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**What Children Know About Social Withdrawal: Age-Related Changes
in Children's Descriptions of Socially Withdrawn Behaviours**

by

Marie-Hélène Gavinski Molina, B.A.

A thesis submitted to
the Faculty of Graduate Studies and Research
in partial fulfillment of
the requirements for the degree of

Master of Arts

Department of Psychology

Carleton University

Ottawa, Ontario

August 20, 1999

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Description of Socially Withdrawn Behaviours**

submitted by

Marie-Hélène Gavinski Molina

**in Partial fulfillment of the requirements for
the degree of Master of Arts**

Chair

Thesis Supervisor

**Carleton University
September, 1999**

Abstract

The goal of this study was to examine age and gender differences in children's ability to perceive and differentiate between different subtypes of social withdrawal (i.e., fearful shyness, self-conscious shyness, active isolation, and social disinterest). Children in Grade 1 (n=42) and Grade 5 (n=42) were interviewed and asked to describe reasons, behaviours, and feelings of children who play alone. Results indicated that children in both grades made reference to several different reasons why children may play alone, along with various behaviours and emotions that may be displayed when children play alone. Grade 5 children made more references to self-conscious shyness and internalizing problems than Grade 1 children. In addition, more Grade 5 children described peers as "shy", while more Grade 1 children described peers as socially disinterested. Across grade, active isolation was viewed as the most problematic, followed by fearful shyness and self-conscious shyness. The majority of children did not view social disinterest as a problem.

Acknowledgements

There are many people that I would like to thank for their help and contribution which led to the completion of this thesis. I would like to express my deepest appreciation and gratitude to:

The principals, the Grade 1 and Grade 5 teachers of two local elementary schools in the Ottawa-Carleton area, as well as the children from both grades for their enthusiastic and generous participation in this study.

Special thanks to all my "dog walking" friends (Graham, Shari, Ginny, Ann) and Ann Barber for helping me contact other Grades 1 and 5 children, so that I could meet the quota of children needed.

Dr. Robert Coplan for his patience, support, and guidance during the two years that we have been working together. His unwavering support has made my task of writing this thesis a great deal easier.

The members of my committee, Dr. Tina Daniels, Dr. Monique Sénéchal, and Dr. Alastair Younger for their valuable comments and suggestions.

Kim O'Neil, an undergraduate student and a friend, who helped

provide input with the coding and also helped me in the arduous task of coding the data. Gregg Dunn who helped me transcribe some of the interviews at the expense of his own free time.

A special thank you to everyone who helped me to understand logit loglinear analyses - Vanessa Lybanon, Dr. Richard Dillon, Irene Ruenrung Lu, and Isabelle Green-Demers.

Dan Lagacé-Séguin and Cathy Mills, my friends and colleagues, who have provided me with support and advice throughout many difficult times.

My mother, Hélène Gavinski, for her interest in the progress of my writing.

Finally, my husband Roberto Molina who believed in me, who listened to me, who gave me a shoulder to cry on when I needed one, and who encouraged me throughout.

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What Children Know About Social Withdrawal: Age-Related Changes in Children's Descriptions of Socially Withdrawn Behaviours

Peers play an important part in children's everyday lives. Through peers children learn how to interact and play with others and acquire what is considered to be acceptable behaviour and what is not. As children age, peers become an increasingly important influence. By the age of 11, children spend approximately 50% of their waking time with peers (Barker & Wright, 1955).

Peers serve several unique functions for children. Through peers, children learn how to clarify their status and role within the peer group. By intermingling with peers, children learn what is important to others - what makes them sensitive to how others feel. Moreover, peers provide instruction with regard to cognitive and physical skills (Grusec & Lytton, 1988).

Children may interact in many different ways with peers. Some children interact in a prosocial manner while others may interact inappropriately (e.g., displaying aggression or withdrawal). The quality of children's peer relationships has been found to be strongly related to later socio-emotional adjustment (see Rubin, Bukowski, & Parker, 1998, for a recent review). For example, children who are consistently aggressive with their peers tend to experience externalizing difficulties such as conduct disorder and delinquency (Roff & Wirt, 1984).

For many years, researchers did not consider children who were more socially withdrawn (i.e., children who tend not to play a lot with others) to be "at risk" (Kohlberg, LaCrosse, & Ricks, 1972; Ensminger, Kellam, & Rubin, 1983). In fact, historically, this group of children has been largely ignored in the research. There are several reasons for this. Children who are withdrawn do not disturb the class as much as those who are aggressive. Thus, since withdrawn behaviour tends to affect the child in question more than his/her peers, it was not considered as much of a concern. In addition, since children who are withdrawn are less "overt" in their behaviours than aggressive children, they are not seen as being problematic to the teachers or to their peers. Thus, often times, withdrawn children are overlooked by their teachers and their peers.

