut tape, help to tie on costume hood and help to do an activity.

Offering help

In response to the question "Do you ask if you can help someone?" all six participants said "yes". Tammi (Group One), Sian and Steve (both of Group Two) were all observed offering help to peers, thus confirming their interview responses. Eric, Owen (both of Group One) and Errol (Group Two) were not observed offering to help others, thereby neither confirming nor discrediting their interview responses.

Telling others what to do

During the MESSY self-report, all the participants indicated that they did not tell other people what to do in preference to asking them. This was observed to be the case for all children except for Owen (Group One) who on two occasions "gave orders to" rather than made requests of his peers. (These two instances are detailed in the section entitled Field Notes).

Initiating conversation

Tammi (Group One) and Errol (Group Two) were the only ones who indicated during the MESSY self-report that they would not walk up to someone and start a conversation. Observations revealed that all children except Errol did, hence confirming interview responses from all participants except Tammi.

Using names

All six participants indicated during the MESSY self-report that they called other people by their names. Observations were able to confirm this response for every child except for Errol (Group Two) who was not observed using anybody's name.

Joining in games

When asked in the MESSY interview if they joined in games with other children, all participants except Owen (Group One) and Errol (Group Two) responded affirmatively. Observations verified responses from Tammi (Group One), Sian, Steve and Errol (all of Group Two). Owen's response was not verified because he was observed on four separate occasions joining in games with other children. Observations were unable to confirm or discredit Eric's (Group One) response.

A summary of instances when observations of the participants' behaviour reflected their responses given during the MESSY self-report about knowledge of their own social competence is shown in Table 4-26. Sian and Errol were observed to behave in the greatest number of ways which reflected their knowledge about their own social competence as communicated using the Messy self-report, followed by Tammi and Steve, then Eric and Owen.

Table 4-26

Instances Where Observed Behaviour Aligned With Knowledge Expressed Concerning Social Competence

<u>Observed Behaviour</u>	<u>Number of Instances</u>					
	<u>Group One</u>			<u>Group Two</u>		
	<u>Eric</u>	<u>Tammi</u>	<u>Owen</u>	<u>Sian</u>	<u>Steve</u>	<u>Errol</u>
Behaviour reflected knowledge about social competence	4	6	4	7	6	5
Behaviour did not reflect knowledge about social competence	3	2	3	1	2	1
Opportunity was not presented	1	0	1	0	0	2

Field Notes

Many instances were observed where the participants engaged in social interactive behaviours which reflected their knowledge of their social

competence. On other occasions the participants engaged in social interactive behaviour not consistent with the information they gave about themselves. Some of the details taken from the field notes are summarised below for each child separately, and elaborate on information already presented in the observation schedules, while additional examples of observed behaviour relate to various discussion points taken from the Pictorial Scale, the MESSY, and the video-taped vignettes.

Group One (More socially able children)

ERIC

Eric appeared to have numerous friends to play with. He included himself in the play of others often, for example, in the sandpit he moved between and joined in with various groups of children who were digging and playing in the sand. Eric played alone periodically, for example, he pushed a bulldozer by himself around the perimeter of the sandpit a number of times.

Eric initiated conversations regularly. For example, during one particular fruit time, Eric began conversations with the teacher, the teacher's aide, Ben, Adam and Simon, and made incidental comments to other peers seated nearby.

On no occasion was Eric observed annoying, teasing or making fun of other children. He was seen playing and talking with all the children he had nominated as being his friends. Most of the behaviour observed aligned with the information Eric gave about his own social behaviour.

TAMMI

Tammi was observed playing by herself, playing with one friend, and with a group of friends on various occasions. These instances served to confirm comments made earlier by Tammi about the people she played with, namely that she had "quite a few friends to play with outside", "lots and lots of friends to play with inside", and that she sometimes liked to play alone. The

two peers Tammi spent most time with were Zoe and Erin, the ones identified on Tammi's sociogram as being "closest" to her.

On one occasion, Tammi had been playing with a group of children and chose to move away and ask a boy who was playing alone if she could join in with him. He replied that he did not want her to play with him, and Tammi moved away to play by herself. Such behaviour reflected earlier comments made by Tammi that if she wanted to join in the play of someone else, she would ask.

Tammi was observed offering to help a peer with an indoor activity. As discussed earlier, Tammi had said she would ask if she could help someone. She also initiated numerous conversations with others, and almost always engaged in eye-contact while speaking and being spoken to.

During the final period of observation, Tammi and Zoe appeared to have a disagreement. Tammi was playing on the swing when Zoe came up for a turn. Tammi refused to get off, at which point Zoe announced, "I won't be your friend!" Tammi got off the swing but walked away apparently upset and found something else to play with. Zoe left the ladder too but kept away from Tammi. Tammi went to the sandpit, called out to Zoe, got no response, ran back to the swing, then back to the sandpit and sat on the crane. She dug in the sand very briefly with Mia, then Zoe came across and Tammi and Zoe left the sandpit holding hands. They headed for the grassed area to find flowers which they picked and "planted" in the sandpit to make a garden.

An examination of this sequence of events serves to highlight a few interesting areas. Tammi's relinquishment of the swing (although followed by her initial refusal to share) supported the comment made by her that she would share when asked and find something else to do. It would be informative to know if Tammi's decision to get off the swing was influenced by Zoe's threat not to be her friend, and if getting off the swing was not so much "sharing" as it was removing herself from Zoe's presence. Of further interest is the manner in

which the conflict was resolved. Tammi's behaviour was consistent with comments made by her during earlier discussions in that she did not slap or hit a person who made her angry, and that she did not tease or make fun of her friend. It did not appear that Tammi used the situation to annoy Zoe or make her angry. The swift resolution may confirm Tammi's self recognised ability to make friends. No behaviour was observed which conflicted with the information Tammi gave about her own social behaviour.

OWEN

Owen had indicated a number of times during discussions that he did not have many friends. These comments were confirmed by observations of Owen interacting almost exclusively with Dean, the classmate nominated most often in his social network at school. He played with groups of peers, but only when Dean was a part of the group, and even then, most of his comments were directed towards Dean. When Owen joined in play with other children he was observed joining in, but not asking as he had described during the discussion about playing with others. His comments about playing alone were unable to be confirmed as he was not observed playing alone at any time.

Owen's use of eye-contact during verbal exchanges accurately reflected the information he provided about himself, as did his ability to initiate conversations with others.

During earlier discussion Owen had indicated that he was not a "bossy" kind of person who told rather than asked people to do something. On two occasions, however, Owen did actually instruct other children on certain matters, rather than ask them. The first of these occasions was when Owen and a few other boys were playing with the train set. Owen removed a few carriages from another boy's train and told him he had too many. The boy protested and tried to get the carriages back but Owen insisted they should be shared. Then, against the boy's wishes, Owen distributed the carriages to other boys sitting in the group. The second occasion was when Owen and

three other children were called to the dental room for a check-up. While in the waiting room, all four children looked at the posters on the walls and talked about them. After a short time Owen announced loudly, "That's enough talking!", and the other children responded by keeping quiet for a little while. Apart from these two occasions when Owen told rather than asked people to do something, all other behaviours observed harmonised with the information Owen had given about himself.

Group Two (Less socially able children)

SIAN

At times Sian played alone and at other times she played with her peers. Of the three 15 minute periods of sandpit play observed, Sian spent the first and the third of those periods digging in the sand alone. During the second of those periods, Sian asked and was permitted to join in the play of a group of about five peers.

Sian initiated numerous conversations although mainly with adults. The bulk of her verbal interaction with peers took place during one instance in the sandpit. The other exchanges with peers were isolated instances only. Sian nearly always used eye-contact when she engaged in conversation with others.

Sian had indicated earlier that she would offer to help someone. Such behaviour was witnessed when she offered to help a girl who was attempting to dig a large hole in the sandpit.

Sian had mentioned that she had many friends, yet during the total four hours of observation Sian was seen only once playing and conversing with a group of her peers (in the sandpit as already detailed.) Most of the time Sian played alone, sat alone, and had minimal interaction with others. Sian did not appear to have "lots and lots of kids" wanting to sit next to her as she had indicated during the Pictorial Scale discussion, nor was she observed on any occasion being invited by others to play.