More recently, researchers have begun to study children who are shy, withdrawn, or isolated. It is becoming increasingly clear that withdrawn children may also be experiencing some problems (e.g., Rubin, LeMare, & Lollis, 1990). Results of recent research indicate that children who are withdrawn tend to have internalizing difficulties such as loneliness and depression, both of which can have detrimental effects on children's social development (Rubin et al., 1990).

It has been argued that social withdrawal is less of a problem in early childhood, because it is not negatively salient

to the peer group and because young children do not have well-developed perceptions of socially withdrawn behaviours (Rubin, 1985; Younger, Schwartzman, & Ledingham, 1985, 1986). However, definitional issues call this conclusion into question. As such, the goal of the present study was to examine how children perceive social withdrawal. In particular, children's ability to perceive and describe different types of social withdrawal was explored in both early and middle childhood. In the following pages, definitional and conceptual issues are discussed as well as the various methods for assessing social withdrawal in childhood.

Defining Social Withdrawal

Social withdrawal is a term that encompasses a lot of controversy. According to Wanlass and Prinz (1982), there are at least three ways in which childhood social withdrawal has been defined. The first concerns the rate of social interaction. According to Rubin (1985), socially withdrawn children tend to interact significantly less often with their peers than other children of similar age. This definitional approach to the study of social withdrawal has the advantage of being easily measured by observing the social interaction between peers. However, this approach does not distinguish between different types of socially withdrawn children or nonwithdrawn children (Asher, Markell, & Hymel, 1981); children may play alone for many different reasons.

The second approach to the definition of social withdrawal has been through the quality of children's social interaction. That is, researchers have focused on the different kinds of behaviours children display when not interacting with their peers (Wadeson, 1993). For instance, a child engaging in reticent behaviour demonstrates prolonged onlooking behaviour without any accompanying play and/or remains unoccupied (Coplan & Rubin, 1998). This type of behaviour has been found to be stable and associated with maternal ratings of child shyness, anxious behaviour, and internalizing problems (Coplan, in press; Coplan, Rubin, Fox, Calkins, & Stewart, 1994). A child displaying solitary-passive behaviour demonstrates quiet exploration and/or constructive activity when playing alone (Coplan & Rubin, 1998). This type of behaviour is reinforced by peers, teachers, and parents. It is also associated with acceptance by peers and competent problem-solving (Rubin, 1982). Finally, solitary-active behaviour involves "rowdy" types of behaviour in the presence of others (e.g., solitary-dramatic and solitary-functional) (Rubin, 1982; Coplan & Rubin, 1998). This type of behaviour has been associated with rejection by the peer group as well as externalizing problems such as aggression (Rubin, 1982; Coplan et al., 1994; Coplan & Rubin, 1998). As opposed to the previous method of defining social withdrawal, Asher et al. (1981) believed that this method is more important for relations

with peers than the rate of social interaction.

The last method used for defining social withdrawal has focused mainly on how peers evaluate or respond to the behaviour(s) of the child in question (Wanlass & Prinz, 1982). In other words, the focus is on peer rejection or acceptance. However, a disadvantage with this method is the possibility of confusing children who are rejected because of aggression with children who are rejected because of withdrawn behaviour (Wadeson, 1993).

Another way of characterizing social withdrawal research in children is in terms of the various subtypes of social withdrawal. There seems to be many different forms of solitude in children (Asendorpf, 1993). This could be the reason why there are so many different terms that are used to describe withdrawal. For example, this term has been used interchangeably with inhibition, reticence, sociometric neglect, and rejection (Rubin & Asendorpf, 1993).

Asendorpf (1993) suggested that there are three different causes to explain why children might have a low rate of social interaction: shyness, unsociability, and social isolation. Both shyness and unsociability in children can be thought of as being the consequences of withdrawing from others. Social isolation is due to being isolated by others (Rubin et al., 1990). Thus, Asendorpf (1993) described shyness and social disinterest as

being due to factors that are internal to the child. He also thinks of social isolation as being due to factors that are external, outside of the child.

According to Asendorpf (1990), children who are shy are caught in an approach-avoidance mechanism. These children want to engage in social interaction with others but are unable to because they feel a simultaneous desire to avoid others - especially when interacting in novel situations. This may be attributed to a fear of strangers (e.g., fearful shyness) (Buss, 1986) as well as a fear of social evaluation (e.g., Asendorpf, 1989). Behaviourally, shy children are thought to demonstrate reticent behaviour (Coplan & Rubin, 1998), which appears to be reflective of anxiety and fear in a social context (Coplan & Rubin, 1998).