Sian's behaviour mainly reflects the information she gave about her own social behaviour, apart from the information she gave about her friends.

STEVE

Trent was nominated by Steve as being the friend with whom he spent most time and observations confirmed this to be the case. Steve's responses given during earlier discussions indicated that Steve felt he had many friends to play with indoors and outside and he was observed interacting with many of his peers.

Steve approached others and joined in their play, but he did not engage in any one activity for more than a few minutes. Instead he moved between a number of activities for relatively brief periods of time. Steve had mentioned earlier that he was hardly ever asked by others to join in their play, and this comment was confirmed by the observations.

When approached by others who wanted to join in his play, Steve seemed willing to incorporate them into his games. For example, Steve moved across to play alone in the home corner and shortly after, a boy and a girl asked if they could play too. Steve said they could and explained he was getting food ready for a party. The three children then pretended to cook together. Another example was when Steve wanted to be "the teacher", and sat on the teacher's chair holding a set of flash-cards. One by one, five children sat on the floor in front of the chair to be the "students". After just a few minutes of playing, the five children all drifted away one by one to do something else, leaving Steve sitting quietly on the chair.

When answering the MESSY self-report, Steve had responded that he looked at others when he was talking, but not when he was being spoken to. Observations confirmed these comments.

Steve had made two seemingly inconsistent comments regarding his ability to interact verbally. He had said he would initiate conversations with others, yet he felt he was afraid to talk to people. During observation, Steve's

behaviour tended to reflect the former and not the latter comment as he engaged in numerous conversations with teachers and peers, and initiated many of them himself.

During observation it seemed that Steve had trouble dealing with situations in which he felt threatened, and in which things did not go his own way. On each of the four occasions Steve was observed, there was at least one instance when Steve came up against some kind of conflict. For example, on two different occasions, Steve was digging in the sandpit with a group of peers when a comment or suggestion was made with which he did not agree. His typical coping strategy was to remove himself from the group and the situation, and go away by himself somewhere. After some time alone Steve would rejoin the group or find something else to do. On two occasions Steve appeared to be upset by comments made by staff members. In both instances he used the same coping strategy of withdrawal, then getting on with something else. Once when at the "withdrawal" stage, a peer came up to console Steve, whose reaction was to shout at the boy. Steve remained by himself for a few minutes longer, then went back to playing with his friends. Steve's behaviour mainly reflected the information he gave about himself.

ERROL

Errol appeared to have few friends, and he engaged in minimal interaction with others. During the first observation period Errol spoke a number of times to Jesse and mainly while they ate lunch. Errol spoke just one word to the teacher during the second and fourth observation periods, and he remained completely silent for the third hour long observation period. Such behaviour reflected the comment Errol made about himself in that he would not walk up to someone and start a conversation. Observations revealed a heavy reliance on non-verbal signals, including shrugging his shoulders, nodding and shaking his head. Such non-verbal behaviour was often used instead of making verbal replies. Regarding use of eye-contact, Errol nearly always

looked at people when he did speak to them, and when he was being spoken to, which confirmed information he had provided earlier.

Errol's behaviour reflected most of the comments made concerning playing with friends. He had indicated that he had "lots and lots" of friends to play with, yet said he had "hardly any friends to play with outside", and that "no-one plays with me." The one instance when he was seen playing with a peer outside, and then only briefly, was with Jesse. The two boys had been talking and playing on the grass for about 5 minutes when Errol grabbed Jesse by the arm and swung him to the ground. Jesse picked himself up and walked away, apparently in an upset state. Errol watched him go, and then walked in the opposite direction. He lay down by himself on the ground for a couple of minutes, then went to sit inside a cement tunnel in the playground. Nicholas entered the tunnel shortly after, put thumbs in each ear and wiggled his fingers teasingly at Errol who watched and continued to sit silently. Nicholas then spat on the ground beside Errol and walked away. Errol left the tunnel and moved across to the play dough table which was set up just outside the classroom. He began to play with some play-dough but did not talk to anyone. He remained there for the rest of the play session until all children were called to go inside.

The scene with Nicholas seems to align with Errol's comments concerning his strategy for dealing with people who annoyed him. During an earlier discussion, Errol had indicated that in such a situation he would just move away.

When describing himself, Errol had said he had only "a few friends to play games with inside", he would not join in games with other children, and that no-one would ask to join in with his play. All of these comments were supported by observations of Errol generally playing alone. However, he had said that he was usually asked by others to play. On no occasion was this

observed. On the whole, Errol's behaviour mainly reflected the information he gave about his own social behaviour.

Summary Of Observed Links Between Knowledge And Behaviour

The social behaviour of the participants mainly reflected the information they had given about themselves. The two exceptions were the instances when Owen told, rather than asked, his peers to do something, and that Sian appeared to have fewer friends than she claimed. In all other respects it appears that the six participants behaved in ways which corresponded with the knowledge they shared about their own social competence.

Investigation Into The Techniques Used

This next section looks at the effectiveness of the various techniques used in assisting the participants to articulate their knowledge about their social network and social competence.

Knowledge Of Social Network

Colouring-in activity: Gingerbread people

The outlines of gingerbread people coloured by the children to depict members of their social network were useful in assisting the children in the identification of members of their network. The figures provided an initial means of focusing the children's thoughts onto the people they knew who provided various kinds of help, and they were a useful way of connecting the first and second sessions. It was anticipated that the participants might add to the gingerbread people network during the second session, however that did not eventuate, possibly due to the attention demanded of the children while viewing and discussing the video-taped vignettes.

Dialogue-interviews: Video-taped vignettes

The video-taped vignettes were a highly effective means of assisting children to articulate their knowledge. All the participants responded well and demonstrated an understanding of what was taking place on the screen by asking relevant questions and making appropriate responses. For example,

participants expressed sympathy with a child on the video who had worked on building a tower of blocks only to have them knocked down by a peer. All participants except Steve were able to attend fully for the duration of the video viewing session. Steve became distracted towards the end of the session, rolling on the ground and watching and commenting on staff and children who passed through the room.

Knowledge Of Social Competence

Self-report: Pictorial Scale

The Pictorial Scale of Perceived Competence and Social Acceptance for Young Children (Harter & Pike, 1984) was selected because of the appropriateness of the pictorial representation for use with pre-school children. The pictures were easily understood by the participants and seemed appropriate for use with children at the pre-operational stage as described by Piaget (Craig, 1986). Two versions of the pictures were available with the gender of the target child differing so that one set was appropriate for males and one for females. The large and small circles drawn below the pictures were an effective way of having the participants indicate the extent to which they identified themselves with the target child depicted.

The Pictorial Scale was not scored for statistical purposes as the investigator was not interested in quantifying the answers, but in triangulating between all data collected. The scale was a valuable means of finding a way into the area of children's knowledge about their social competence, and was useful in guiding conversations.

Criticism made here of the Pictorial Scale include the limited number of identified situations, and the interpretation of the scores. Of the six items featured, four dealt specifically with the number of friends the child felt they had, the options being "lots and lots", "quite a few", "a few", and "hardly any". The subsequent interpretation of the scores involved judging a child's

perception of acceptance by peers according to the number of friends they had.

Self-report: MESSY

According to the authors of the MESSY, "[the assessment] has been the most heavily researched social skills checklist with children. The initial sample studied included 744 children and youths between 4 and 18 years of age." (Matson & Ollendick, 1988, p 20). The participants were able to respond to every item with further clarification required for a few of the items, however, the format did not seem to be entirely appropriate for use with pre-school children because it was largely abstract in form. For each item read aloud to them, the participants responded with "yes" if the description fitted, or "sounded like" them and "no" if the item did not. While this may seem a clear way to express each item, it is questionable whether the children accurately reflected and reported on their own behaviour, or merely supplied what they thought might be the "expected" answers.

As with the Pictorial Scale, the MESSY scores were not used for statistical analysis, but to triangulate between other data collected. The MESSY items were useful in structuring conversations regarding children's knowledge about their social competence, and were used to guide observations.