In contrast, unsociable children seem to prefer solitude to socializing with peers (Rubin & Asendorpf, 1993). However, these children do not have a problem when they want to interact with others (Asendorpf, 1993). They just seem to be more object oriented rather than people oriented (Jennings, 1975). These children can be described as having a low social approach but not necessarily as having a high social avoidance motivation (Asendorpf, 1990). Another term used to describe these children is passive withdrawal (Rubin & Mills, 1988). Behaviourally, these children tend to engage in solitary-passive play (Coplan,

in press; Coplan & Rubin, 1998) or quiet, exploratory, and constructive behaviour while playing alone.

Finally, socially isolated children are actually isolated by others (Asendorpf, 1993). These children have a low social avoidance and a high social approach motivation. These children are thought to demonstrate solitary-active behaviours (Rubin & Mills, 1988; Coplan & Rubin, 1998). They tend to engage in more active forms of behaviour (e.g., solitary-dramatic play). They are also thought to be more likely to engage in aggressive and immature behaviours which may eventually lead them to being rejected by others. See Table 1 for a diagram of these different types of socially withdrawn behaviours.

Insert Table 1 about here

Thus, it is clear that researchers use different terms to describe similar behaviour. For instance, Asendorpf (1993) uses the term social isolation to describe children who are isolated by others, while Rubin & Mills (1988) use the term active isolation. In addition, it seems that social withdrawal is not a unidimensional term as once thought but rather a multidimensional term that encompasses many different subtypes (e.g., shy, unsociable, and socially isolated).

Table 1

Diagram of the Different Types of Socially Withdrawn Behaviours

There are numerous difficulties surrounding the definition of the terms social withdrawal, inhibition, and shyness. Each researcher tends to have slightly different definitions and meanings depending on the area of research, thus making it difficult to directly compare results from one research to another. For the purposes of the present study, the term social withdrawal will be used as the "umbrella" term encompassing all the different forms of behavioural solitude - children who play alone for various reasons (Rubin & Asendorpf, 1993).

Theoretical Approaches to the Study of Social Withdrawal

As previously mentioned, there are a variety of different conceptual models of social withdrawal. Although these theories share some similarities, there are varying conceptualizations as to why children do not interact with others. Some of these theories are discussed in more detail in the following sections.

Inhibition. Kagan and colleagues (1984, 1987, 1988, 1989) define inhibition as the tendency to react to something unfamiliar or novel by showing an increase in timid, quiet, and avoidant behaviour (Kagan, 1989). This approach tends to focus more on the biological bases of behaviours (e.g., heart rate and heart rate variability, pupillary dilation). From their studies, Kagan and colleagues identified two extremes of behavioural responses to the unfamiliar: inhibited and uninhibited. These two behavioural extremes could help explain why one child will

react in a timid, shy manner, and another may be sociable and fearless in the face of the same situation (e.g., meeting strangers).

For instance, Kagan, Reznick, Snidman, Gibbons, and Johnson (1988) found that in unfamiliar social situations (e.g., in the laboratory and free-play situations), inhibited children tended to be less talkative and more isolated, whereas uninhibited children seemed to be more talkative and interacted more with others. In addition, children who were inhibited had a higher and more stable heart rate, larger pupil dilation, and had a lower threshold of excitability in limbic structures (e.g., Kagan, Reznick, Clarke, Snidman, & Garcia-Coll, 1984; Kagan, Reznick, & Snidman, 1987, 1988). According to Kagan, inhibited children have a biologically-based low threshold for physiological arousal in the face of novelty.

Shyness. One theory of the underlying nature of shyness comes from Buss (1984, 1986). Buss argued that shyness can be broken down conceptually into fearful shyness and self-conscious shyness. Fearful shyness develops during the first year of life. It occurs usually in the presence of unfamiliar people. This type of shyness is usually demonstrated by the child retreating, showing signs of wariness, and attempting to find comfort in his/her parents' arms (Buss, 1986). However, more severe reactions could include "a cry-face or the crying and shrinking

back that characterize fear" (Buss, 1986, p. 39). This type of shyness, while being adaptive during infancy, tends to decline as children age. However, for some children, this type of shyness persists except that it is triggered by different events (e.g., social evaluation).

On the other hand, self-conscious shyness "involves the self as a social object" (Buss, 1986, p. 40). This type of shyness usually begins when children are between the ages of 4 and 5 years. It is during this age period that children become more and more conscious about being the focus of attention (Buss, 1984). According to Buss (1986), there are four situations that can cause self-conscious shyness: the feeling of being scrutinized; the feeling of being different from others in a particular situation; some sort of breach of privacy (e.g., exposure of private body parts or private functions); and during a formal situation (e.g., wedding).

Asendorpf (1990) also describes social-evaluative shyness as a fear of being evaluated negatively in a particular social situation (e.g., oral presentations). Similar to self-conscious shyness (Buss, 1986), both have a later onset than fearful shyness (between 5-6 years). In addition, during this age period, children become more aware of themselves as social objects as well as having forms of social anxiety.

Social motivations. Asendorpf (1990) has argued that there

are different subtypes of social withdrawal that can be described in terms of two disparate behavioural dispositions: social approach and social avoidance. These dispositions may be thought of in terms of different motivational systems that cause children to increase their tendency to avoid, approach, or ignore other children. Thus, some children may ignore other children because they are already involved in some other activity (i.e., such as a girl playing with her favourite doll). These children can be described as having a low social approach and a low social avoidance motivation and have been referred to as socially disinterested or unsociable.

Other children may be trapped in an approach-avoidance conflict. These children want to play with others but for some reason (i.e., fear) feel like they have to avoid them, especially in an unfamiliar (novel) setting. This conflict can be resolved through some sort of compromise (e.g., hovering around those who are playing a game that they really want to play). Thus, it seems that these children may be wary to join in for some reason or another (e.g., expectation that they may be laughed at if they join the game because they believe that they are not good at it). According to Asendorpf (1990), these children would be classified as shy.

Isolation from/by peers. Another theoretical approach is based on Rubin and Mills (1988). They argued that social

withdrawal is a multidimensional construct. While one form of social withdrawal might be viewed as being normative at one stage of life, it might also be viewed as atypical at another stage. They suggested two different forms of social withdrawal: passive-anxious and active-immature. They viewed passive-anxious as constructive, quiet, exploratory type of behaviour. This type of behaviour is seen as normal in preschool years and is associated with the child's acceptance by his/her peers as well as being competent in solving problems (Coplan et al., 1994). This behaviour tends to be positively reinforced by parents, peers, and teachers (Rubin, 1982). However, as other researchers have done in the past, Rubin and Mills (1988) confounded passive-anxious behaviour and socially disinterested behaviour.

The second form of social withdrawal, active-immature, is characterized by boisterous behaviour and cognitive-immature behaviour. These children tend to engage in solitary play behaviour that is immature (e.g., solitary-sensorimotor play or solitary-dramatic play). The children's behaviour then becomes part of a vicious cycle. Children who demonstrate this type of behaviour may be seen as not only withdrawing from the peer group because they feel that they are not liked by others, but they will also be eventually rejected by their peers. These children are more likely to have externalizing problems such as aggressive behaviour as well as immature behaviour throughout childhood

(Coplan, in press; Coplan et al., 1994; Coplan & Rubin, 1998; Rubin & Mills, 1988).

Thus, as mentioned, there are many different theories as to why children do not interact with their peers. Some children may play alone because they are fearful and socially cautious. Other children refrain from social interaction because they are self-conscious. Still, others are not highly motivated to play with others. Finally, some children play alone because their play partners do not want to play with them.

Measures of Shyness, Inhibition, and Social Withdrawal

There exists various different methods for assessing social withdrawal and related constructs. These methods can be characterized by the source of the information: direct observations, teachers, parents, self-reports, peers, as well as interviews. The advantages and disadvantages of these methodologies are briefly discussed in the following section.

Direct observations. Rubin et al. (1990) argued that direct behavioural observations are the bases from which all other methods of assessing behaviour should be compared. According to Coie, Dodge, and Kupersmidt (1990), there are several advantages to using this methodology. First, since observations involve trained, unbiased observers, the results are not tainted by previous contact with the children and they are more objective. Second, observers can be trained to record

specific and detailed aspects of behaviour in a more discrete manner than teachers or peers. Third, direct observations allow researchers to define a behaviour (e.g., social withdrawal) in an operational way. For instance, the rate at which a child displays withdrawn behaviour (e.g., showing physical signs of anxiety such as blushing) when around other children. Fourth, this method allows researchers to understand the sequence in which behaviours occur and the circumstances surrounding the event. Fifth, this method has the most face validity than other methods since it is directly observing behaviours of children.

However, despite these many advantages, observations are difficult to employ because they are very time-consuming and less economical than other methods (e.g., teacher and parent ratings). Another reason why observations can be problematic is that it becomes harder in the elementary schools to naturally observe children because there is less and less free play as grades increase (Rubin et al., 1990). This latter problem has been somewhat rectified by observing children under other situations such as during recess (e.g., Ladd, 1983). Moreover, when observing children under free-play conditions, one can only observe them under a limited time frame and context, thus making it difficult to generalize the results to everyday behaviours. Finally, when children know that they are being observed, they may act differently than when they know they are not being

observed (Rubin, Coplan, Nelson, Cheah, & Lagacé-Séguin, 1999).