Dialogue-interviews: Video-taped vignettes and dolls

As was the case with discussing knowledge of the social network, the video-taped vignettes were appropriate for assisting children to articulate knowledge about their social competence. The children were able to relate the scenarios to their own experience. In most cases the dolls were used spontaneously to play out the children's own imagined responses. Errol alone appeared to find it difficult to respond using the dolls and elected not to use them.

Summary Of Perceived Efficacy Of Techniques Used

In summary, the techniques used to assist children to articulate knowledge about their social network and social competence were considered to be appropriate and successful. The visual props and concrete props were useful in focusing children's attention. The self-reports guided conversations and the dialogue-interviews were an effective means of obtaining comprehensive data from the participants. The video-taped vignettes were particularly helpful in eliciting responses from the children.

Chapter Five

Discussion

The question posed at the beginning of this study asked why some young children will actively seek help, while others will not. Results from this investigation support the proposition that young children's knowledge of their social network and their social competence is related to their social behaviour (Gamble & Woulbroun, 1995; Dubow & Ullman, 1989; Bye & Jussim, 1993). In addition, the investigation explored ways of helping young children articulate their knowledge concerning the abstract concepts of social networks and social competence.

The results show that the participants articulate some important knowledge about their social network and social competence, a finding consistent with that of Gamble and Woulbroun (1995), who found young children are cognitively able to articulate knowledge about the abstract concepts regarding their social worlds. Further, the results of this study show important links between young children's social knowledge and their social behaviour, concordant with Bye and Jussim's (1993) proposition that social knowledge and social behaviour are related. The children were assisted in the articulation of their knowledge by the various data collection methods employed. These included self-reports and dialogue-interviews which used visual and concrete props. Summaries of these findings are discussed with the main focus being on the links between young children's knowledge of their social network, their social competence and social behaviour.

Children's Knowledge Of Their Social Network

In the words of Feiring and Lewis (1984), "from the moment of birth the child is embedded in a large social network, the fabric of which is made up of many people, functions, and situations" (p. 59). Each participant in the present

study was able to articulate knowledge concerning their social network. The children identified people they knew who could be turned to or relied on in given situations.

Accuracy Of Knowledge

The results found that the children in Group One (who were identified as being more socially able), had formed more accurate knowledge of their social networks than the children in Group Two (who were identified as being less socially able). There were no apparent inaccuracies in knowledge for the children in Group One (Eric, Tammi and Owen), but inaccuracies in knowledge were evident for all the children in Group Two (Sian, Steve and Errol).

Sian evidenced inaccurate knowledge by including Sonia and Violet in her social network at school and at home. These neighbours were no longer part of her life as they had moved, but perhaps Sian had not fully dealt with the departure of two friends from her life. In reminiscing about the past Sian may have had difficulty, as young children do, in separating fantasy from reality (Black et al. 1992). In addition, Sian may not yet have had a fully developed understanding of the concept of time, and may have been confusing past and present experiences.

On four occasions Steve included the children on the video-tape, whom he did not know, as being members of his social network. As with Sian, Steve may have been experiencing difficulty in discerning between fantasy and reality, in spite of the investigator's attempts to explain that the children were not known to Steve and were from a different school.

The frequency of the answers "I don't know" and "no-one" used by Errol indicates either he had limited knowledge of his social network, or that he was articulating his perceptions as honestly as he was able. Errol's limited ability to identify network members may suggest he did not yet have the cognitive skills required to recognise and nominate all of his network members. In addition to cognitive development, consideration should be given to Errol's psychosocial

development. Erikson identified the first year of life as being a critical time for the emergence of a sense of trust, the "primary psychosocial task", which affects later development of personality (Black et al. 1992, p. 147). If unsuccessful resolution of early psychosocial stages has occurred, Errol's development may be characterised by a sense of mistrust, shame and doubt, and guilt, impeding his social interaction with others and consequently the development of his social knowledge (Black et al. 1992). Errol's relationships at home are a matter of conjecture as this study did not investigate this context.

In summary, the children in Group One have formed more accurate knowledge of their social networks than the children in Group Two. One explanation may be to do with the links between different developmental domains as described by Santrock (1994), who states, "socio-emotional processes shape cognitive processes ... cognitive processes promote or restrict socio-emotional processes" (p. 18). The children in Group One may have further developed cognitive processes, including language, resulting in more accurate social knowledge and a greater ability to articulate that knowledge. Comparatively, the children in Group Two may have lesser developed cognitive processes, resulting in less accurate social knowledge and a lesser ability to articulate that knowledge. The significance of this finding serves to reinforce the importance of studying and promoting aspects of children's development while maintaining a picture of the whole child, that is, not to separate the different areas of development, but to consider the inter-relatedness of children's cognitive and social development (Santrock, 1994). This is consistent with the Vygotskian notion that an individual's cognitive development may not be isolated from their social and cultural contexts (Santrock, 1994).

Naming Of Social Network Members

No consistent pattern was evidenced in the naming of social network members, unlike those found in previous studies. For example, Dubow and Ullman (1989), found the three most frequently named network members were mothers, fathers/peers, and siblings/grandparents/teachers. Similarly, Reid et al. (1989) recorded mothers as the best overall provider. Gamble and Woulbroun (1995), found mothers were named most often, and fathers less often. However, with respect to fathers, these authors noted that a significant number of children in the study had little or no contact with their fathers, resulting in mothers and siblings taking on added importance in the father's absence. Furman and Buhrmester (1985), found children rated mothers and fathers as most important, followed by grandparents and siblings, friends, and teachers.

In the present study, mothers were nominated by all participants, but were not always named most often as in other studies. Two of the six participants (Eric from Group One, and Errol from Group Two) nominated their mothers most frequently. Of the remaining children, Owen and Tammi from Group One ranked their mothers in second and third place respectively, and Sian and Steve from Group Two ranked their mothers in equal fifth, and equal sixth place respectively.

Grandparents did not feature as highly in this study as they have in other studies (Dubow & Ullman, 1989; Furman & Buhrmester, 1985). Errol was the only participant to refer to a grandparent. This may have been a result of the small sample size, and possibly the situations discussed did not lend themselves to the participants including grandparents in their answers.

Siblings and peers were frequently mentioned as social network members, an observation shared to some degree by other studies with pre-primary children (Gamble & Woulbroun, 1995) and older children (Dubow & Ullman, 1989; Furman & Buhrmester, 1985). Owen (Group One) made no

mention of his one-year-old brother during any of the discussion times, and Steve (Group Two) did not include mention of his new born sister at any time. Possibly Owen and Steve did not yet perceive their youngest siblings as being a source of help or companionship. Eric, as an only child in the family, did not refer to siblings but cousins with whom he has regular contact.

It is somewhat surprising that the young children in this study named their teacher as a source of support infrequently, but this finding aligns with findings of other studies with pre-primary children (Gamble & Woulbroun, 1995) and older children (Furman & Buhrmester, 1985). The children in Group One referred to their teachers more often than did the children in Group Two, suggesting that the more socially able children knew more about the kinds of support offered by teachers, and knew how to access teacher support. As suggested by Gamble and Woulbroun (1995), young children may not know how to make use of their teachers as a source of support, a notion supported by the findings of this study, particularly with regard to the children in Group Two. An implication from this finding is that young children may need to be taught how to make use of their teachers as a source of support, and taught how to access that support. Gamble and Woulbroun (1995), suggest assisting children in a better understanding of accessing support from teachers may prove beneficial in times of severe stress. Teachers need to understand the kinds of life adjustments and stressful situations that face many young children in the 1990s.

The finding by Dubow and Ullman (1989), that females include more members in their social network than males could not be supported by the present study, and this may be due to the small sample size. Nor could the statement by Furman and Buhrmester (1985), that girls have a heavier reliance than boys on a "best friend", which again may be a factor of the sample size. With the exception of Errol, all participants, both male and female, nominated one particular peer more frequently than all other peers,

perhaps indicating that both the boys and the girls relied on a "best friend". Errol's inability to nominate school peers may have been related to his limited interactions with others, as Santrock (1994) writes, "being a good play-mate" is an influential factor in the development of friendships during childhood (p. 473). Durability of friendships is thought to increase as children reach the ages of 4 and 5 and as their cognitive and social development increases (Black et al. 1992). Possibly as Errol's cognitive and social skills undergo further development he may build friendships with others and come to recognise particular peers as being his friends. Errol may require specific intervention to assist in furthering the development of his cognitive and social skills.

Size Of Social Network

It has been suggested that larger networks are more supportive than smaller ones, the belief being that a greater number of social ties ensures greater availability of support (Dubow & Ullman, 1989). This view has received criticism (Dubow & Ullman, 1989), due to the absence of findings which relate the sheer size of one's network to the availability of social support.

Results of the present study suggest that the "ideal" network may not be dependent upon the number of identified members, but upon the relationships with those members. Owen (Group One), for example, had a comparatively small network, yet his responses indicated he knew his network to be supportive. Figures 5-1 shows all but two of the network members identified by Owen are positioned in the second and third circles, indicating a high level of perceived familiarity with them, and an awareness of their abilities and availability.

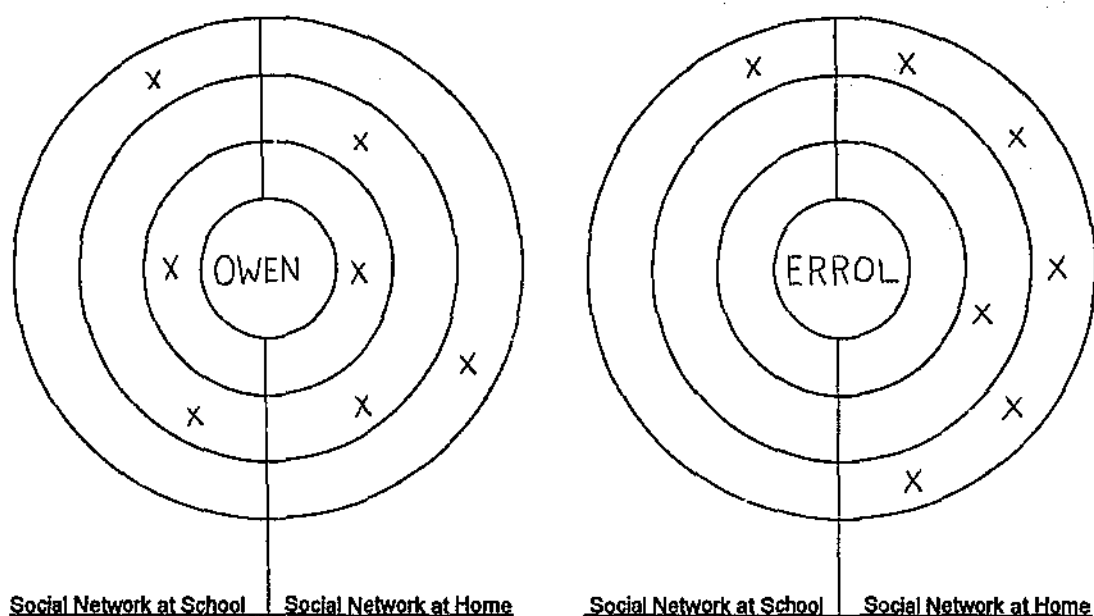


Figure 5-1. Comparison Of Sociograms For Owen And Errol.

KEY (x = a network member)	
Circle	Total Nominations
1st.(inner-most)	15 or more
2nd.	10 -14
3rd.	5 - 9
4th.	0 - 4

In almost all of the situations discussed Owen identified network members he knew he could turn to or rely upon to fulfil his needs. The exceptions were that he preferred to talk with "no-one" when he was feeling angry, and that "no-one" would give him hugs at school. It is inferred that Owen knew his small social network to be highly supportive. Owen's reliance on a select few individuals may perhaps be reinforced by the satisfaction with the support received from them, and by positive relationships shared with those members.

Like Owen, Errol (Group Two) had a relatively small social network, but several distinct differences emerge when comparing Owen and Errol's knowledge. Owen knew his network to be supportive, Errol did not, and this was shown when Owen identified network members for the majority of the situations discussed, but Errol indicated he did not know anyone, or knew "no-

one" for the majority of the situations. In contrast to Owen's sociogram, Figure 5-1 shows Errol's sociogram is characterised by an absence of "close" members. The inner two circles of the diagram are void of any names, his mother is included in the third circle, and the remaining members are positioned in the outermost circle.

Errol's apparent isolation may indicate a lack of knowledge about his social network, and this means he did not recognise the support offered by his social network members. Another explanation may relate to the concept of incongruity, which is described by Shumaker and Brownell (1984), as being a mismatch between the perceived needs of the recipient (in this case Errol), and the responses given by the provider, that is, a member of his social network. Such a mismatch may occur when the recipient is unable to provide information about their needs to the provider, or when the recipient lacks interpersonal skills necessary for accessing support from a network member (Cassidy & Asher, 1992; Jones, 1985).

Children's Knowledge Of Their Social Competence

It has been established that secure relationships (particularly in the home) and the frequency of social interactions are linked to higher levels of social competence (Rubin, 1982; Waters et al. 1979; Lieberman, 1977). In recent times investigations into social relationships have incorporated techniques to investigate children's knowledge of their social competence (Dubow & Ullman, 1989; Gamble & Woulbroun, 1995).

Renshaw and Asher (1982), discuss the advantages of using social knowledge interviews with children as a basis for accessing knowledge about social competence and in turn peer relations. The authors concluded, "unpopular children not only behave inappropriately, they also seem to lack knowledge about what is appropriate in various situations" (p. 386), a finding which concurs with that of the present study. Errol (Group Two), for example, who saw himself as being moderately accepted by peers, was observed to

engage in minimal interaction with others, which may have been due to a lack of knowledge concerning appropriate social behaviour. His responses while watching the video-taped vignettes indicated a lack of knowledge about how to behave appropriately in most of the situations portrayed. During the single instance when Errol was observed playing with another child, he displayed inappropriate behaviour. On this occasion, Errol swung Jesse to the ground, and Jesse then got up and walked away upset. Errol watched him go and then isolated himself. Examples of behaviour for Errol which would have been appropriate include going after Jesse to see if he was all right, apologising for hurting him, and suggesting to do another activity together. A resulting implication is that social knowledge interviews are a useful tool to find out what children know about their social competence and peer relations.

The results of the present study indicate that all participants had a fairly accurate understanding of their own social competence in a variety of circumstances. The differences between the two groups was not as distinctive as first anticipated. Eric and Tammi's knowledge of their social competence clearly confirmed their inclusion in Group One, the more socially able group. Steve and Errol's knowledge of their social behaviour clearly confirmed their inclusion in Group Two, the less socially able group. However, Owen and Sian's knowledge appeared to place them mid-way between the two groups. Considering the unsuitability of the Pictorial Scale given Owen's preference to develop a fewer number of friendships, it may be justifiable to include him in Group One rather than Group Two. Sian also appears to warrant inclusion in Group One rather than Group Two. It is interesting to note that upon her selection, Sian's teachers commented that their initial reaction was to nominate her as the "less socially able" child. However, when completing the Vineland Assessment the teachers realised Sian had matured socially in recent times, and perhaps was not as lacking in social competence as she used to be. The Vineland results further attest to this possibility in the "adequate"

categorisation of Sian's level of social skill, suggesting she may have been in a stage of transition. A realisation such as this confirms the notion that social competence should not be viewed as "a static set of abilities, bounded by particular contexts", but have a "more complex, fluid and dynamic interpretation" (Kantor, Elgas & Fernie, 1993, p. 125). In addition, it is interesting to note the overall accuracy of teachers' perceptions of children's social competency levels in the selection of participants for the study as validated by the Vineland assessment.

Links Between Knowledge And Behaviour

Bye and Jussim (1993) assert that, "social knowledge and social behaviour are related" (p. 144). A possession of social knowledge coupled with a reason to use it is thought to bring about appropriate behaviour (Bye & Jussim, 1993). Consistent with findings that young children are cognitively able to offer reliable and useful information about their social worlds (Curry & Johnson, 1990; Zelkowitz, 1989; Gamble & Woulbroun, 1995), the children in this study were found to have an accurate understanding of their own social behaviour in a variety of circumstances. An example of this is that the participants mostly behaved in ways consistent with the information they had provided about their own social behaviour during the MESSY self-report and only a few exceptions were evident. Using eye-contact, initiating conversation, using people's names and joining in games, were some of the behaviours which were observed to reflect the information provided by the participants about themselves. More often than not, all the children behaved in ways which aligned with their social knowledge. However, no significant differences were found on a group basis.