Children who are observed as displaying a low rate of interaction with their peers tend to be identified as being socially withdrawn (e.g., Greenwood, Walker, Todd, & Hops, 1979). However, as previously mentioned, there are problems (empirically and conceptually) with defining social withdrawal solely on the basis of the amount of interaction. For instance, researchers have varied how to define a low rate of interaction - from children who interact with peers less than 15% of the time to children who interact with peers less than 50% of the time (Rubin et al., 1990). This makes it difficult to compare results from one study to the next. Moreover, when only looking at the rate of interaction, this allows the inclusion of different forms of "solitary play" under one label, thus making it difficult to differentiate between different types of withdrawn behaviour (e.g., Coplan et al., 1994; Coplan & Rubin, 1998).

Another problem with observations is that the age of the children has not been taken into consideration with many studies. Young children tend to spend most of their free play not interacting with others (e.g., Parten, 1932). However, some researchers have ignored this and have identified young children as being socially withdrawn if their interactions with peers are less than one half to one third of their behaviour (Rubin et al., 1990).

Teacher assessments. Another way of evaluating the withdrawn behaviours of children is with teacher ratings. There are numerous advantages to using teachers as assessors of children's behaviour. First of all, since teachers spend a lot of time with the children, they can be useful observers for infrequently occurring behaviours (Rubin et al., 1990). Second, having teachers assess behaviours makes the task more economical, more effective and less time-consuming than using observations or peer ratings (Wadeson, 1993). There is also no class-time disruption for the children. Third, since teachers are not part of the peer group, they may provide an outsider's perspective that is more objective than peers would with regard to the occurring behaviours in question (Rubin et al., 1999).

However, there are also several disadvantages to using teachers as evaluators of children's behaviours. First, while teachers may have a more objective perspective of the behaviours, they also have more of an adult perspective which is quite different from children (Rubin et al., 1990). Second, with regard to withdrawal, teachers may not be good observers of more quiet, nondisruptive classroom behaviour; they are better at observing aggressive-type behaviours (Rubin et al., 1990). Teachers also tend to be biased in that they tend to report more boys as being aggressive and girls as being more quiet, shy (Coie et al., 1990). Third, while peer observations involve more than

one observer, teacher observations typically involve observations from only one perspective. Fourth, children tend to act differently when they are with peers than when they are in the company of an adult (e.g., teacher) (Ledingham & Younger, 1985). Finally, since teachers are very concerned with maintaining classroom discipline, they may be more biased in that they tend to underreport quiet, nondisruptive types of behaviour. Thus, they may not be in the position to recognize children who are well-behaved but withdrawn (Ledingham & Younger, 1985).

Few scales exist that measure social withdrawal directly, although some teacher scales include items pertaining to social withdrawal. When measuring social withdrawal, researchers tend to use withdrawal, anxious, or internalizing subscales from many different scales, including the Preschool Behavior Questionnaire (PBQ, Behar & Stringfield, 1974), the Devereux Child Behavior Rating Scale (DCBRS, Spivack & Spotts, 1966), the Children's Behavior Questionnaire (CBQ, Rutter, 1967), the Conners Teacher Rating Scale (CTRS, Conners, 1969), the Preschool Socioaffective Profile (PSP, LaFrenière, Dumas, Capuano, & Dubeau, 1992), and the Child Behavior Scale (CBS, Ladd & Profilet, 1996).

However, the majority of these scales were conceived to measure more global constructs (e.g., social and emotional functioning) in the classroom setting. Recently, Coplan and Rubin (1998) developed the Preschool Play Behavior Scale (PPBS),

a teacher rating scale designed to specifically evaluate children's nonsocial play behaviours within the play group. Teachers rate children's behaviours according to 18 statements on a 5-point Likert scale (1 = never to 5 = very often). The scale is comprised of five factors: social play, reticent behaviour, solitary-passive behaviour, solitary-active behaviour, as well as rough play. This scale has been found to be potentially useful in either replacing other time-consuming observations of behaviour, or as a multi-method tool for assessing younger children's behaviours (social and nonsocial) during free play (Coplan & Rubin, 1998).

Parent assessments. Parents are sometimes used as evaluators of children's withdrawn behaviour. Mostly the same scales that are used for teachers are also used for parents. The same pros and cons that apply to teachers as evaluators tend to apply to parents. However, some are specific to using parents as observers. For instance, while parents are able to watch their children's behaviour in a variety of different settings, they also bring their adult perspective when evaluating behaviours such as social withdrawal (Coie et al., 1990). In addition, parents are not able to observe their children's classroom-based behaviours which tend to be quite different to observing their children in a more familial environment.

Studies have shown that while mothers are the ones that tend

to participate more in studies, there is a relatively high agreement between mothers and fathers when evaluating the behaviour of their children (Burrows & Kelley, 1983). As compared to teachers, parents seem to report an elevated number of behavioural disorders (Touliatos & Lindholm, 1981). The correlation between teacher and parent ratings of children's behaviours ranges from low to moderate (Touliatos & Lindholm, 1981).