With regard to observations, limitations of the study noted here include the influence of observer presence, and observer bias. During the observation periods, the observer attempted as far as possible to minimise verbal and non-verbal communication with the children in the class. Of the six participants,

only Tammi (Group One) was identified by her teacher as modifying her behaviour when the observer was present. Such modifications included waving to the observer and seating herself towards the back rather than the front of the class group. Apart from Tammi, the teachers reported that the children's behaviour had not altered significantly in response to an observer being present. While every care was taken by the observer to ensure accurate records were maintained and fair inferences were being made throughout the investigation, the fact that there was only one observer meant checks for inter-observer reliability were not possible.

Investigation Into The Techniques Used

The secondary focus of the present study was to explore ways in which young children may be helped to articulate knowledge of their social network and social competence. A discussion follows of the perceived effectiveness of the various techniques used.

Colouring-in Activity: Gingerbread People

The gingerbread people were a useful visual tool for focusing the participants' thoughts on network members and for providing a connection between the two interview sessions.

Self-report: Pictorial Scale

The format of the Pictorial Scale (Harter & Pike, 1984), appears to be suitable for tapping young children's perceptions of social acceptance. It was useful for opening up discussion about children's knowledge of their social competence and the participants' responses were used for triangulation between data sets. The variety of situations in the Pictorial Scale was limited. Of the six situations used to discuss peer acceptance, four of them dealt specifically with a child's total number of friends. It is suggested here that more information would be gained about perceived peer acceptance by including some other situations relevant to the pre-primary setting. These

situations could include, being greeted by others, others engaging the child in conversation, and others being available to help.

It is suggested that it is invalid to judge a child's knowledge of their level of acceptance by peers according to the number of friends they have. The view that having many friends equates with greatest acceptance by peers does not seem to apply in Owen's case. He reported that hardly any children played with him. Observation in the classroom revealed this to be true because Owen tended to play almost exclusively with one "best" friend. This did not appear, however, to detract from his popularity with others in the class. Owen was usually asked to play by others and quite a few children would share toys with him. It seems that Owen had chosen to develop a close friendship with one other child (Dean), and that Owen did not view other peers as being as "close" to him as Dean was. Owen acknowledged that Dean was his best friend, but this does not mean he perceived himself as being least accepted by his peers in general.

Self-report: MESSY

As with the Pictorial Scale, the MESSY items (Matson & Ollendick, 1988), provided a useful structure for guiding conversations with the participants about their knowledge of their social competence. The items in the self-report were valuable in guiding observations. The format of the MESSY had some shortcomings, but with adaptations may prove more suitable for use with pre-primary children. The items could be coupled, for example, with illustrations and references made to specific instances in which the children might find themselves. Identification with a target child pictured in each of the hypothetical situations may better assist children in making accurate responses. Item 8, for instance, reads, "Do you help a friend who is hurt?" The item could be accompanied by a picture of a child who had fallen down and was crying and an explanation by the assessor that the child in the picture had been running in the playground when they tripped over and fell

down, hurting their hands and knees. The participant could then be asked, "If this was your friend, would you go over and help?" A further suggestion for improvement is that the responses could be selected from the three options, "always", "sometimes" and "never". If this were done, the participants may be able to answer items more accurately. The options could be reinforced visually, perhaps by choosing between differently sized circles as used in the Pictorial Scale.

Dialogue-interviews: Video-taped Vignettes

The video-taped vignettes, the accompanying dialogue-interviews and the use of the dolls for acting out responses were found to be highly successful in assisting children to articulate their knowledge. It has been suggested that young children may watch as much as 28 hours of television each week (Black et al. 1992), indicating many young children may have some degree of familiarity with this form of visual communication. The television and video-tape proved to be a familiar medium for the participants of this study. They were able to recognise and comment on the activities of the children in the vignettes as familiar situations appeared on the television screen. The dialogue-interviews relating to the vignettes were successful in accessing children's knowledge about social competence and peer relations. The dolls were found to be a highly useful play technique. With the exception of Errol, all the participants used the dolls with ease.

In summary, various techniques were used in the present study in response to the call by researchers for the refinement of methods used to explore young children's perceptions of their social worlds (Reid et al. 1989; Dubow & Ullman, 1989; Gamble & Woulbroun, 1995). The different techniques employed in this study explored ways of helping children talk about the abstract concepts of social networks and social competence. The self-reports and the dialogue-interviews were successfully used to help children to talk about their social knowledge. The visual and concrete props were

appropriate and useful in eliciting responses. The variety of techniques used allowed for triangulation between data sets.

Summary Of Findings

Recent literature has emphasised the need for continued research in the area of children's social networks with a focus on children's socio-emotional adjustment (Gamble & Woulbroun, 1995; Furman & Buhrmester, 1985). It has long been hypothesised that children's relationships with others is related to their social competence (Waters et al. 1979; Lieberman, 1977). In support of this, one opinion is the various forms of social interaction, as occurring within a social network, assist in furthering the development of social skills (Rubin & Ross, 1982). Another view is that individual characteristics such as social competence may assist a person in developing and accessing effective social support from their network (Dubow & Ullman, 1989). The emphasis in more recent times has been on the significance of children's perceptions of themselves (Gamble & Woulbroun, 1995; Dubow & Ullman, 1989; Furman & Buhrmester, 1985). Recent studies show that children's *knowledge* of their relationships with others is related to their *knowledge* of social competence (Gamble & Woulbroun, 1995; Dubow & Ullman, 1989). The results of the present investigation found the children who knew more about their social network also knew more about behaving in socially competent ways and exhibited a greater degree of those behaviours. The children who knew less about their social network also knew less about behaving in socially competent ways and exhibited a lesser degree of social competence.

The purpose of this investigation was to explore the links which exist between children's knowledge of their social network and their social competence. The exploration of those links was assisted by the various data collection techniques used, some of which were highly effective in assisting

children to articulate their knowledge about the abstract concepts of their social network and their social competence.

Implications

Having explored the links between young children's knowledge of their social network and their social competence, a number of implications emerge. An immediate implication is for teachers to promote social understandings by assisting children in the identification of their social network. Video-taped vignettes with dialogue-interviews were used successfully in this study and may be adapted for classroom use. Teachers should plan for and encourage discussion concerning who children know they can turn to for support. When planning such activities, and interpreting and responding to the information offered by the children, teachers should keep in mind the inter-relatedness of cognitive and social development.

An example of a current programme which incorporates the explicit teaching of social networks is that developed by Protective Behaviours Incorporated (West, 1989). The programme is a preventative one, aimed at teaching life skills which will assist children in dealing with various forms of difficult or abusive situations. The Protective Behaviours programme advocates teaching children how to recognise, build and use their social network, while acknowledging the life-long psychological and physical benefits (West, 1989) and the results of this study show support for the aims of the programme. In addition, teachers should maximise each informal and spontaneous opportunity to reinforce children's understanding of social support.

A second implication for classroom teachers concerns the promotion of social skills. The young children in the present study were able to articulate accurate knowledge about their social competence. By using dolls and video-taped vignettes with dialogue-interviews designed specifically for the classroom, teachers may be assisted in obtaining information about their

children's social knowledge. Finding out what children already know about their own social competence is a necessary starting point for planning further instruction, particularly on a one-to-one basis with children who have been identified as needing special attention. When planning specific social skills instruction, teachers may incorporate various techniques which promote cognitive development simultaneously. In particular, techniques incorporating social interaction assist in the development of mental functioning skills which is consistent with Vygotskian theory (Santrock, 1994). Video-taped vignettes, for example, showing children engaged in particular pro-social behaviours may be developed for the classroom. The use of dolls and role-play may assist children in practising the social skills that were demonstrated on the video. Related story-telling activities, drama and planned social interactional experiences may be used to further enhance children's understandings of the specific social skills being promoted.

With respect to further research, investigations should include a focus on what individuals bring to the social network in terms of their perceptions of self and others (Jones, 1985). Areas to be addressed which were not covered in this study include investigating the links between social development and cognitive development, exploring aspects of children's alone-ness, and considering children's views of themselves in the role of "provider" within their social networks (Shumaker & Brownell, 1984). Shinn, Lehmann and Wong (1984), point out the need to study negative social interactions as they may be more accurately classified as stressors rather than as a lack of support. Shumaker and Brownell (1984), also emphasise the need to distinguish between interpersonal relations which are intentionally and unintentionally harmful.

There should be continued exploration into the development of methods to explore young children's perceptions of their social worlds (Reid et al. 1989; Dubow & Ullman, 1989; Gamble & Woulbroun, 1995). Methods need to be

developed which will assist young children in the articulation of their knowledge and will be useful in teaching pre-primary children about social networks and social competence. The suggested adaptations of scales such as the MESSY could be the topic of future study.

Information gained from this and future studies may contribute to a better understanding of children's social development. Such an enhancement of understanding may, in turn, have a positive impact on the development and implementation of high quality early childhood programmes used to teach young children crucial social skills.

Conclusion

In conclusion, the present study has supported the notion that young children's knowledge of their social network is linked to their knowledge of social competence, and that this social knowledge is reflected in their social behaviour. The study found that the children who knew more about their social network also knew more about behaving in socially competent ways and exhibited a greater degree of those behaviours. The children who knew less about their social network also knew less about behaving in socially competent ways and exhibited a lesser degree of social competence. These findings emphasise the need for teachers to help children increase their knowledge about their own social network and social competence, both in the classroom and in the home. Further investigation of these areas of children's knowledge may serve to improve and promote a child's sense of psychological and physical health and well-being both during their childhood, and in their future years.

Bibliography

- Antonucci, T. (1985). Social support: Theoretical advances, recent findings and pressing issues. In Sarason, I. & Sarason, B. (Eds.), *Social support: Theory, research and applications*. Dordrecht, The Netherlands: Martinus Nijhoff Publishers.
- Augoustinos, M. & Innes, J. (1990). Towards an integration of social representations and social schema theory. *British Journal of Social Psychology*, 29, 213-231.
- Australian Bureau of Statistics. (1994). *Focus on families: Demographics and family formation (ABS Catalogue No. 4420.0)*. Canberra, Australia: Australian Government Printing Service.
- Belle, D., Dill, D. & Burr, R. (1991). Children's network orientations. *Journal of Community Psychology*, 19, 362-372.
- Black, J., Puckett, M. & Bell, M. (1992). *The young child: Development from prebirth through to age eight*. NY: Macmillan Publishing Company.
- Blackmore, A., Rohl, M., Tayler, C., Corrie, L., Milton, M. & Barratt-Pugh, C. (1995). *Early intervention in West Australian schools*. Unpublished Report.
- Bullock, J. (1993). Children's loneliness and their relationships with family and peers. *Family Relations*, 42, 46-49.

- Burns, R. (1994). *Introduction to research methods*. Melbourne, Australia: Longman Cheshire.
- Butterworth, D. (1989). Changing societal and familial trends: Changing teacher strategies. *The Australian Journal of Teacher Education*, 14(2), 35-39.
- Bye, L. & Jussim, L. (1993). A proposed model for the acquisition of social knowledge and social competence. *Psychology in the Schools*, 30, 143-151.
- Cassidy, J. & Asher, S. (1992). Loneliness and peer relations in younger children. *Child Development*, 63, 350-365.
- Cohen, S., Mermelstein, R., Kamarck, T. & Hoberman, H. (1985). Measuring the functional components of social support. In Sarason, I. & Sarason, B. (Eds.), *Social support: Theory, research and applications*. Dordrecht, The Netherlands: Martinus Nijhoff Publishers.
- Cole, M. (1985). The zone of proximal development: Where culture and cognition create each other. In Wertsch, J. (Ed.), *Culture, communication and cognition: Vygotskian perspectives*. NY: Cambridge University Press.
- Craig, G. (1986). *Human development*. Norwood, NJ: Prentice Hall.
- Curry, N. & Johnson, C. (1990). *Beyond self-esteem: Developing a genuine sense of human value*. WA: National Association for the Education of Young Children.

- Davis, A. (1991). Piaget, teachers and education: Into the 1990s. In Light, P., Sheldon, S., & Woodhead, M. (Eds.), *Learning to think*. London: Routledge.
- Dubow, E. & Tisak, J. (1989). The relation between stressful life events and adjustment in elementary school children: The role of social support and social problem-solving skills. *Child Development*, 60, 1412-1423.
- Dubow, E. & Ullman, D. (1989). Assessing social support in elementary school children: The survey of children's social support. *Journal of Clinical Child Psychology*, 18(1), 52-64.
- Eckenrode, J. & Gore, S. (1981). Stressful events and social supports: The significance of context. In Gottlieb, B. (Ed.), *Social networks and social support*. Beverly Hills: Sage Publications.
- Edwards, C. & Lewis, M. (1979). Young children's concepts of social relations: Social functions and social objects. In Lewis, M. & Rosenblum, L. (Eds.), *The child and its family*. NY: Plenum Press.
- Feiring, C. & Lewis, M. (1984). Changing characteristics of the U.S. family: Implications for family networks, relationships, and child development. In Lewis, M. (Ed.), *Beyond the dyad*. NY: Plenum Press.
- Feiring, C. & Lewis, M. (1989). The social networks of girls and boys from early through middle childhood. In Belle, D (Ed.), *Children's social networks and social supports*. NY: John Wiley and Sons.

- Fine, G. (1981). Friends, impression management, and preadolescent behaviour. In Asher, S. & Gottman, J. (Eds.), *The development of children's friendships*. Cambridge: Cambridge University Press.
- Furman, W. (1989). The development of children's social networks. In Belle, D (Ed.), *Children's social networks and social supports*. NY: John Wiley and Sons.
- Furman, W. & Buhrmester, D. (1985). Children's perceptions of the personal relationships in their social networks. *Developmental Psychology*, 21(6), 1016-1024.
- Gamble, W. & Woulbroun, E. (1995). Perceptions of social support among young children. *Early Education and Development*, 6(1), 5-23.
- Harter, S. & Pike, R. (1984). The pictorial scale of perceived competence and social acceptance for young children. *Child Development*, 55, 1969-1982.
- Hirsch, B. (1981). Social networks and the coping process: Creating personal communities. In Gottlieb, B. (Ed.), *Social networks and social support*. Beverly Hills: Sage Publications.
- Jones, W. (1985). The psychology of loneliness: Some personality issues in the study of social support. In Sarason, I. & Sarason, B. (Eds.), *Social support: theory, research and applications*. Dordrecht, The Netherlands: Martinus Nijhoff Publishers.

- Kantor, R., Elgas, P. & Fernie, D. (1993). Cultural knowledge and social competence within a preschool peer cultural group. *Early Childhood Research Quarterly, 8*, 125-147.
- Kerlinger, F. (1986). *Foundations of behavioural research*. NY: Holt, Rinehart and Winston.
- Kids Help Line (1995). *KHL Statistical Report* (March 1993 to September 1995). Red Hill, Australia: Author.
- Kids Help Line (1995). *Newsletter* (March 1995). Red Hill, Australia: Author.
- Kids Help Line (1995). *Newsletter* (August 1995). Red Hill, Australia: Author.
- Kostelnik, J., Stein, L., Whiren, A. & Soderman, A. (1993). *Guiding children's social development*. USA: Delmar Publishers.
- LaFreniere, P. & Sroufe, L. (1985). Profiles of peer competence in the preschool: Interrelations between measures, influence of social ecology, and relation to attachment history. *Developmental Psychology, 21*(1), 56-69.
- Lewis, M. (1982). The social network systems model. In Field, T., Huston, A., Quay, H., Troll, L. & Finley, G. (Eds.), *Review of human development*. NY: Wiley.
- Lewis, M., Feiring, C. & Kotsonis, M. (1984). The social network of the young child. In Lewis, M. (Ed.), *Beyond the dyad*. NY: Plenum Press.