Self-reports. Self-reports could also be potentially useful in the evaluation of children's socially withdrawn behaviours. Through self-reports, we can gain information about how children view themselves, which might be very different from how others view them. In addition, it seems critical to consider the children's perspective (especially older children) in order to unravel the processes that might be involved in the development of poor peer relations (Hymel & Franke, 1985). Unfortunately, children's self-reports have not frequently been used. The reason for this is that while self-reports in the adult population have been frequently utilized (e.g., The Stanford Shyness Project, Zimbardo, 1986), it is thought that children's self-reports are less valid (Hymel & Franke, 1985).

The disadvantages of using self-reports are that they may be subject to social desirability responses (Ledingham, Younger, Schwartzman, & Bergeron, 1982). Furthermore, children's self-

reports were found to be as valid as other sources of assessment (e.g., peers and teachers) only when their self-reports acknowledged attributes that are undesirable (Kagan, Hans, Markowitz, Lopez, & Sigal, 1982).

Peer assessments. Using peers as informants of other children's social withdrawal has many advantages. First of all, since children are an active part of the peer group, they have inside access to the behaviours within their peer group. Second, as opposed to other observers (e.g., teachers), peers get to witness more interactions on a consistent basis - what is the norm in behaviour. Third, peer reports represent the perspectives of numerous peers who have had varied types of relationships with the child in question (Hymel & Rubin, 1985). This helps to reduce rater biases (Ledingham et al., 1982). Fourth, previous research has shown the validity of peer evaluations in the prediction of future social adjustment (Hymel & Rubin, 1985).

For example, Cowen, Pederson, Babigian, Izzo, and Trost (1973) found that peer assessments by third graders were better predictors of later mental health problems (psychiatric problems) than other methods of assessment. Rolf (1972, 1976) reported that, as compared to teacher ratings of adjustment, ratings of peers by children in Grades 3 and 5 were more accurate in the identification of children at risk for schizophrenia in

adulthood.

Teacher and peer ratings are both comparable assessors of certain behaviours, namely, aggression and sociability (Ledingham et al., 1982). However, while younger children seem to be poorer assessors of social withdrawal in their peers, as they age their ability to assess withdrawal becomes comparable to teachers' ability to assess withdrawal. The reason suggested for this is that older children have greater cognitive abilities (e.g., pay more attention to unobservable behaviour which is more descriptive of withdrawn behaviour) than younger children, thereby they are better able to perceive withdrawn behaviour in other children.

When using peer behavioural assessment procedures, researchers ask children to nominate their peers according to different behavioural or character type roles (e.g., "Who in your class has feelings that get hurt easily?"; "Who is very shy?"). Then, the nominations are summed and standardized by class and gender.

The two most common scales used to assess social withdrawal and related constructs are the Revised Class Play (RCP, Masten, Morison, & Pellegrini, 1985) and the Pupil Evaluation Inventory (PEI, Pekarik, Prinz, Liebert, Weintraub, & Neale, 1976). Factor analyses of these two scales have demonstrated that they both have three behavioural factors that are similar. The social

withdrawal items for both scales can be found in Table 2.

Insert Table 2 about here

The RCP consists of three factors: Sociability-Leadership, Aggressive-Disruptive, and Sensitive-Isolated, and is a 30-item role playing nomination scale. Children are asked to play the role of a director and assign a maximum of three of their peers in their class to each of the behavioural roles. According to Masten et al. (1985), RCP internal consistency ratings are above .80 for all three factors. Test-retest reliability of the scale was also quite stable over a 17-month period.

For the PEI, the factors are: Likeability, Aggression, and Withdrawal. It is a 34-item scale that is appropriate for children between Grades 2 to 9. There also exists a shorter version (16 items) for Grade 1 children. This scale includes 5 likeability, 9 social withdrawal, and 20 aggression items. The peer rater is asked to put an "X" under the names of all the children in his/her class that fit the behavioural description in question. Pekarik et al. (1976) reported that this scale had high internal consistency (above .70) and moderate concurrent validity across grades and gender except for the Likeability factor for males in Grades 7 to 9. Moreover, there was high interrater agreement across raters (males and females). This

Table 2

Social withdrawal items for the RCP and PEI Scales

Revised Class Play (Masten, Morison, & Pellegrini, 1985)

Sensitive-Isolated

1. Often left out.
 2. Feelings get hurt easily.
 3. Usually sad.
 4. Rather play alone than with others.
 5. Has trouble making friends.
 6. Can't get others to listen.
 7. Very shy.
-

Pupil Evaluation Inventory (Pekarik, Prinz, Liebert, Weintraub, & Neale, 1976)

Withdrawal

1. Too shy to make friends.
 2. Feelings easily hurt.
 3. Never have a good time.
 4. Upset when called on in class.
 5. Chosen last for activities.
 6. Have few friends.
 7. Unhappy or sad.
 8. Don't want to play.
 9. Not noticed much.
-

scale had a test-retest correlation (after having given the test again after two weeks) above .80 for the three factors.