- Lieberman, A. (1977). Preschoolers' competence with a peer: Relations with attachment and peer experience. *Child Development, 48*, 1277-1287.
- Matson, J. & Ollendick, T. (1988). *Enhancing children's social skills: Assessment and training*. NY: Pergamon Press.
- Ochiltree, G. (1990). *Children in Australian families*. Melbourne, Australia: Longman Cheshire Pty. Ltd.
- Oden, S. & Asher, S. (1977). Coaching children in social skills for friendship making. *Child Development, 48*, 495-506.
- Reid, M., Landesman, S., Treder, R. & Jaccard, J. (1989). "My family and friends": Six-to twelve-year-old children's perceptions of social support. *Child Development, 60*, 896-910.
- Renshaw, P. & Asher, S. (1982). Social competence and peer status: the distinction between goals and strategies. In Rubin, K. & Ross, H. (Eds.), *Peer relationships and social skills in childhood*. NY: Springer-Verlag.
- Rogoff, B. (1991). The joint socialisation of development by young children and adults. In Light, P., Sheldon, S., & Woodhead, M. (Eds.), *Learning to think*. London: Routledge.
- Rubin, K. (1982). Social and social-cognitive developmental characteristics of young isolate, normal, and sociable children. In Rubin, K. & Ross, H. (Eds.), *Peer relationships and social skills in childhood*. NY: Springer-Verlag.

- Rubin, K. & Ross, H. (1982). Some reflections on the state of the arts: The study of peer relationships and social skills. In Rubin, K. & Ross, H. (Eds.), *Peer relationships and social skills in childhood*. NY: Springer-Verlag.
- Sandler, I., Wolchik, S. & Braver, S. (1985). Social support and children of divorce. In Sarason, I. & Sarason, B. (Eds.), *Social support: Theory, research and applications*. Dordrecht, The Netherlands: Martinus Nijhoff Publishers.
- Santrock, J. (1994). *Child development*. USA: Wm. C. Brown Communications.
- Sarason, I. & Sarason, B. (1985). Social support-insights from assessment and experimentation. In Sarason, I. & Sarason, B. (Eds.), *Social support: Theory, research and applications*. Dordrecht, The Netherlands: Martinus Nijhoff Publishers.
- Shinn, M., Lehmann, S. & Wong, N. (1984). Social interaction and social support. *Journal of Social Issues*, 40(4), 55-76.
- Shumaker, S. & Brownell, A. (1984). Toward a theory of social support: closing conceptual gaps. *Journal of Social Issues*, 40(4), 11-36.
- Sparrow, S., Balla, D. & Cicchetti, D. (1984). *Vineland Adaptive Behaviour Scales*. Circle Pines, MN: American Guidance Service.

- Stone, C. & Selman, R. (1982). A structural approach to research on the development of interpersonal behaviour among grade school children. In Rubin, K. & Ross, H. (Eds.), *Peer relationships and social skills in childhood*. NY: Springer-Verlag.
- Wadsworth, B. (1989). *Piaget's theory of cognitive and affective development*. NY: Longman.
- Waters, E., Wippman, J. & Sroufe, L. (1979). Attachment, positive affect, and competence in the peer group: Two studies in construct validation. *Child Development*, 50, 821-829.
- West, P. (1989). *The basic essentials: Protective behaviours, anti-victimization and empowerment process*. South Australia: Essence Training & Publications.
- Wolchik, S., Beals, J. & Sandler, I. (1989). Mapping children's support networks: Conceptual and methodological issues. In Belle, D (Ed.), *Children's social networks and social supports*. NY: John Wiley and Sons.
- Youniss, J. (1980). *Parents and peers in social development: A Sullivan-Piaget perspective*. Chicago: The University of Chicago Press.
- Zahn-Waxler, C., Iannotti, R. & Chapman, M. (1982). Peers and prosocial development. In Rubin, K. & Ross, H. (Eds.), *Peer relationships and social skills in childhood*. NY: Springer-Verlag.

Zelkowitz, P. (1989). Parents and children as informants concerning children's networks. In Belle, D (Ed.), *Children's social networks and social supports*. NY: John Wiley and Sons.

Zubrick, S., Silburn, S., Garton, A., Burton, P., Dalby, R., Carlton, J., Shepherd, C. & Lawrence, D. (1995). *Western Australian child health survey: Developing health and well-being in the nineties*. Perth, Western Australia: Australian Bureau of Statistics and the Institute for Child Health Research.

Appendix A

Questions Relating To Video-taped VignettesQu. 1 Playing outside

Who plays with you when you play outside? What about at home? Who plays with you when you play in your yard or in the park?

Qu. 2 Sharing Cake

If it was your birthday, who would you share your birthday cake with? School/home?

Qu. 3 Playing inside

Who will play with you when you are playing inside at school/home?

Qu. 4 Playing at Someone's House

Do you sometimes play at someone else's house? With whom?

Qu. 4a. Someone Coming to Play

Is there someone who comes to play at your house?

Qu. 5 Help if Someone is Being Annoying

Think about what would happen if you were playing with a friend and someone else came up and started to annoy you? What if that person wouldn't go away, who would help you sort out the problem? School/home?

Qu. 6 Sharing Equipment

Who would share toys or equipment with you? School/home?

Qu. 7 Someone to go to when you mess up

If something goes wrong for you, if something falls down or you spill something and make a mess, who is someone you can go and tell so that you feel better about it? School/home?

Qu. 8 Help to do something new

If you aren't sure about doing something, who do you go to for help? School/home?

Qu. 9 Help to do something better

What if you know what to do, but you want to do it even better, (eg: cutting something out and wanting to cut close to the line) who do you ask to help you? School/home?

Qu. 10 Show something

If you have something new or special, who do you show it to? School/home?

Qu. 11 Tell Exciting News

What if you have some really exciting news, who do you tell it to? School/home?

Qu. 12 Made Something Well

When you have made something that turned out really well, who do you like to show it to? School/home?

Qu. 13 Pretend with

Who will play a pretending game with you? School/home?

Continued Questions (As for school and home, no accompanying vignettes)

Qu. 14 Who is someone who will say good or nice things about you?

Qu. 15 Who is someone who will help you if you scrape your knee or hurt yourself?

Qu. 16 Who is someone who will help you to wash your face/brush your hair/get dressed?

Qu. 17 Who is someone who will help you if you have a bad cold or a tummy ache?

Qu. 18 Who is someone who will help you if you are hungry and you want to find or make something to eat?

Qu. 19 Who is someone to whom you would tell a secret?

Qu. 20 Who is someone who would give you a hug?

Qu. 21-24 To whom would you go if you wanted someone to talk to and you were feeling; sad / angry / afraid / really happy?

Appendix B**Members Of Social Networks**

The following tables detail the responses made by the participants during the viewing of the video-taped vignettes to indicate who belonged to their social networks.

Qu.	ERIC		TAMMI		OWEN	
	School	Home	School	Home	School	Home
1	Frank Keith	No-one	Zoe Laura Erin	My sisters	Dean Nicholas	Dennis
2	Frank Keith Rory Adam	Debbie Deni Kate Mum	My friends	My sisters Mum Dad	Dean Nicholas	Dennis
3	Frank Keith	Deni Kate Debbie Mummy Aunty Nina	Zoe Una	My sisters	Dean Nicholas	Dad
4		Kate Debbie Deni Carl		No-one		Dennis
4a		~		Ursula Kaye		~
5	Teacher	Mummy	Zoe	Mum	Teacher	Dad
6	Frank Sian Leah	Debbie Carl	Zoe Erin Laura	My sisters	Dean	Dad
7	Teachers My friends	Mummy	Teacher	Tess	Teacher	Mum
8	My friends	Debbie	Teacher Aide Zoe	Sheree Amy Mum	Teacher	Dad
9	Teacher	Mummy	Erin Kathy	Tess	Dean	My sister
10	Everyone	Mum My friends Debbie Deni Carl	Zoe Erin	Mum The kids	Dean	Dennis
11	Everyone	Everyone	Teacher All the kids	Mum The kids	Dean	Dennis