Ledingham et al. (1982) conducted a validation study with a French version of the PEI (Pekarik et al., 1976). Self-ratings, teacher ratings, and peer ratings were obtained for 172 children in Grade 1, 346 children in Grade 4, and 283 children in Grade 7 from a French-speaking school. There were 30 teachers involved in this study. They found that with self-ratings, teachers and peers had correlations from .11 to .83 for all three factors (aggression, withdrawal, and likeability). They also found that there was stronger agreement for the aggression factor than for the withdrawal factor for all types of ratings used regardless of grade level. For example, the correlations for the teacher-self ratings for withdrawal went from .11 to .20, for peer-self ratings went from .23 to .38, and for peer-teacher ratings went from .47 to .54.

General Problems With Peer Ratings of Social Withdrawal

The one major disadvantage of using peers as evaluators in this area is that younger children have been found to have more difficulty in differentiating certain types of maladjusted behaviour, namely, social withdrawal (e.g., Younger et al., 1985, 1986; Younger & Piccinin, 1989; Younger & Daniels, 1992). For example, Younger et al. (1985) studied children's perceptions of aggression and social withdrawal using the PEI. Students from

Grades 1 (n=326), 4 (n=356), and 7 (n=298) participated. All the children were given a French version of the PEI. It was administered by class and the children were asked to nominate up to four peers whom they believed best fit the descriptions.

Results showed that children of all ages had no difficulty in differentiating between likeability and aggression items. However, children in Grade 1 had difficulty differentiating the withdrawal items from the other two. As age increased, the withdrawal items and the aggression items became more distinct and cohesive.

Younger et al. (1985) suggested that these findings might be explained by younger children (Grade 1) tending to organize items following an evaluative dimension (i.e., deviant to nondeviant). The likeability items fit under one dimension (nondeviant), while aggression items clearly fit the other dimension (deviant). However, withdrawal items do not really fit well under either dimension but rather in-between the two extremes. This could explain why younger children have difficulty perceiving withdrawal items.

On the other hand, older children (Grade 4 and up) seem to follow an active-passive dimension. That is, older children tend to organize items in terms of whether they see them as active behaviours or as more passive behaviours. Thus, with increasing age, the withdrawal items begin to form a more cohesive and

distinct category, apart from aggression and likeability items.

Younger and Schneider (1993) suggested several other potential problems with these two most commonly used peer rater scales. To begin with, as compared to the aggression items which tend to be more overt (e.g., "A person who gets into a lot of fights" - RCP), the social withdrawal items (e.g., "Someone whose feelings get hurt easily" - RCP) describe more unobservable behaviour (see Table 2). In support of this notion, Shantz (1983) reported that younger children (around 6 years of age) were more likely to describe the observable incidents and activities of individuals when watching a film, while older children (ages 9-12) tended to generate descriptions that were more complex and detailed in nature. Thus, a possible reason why younger children were found not to be able to perceive withdrawal could be that the scales used for examining this behaviour focused more on unobservable states.

A second problem described by Younger and Schneider (1993) is that the descriptions used for the withdrawal items for the RCP and PEI do not describe salient (overt) behaviour. Younger and Boyko (1987) and Younger and Piccinin (1989) conducted studies to examine children's recall for hypothetical characters that were either aggressive or withdrawn (these studies will be described in more detail in a later section). The descriptions for the hypothetical characters were derived from other peer assessment

scales. They reported that children at any age seemed to have a facility to encode and recall descriptions about the hypothetical aggressive peer. However, children's ability to encode and recall descriptions of the hypothetical peer who was withdrawn was poorer. As the age of the child increased, the ability to encode and recall descriptions of the hypothetical withdrawn peer increased. Thus, as previously stated, what is meaningful and overt withdrawn behaviour for older children may not be the case for younger children. As such, scales looking at social withdrawal should keep this last point in consideration.

A third problem suggested by Younger and Schneider (1993) was that the PEI and RCP scales do not differentiate between different subtypes of withdrawn behaviour. Consistent with this notion, Rubin and Mills (1988) found that the sensitivity-isolation factor on the RCP scale actually consisted of two subscales: passive withdrawal and active isolation. As mentioned earlier, there are potentially many different reasons why children may play alone, which are confounded by both the PEI and RCP. Thus, it seems that in the future, scales assessing shyness should take the previously mentioned problems into consideration.