12	Frank Keith	Kate Debbie	Teacher Zoe	Mum The kids	Teacher	Mummy
13	Frank Adam Rory Keith	Debbie Carl Deni Kate	Zoe Kathy Erin	My sisters	Dean	Dennis
14	Keith Frank	Debbie Deni Kate Carl Mum	Zoe Erin Kathy	Tess Beth Mum Dad	Dean	Mum Dad
15	Teacher	Mummy	Teachers	Mum Dad	Teacher	Mum Dad
16	Keith Teacher	Mummy	Teacher Aide	Mum Dad	Teacher	Mum
17	Teacher	Mummy	Teacher	Mum Dad	Teacher	Mum
18	Teacher	Mum	Teacher	Mum The kids	Teacher	Mum
19	Keith Frank Adam Rory	Debbie	Zoe Erin Kathy Laura	Mum The kids	Dean	Dennis
20	-	Debbie Carl Mum	Teacher Zoe Kathy	Mum Dad The kids	No-one	Mummy Daddy
21	Keith Frank	Debbie	Kathy Zoe Erin	Mum Dad	Dean	Mum Dad
22	Teacher	Mum	Teacher	The kids	No-one	No-one
23	Teacher	Mummy	Teacher	Tess	Dean	Mum
24	Frank	Carl Debbie	Zoe Erin Kathy	Sheree Amy	Dean	Daddy

Qu.	SIAN		STEVE		ERROL	
	School	Home	School	Home	School	Home
1	Leah Mandy Ben	Mark Neil	Kevin Trent Seth Barry Erin	Miles Paul	No-one	Self Kurt Brett
2	Everyone	Mark Neil Mum Dad	T.V. child T.V. child Trent Seth Clint Barry	Paul Barry	Everyone	Everyone
3	Leah	Mark Neil	Trent	Trent	Don't know	Brett Kurt
4		Sonia Violet		Barry Trent		No
4a		Emily		Matthew Trent		Luke
5	Teacher	Teacher (Mum)	Teacher	Mummy Daddy	Teacher	No-one <i>hide away</i>
6	Emily Leah Mandy	Mark Neil	Laura Kathy Seth Kevin Trent Barry	Miles	Don't know	Don't know
7	Delia	Mummy	Teacher Aide	Mum Dad	Don't know	Don't know
8	Teacher	Violet	T.V. kids Trent Barry Tammi	Paul	Don't know	Don't know
9	Leah	~	Trent	Miles	Don't know	Don't know
10	Don't know	Neil Mark	Trent Barry Tammi	Paul Dad Mum Miles	No-one	Don't know
11	Terry	Sonia Violet	Barry	Teacher	No-one	Don't know

12	Violet Sonia Leah	Sonia Violet	Teacher Aide	Dad	Teacher	Mum
13	Leah	Mark Neil	Girl:T.V? Kathy Laura Trent	Miles	Don't know	No-one
14	Sonia Leah Terry	Violet Sonia Mum Neil Mark	No-one	No-one	Don't know	Don't know
15	Leah Teacher	Daddy Mum	Trent	Miles	Teachers	Mum Dad
16	Sonia Violet Leah Mandy Emily	Mama	No-one	Mummy	Don't know	Mum
17	Leah	Sonia Violet	Teacher	Mummy	No-one	No-one
18	Teacher	Sonia Violet Mum	Teacher	Daddy Mummy Paul	No-one	Mum Dad
19	Leah	Sonia	Barry Trent Seth	No-one	Don't know	Mum Dad
20	Mark	Sonia Violet	Don't know	Miles Mummy Daddy Paul	No-one	Mum Dad Grandma
21	Sonia Violet	Neil Mark	Seth	Miles	Stay by myself	
22	No-one	No-one	Seth	Dad	No-one	No-one
23	Terry	Violet Sonia Neil	Teacher	Dad	Don't know	Don't know
24	Sonia Violet Leah	Violet Mummy Daddy	Teacher	Dad	Don't know	Don't know

Appendix C

MESSY Items And Responses

(Responses in column on right where y = "yes" and n = "no". Participants' first initials head the column)

<u>Appropriate Social Skill</u>	Ec.	T	O	S	St.	E
2) Do you look at people when you talk to them?	y	y	y	y	y	y
5) Do you have many friends?	y	y	n	y	y	y
8) Do you help a friend who is hurt?	n	y	y	y	y	n
11) Do you cheer up a friend who is sad?	y	y	y	y	y	n
14) Do you feel happy when someone else does something well?	y	y	y	y	n	y
15) Do you tell people they look nice?	y	y	n	y	y	y
17) Do you walk up to someone and start a conversation?	y	n	y	y	y	n
19) When someone does something for you do you say "thankyou", and does it make you feel happy?	y	y	y	y	y	y
20) Do you know how to make friends?	y	y	y	y	y	y
21) Do you stick up for your friends?	y	y	y	y	y	y
23) Do you look at people when they are speaking?	y	y	y	y	n	y
24) Do you call other people by their names?	y	y	y	y	y	y
25) Do you ask if you can help someone?	y	y	y	y	y	y
26) Do you feel good if you help someone?	y	y	y	y	y	y
29) Do you feel sorry when you hurt someone?	y	y	y	y	n	y
30) Do you join in games with other children?	y	y	y	y	n	n

Inappropriate Assertiveness

- 7) Do you take or use things that are not yours without permission? n n n y n n
- 9) Do you slap or hit people when they make you angry? n n n n y n
- 12) Do you tell lies to get something you want? n n n n n n
- 13) Do you annoy other people to try and make them angry? n n n n n n
- 18) Do you hurt other people's feelings on purpose (to make them sad)? n n n n n n
- 22) Do you tease or make fun of others? n n n n n n
- 27) Do you make sounds that annoy other people? (eg: burping, sniffing) n n n n n n
- 28) Do you speak too loudly? n n n n n n

Impulsive/recalcitrant

- 3) Are you a bossy kind of person? (Do you *tell* other people what to do instead of *asking* them?) n n n n n n
- 4) Do you grizzle or complain very often? n n n n n y
- 6) Do you interrupt and speak when someone else is speaking? n n n y n y

Miscellaneous

- 1) Do you say or do things that make other people laugh? n y n y y y
- 10) Do you sometimes like to be alone? y y y y y n
- 16) Are you afraid to speak to people? n n n n y n

Appendix D

Observation Schedules For Weeks One And TwoWeek One

Behaviour	Eric	Group One		Sian	Group Two	
		Tammi	Owen		Steve	Errol
Eye-contact						
when speaking to an adult	3	4	2	5	8	0
not used	0	0	1	0	2	0
when speaking to a peer	11	8	11	1	2	1
not used	1	3	5	0	1	2
adult speaking	1	2	2	3	0	0
not used	0	1	1	2	5	0
peer speaking	9	6	6	0	1	1
not used	0	1	1	0	1	0
Interrupting	2	0	0	0	0	0
Saying "thankyou"	0	0	0	0	0	0
not used	1	2	2	0	1	0
Offering help	0	0	0	0	0	0

Week Two

Behaviour	Eric	Group One		Sian	Group Two	
		Tammi	Owen		Steve	Errol
Eye-contact						
when speaking to an adult	1	7	5	6	9	0
not used	0	0	1	0	3	0
when speaking to a peer	5	5	9	9	7	8
not used	0	0	4	1	3	1
adult speaking	3	5	2	5	1	1
not used	1	0	1	0	4	1
peer speaking	2	5	4	6	6	9
not used	0	0	1	0	3	1
Interrupting	0	0	0	0	1	0
Saying "thankyou"	0	0	0	0	2	0
not used	0	0	0	1	0	0
Offering help	0	0	0	1	1	0

Appendix E

Observation Schedules For Weeks Three And FourWeek Three

Behaviour	Eric	Group One		Sian	Group Two	
		Tammi	Owen		Steve	Errol
Telling others what to do	0	0	1	0	0	0
Initiating conversation	6	10	4	4	2	0
Using names	2	0	3	0	4	0
Joining in games	0	2	2	0	4	0

Week Four

Behaviour	Eric	Group One		Sian	Group Two	
		Tammi	Owen		Steve	Errol
Telling others what to do	0	0	1	0	0	0
Initiating conversation	2	1	6	9	7	0
Using names	0	1	0	4	1	0
Joining in games	0	2	2	0	1	0