In order to address these last three points, Younger and Schneider (1993) developed a new scale to assess only social withdrawal. Their goal was to develop a scale that evaluated

different types of withdrawal (e.g., fearful shyness and self-conscious shyness). Also, they wanted to select descriptions of withdrawn behaviour that would be observable and salient to children of all ages. They interviewed 240 children in Grades 1, 3, 5, and 7 to elicit descriptions of shyness. These interviews generated 1200 behaviours which they organized into 11 categories: (1) does not talk; (2) keeps to himself/herself; (3) does not play or participate in activities; (4) runs away from others; (5) avoids eye contact; (6) shows physical signs of anxiety; (7) hides from others; (8) stays near familiar people; (9) blushes; (10) cries; and (11) gets mixed up when talking. One should note that these 11 categories seem to confound shyness with active isolation and social disinterest. From these categories, they selected the behaviours that were mentioned by at least 10% of the children at every grade level. A final scale was developed with 14 descriptions of withdrawn behaviours and 9 filler items. For the 14 items that describe withdrawn behaviours, please see Table 3.

Insert Table 3 about here

The filler items, which consisted of social behaviours, were taken from existing scales (e.g., RCP and PEI). The scale has the same format as the RCP scale. For instance, like the RCP

Table 3

Withdrawal Items for the Behaviour-Based Peer-Rating Scale of
Children's Social Withdrawal
(Younger & Schneider, 1993)

1. Someone who talks in a very quiet voice.
 2. Someone who stays by themselves most of the time.
 3. Someone who blushes or turns red easily.
 4. Someone who does not play with other children.
 5. Someone who gets nervous when they talk when they have to talk in class.
 6. Someone who walks around alone on the playground.
 7. Someone who watches other kids play, instead of playing with them.
 8. Someone who does not talk to other kids unless they know them really well.
 9. Someone who cries when other kids make fun of them.
 10. Someone who does not answer questions in class.
 11. Someone who tries to hide from other kids they do not know.
 12. Someone who looks down or looks away when people try to talk to them.
 13. Someone who stays close to their teacher, instead of playing with other kids.
 14. Someone who does not talk much to other kids.
-

scale, children are asked to nominate up to three children in their class whom they feel best fit the descriptions on the scale.

Results from factor analysis revealed that the scale consisted of two factors: fearful shyness (e.g., keeping to oneself - which could be interpreted as social disinterest) and self-conscious shyness (e.g., social anxiety). These factors are similar to those defined by Buss (1986) and Asendorpf (1990). As previously mentioned, fearful shyness involves inhibition towards something or someone unfamiliar. Self-conscious shyness involves inhibition during circumstances which involve being evaluated socially (e.g., oral presentations).

However, even though the Behaviour-Based Peer-Rating Scale of Children's Social Withdrawal (Younger & Schneider, 1993) does address some of the problems of the two most frequently used scales (PEI and RCP), it should be noted that some of the 14 withdrawal items on this scale may confound social disinterest with fearful shyness (e.g., "Someone who stays by themselves").

Moreover, when children were being interviewed, they were asked what they thought "shyness" meant. Shyness, as previously mentioned, is a word that is difficult to define. As researchers tend to have their own idea of what shyness means, so might children. The word may be confusing to them. Thus, for the present study, children were asked about peers whom they knew who

tended to play alone. This particular description was selected because it is a behavioural trait shared by shyness, social disinterest, and active isolation.

It is possible that results from studies using the PEI and RCP scales may underestimate children's knowledge about social withdrawal. The items on both of these scales describe social withdrawal as being unidimensional as opposed to multidimensional. Perhaps the reason why it appears that children (especially younger children) are found to have difficulty in perceiving social withdrawal is that the scale items confound the different subtypes under one factor. It could be that younger children are able to perceive different types of social withdrawal, but because the way the scales are set up, researchers are not able to ascertain this very well.

Interviews. The final method for assessing withdrawal with children is through the use of interviews. As mentioned, this procedure has been used most often to obtain information concerning children's perceptions about social withdrawal. There are several advantages to using interviews. First, conducting interviews allows the researcher to obtain more information from the subjects than by giving them a scale/questionnaire to fill out. Second, the interviewer has a chance to make sure that the interviewee clearly understands the questions. Third, by giving open-ended questions, it allows the interviewee to answer what

he/she is thinking - the answers are not led (Cozby, 1993).

There are also some potential disadvantages with using this method. First, interviews can be potentially time-consuming since they are usually administered individually. Second, open-ended questions can make it difficult to code, thus one must be certain that there is some sort of coding scheme established when analysing the responses. Third, the questions themselves must be well-thought-out and the wording must be clear and concise. Fourth, there may be interviewer bias. That is, the interviewer may subtly approve or disapprove the responses of the interviewee. Moreover, the interviewer might expect to see something in the interviewee's answers that might actually not be there, thus this could lead to biased interpretations of their responses (Cozby, 1993).

Particularly with younger children, interviews represent the only method to assess children's knowledge about social withdrawal. Thus, for the present study, children were interviewed in order to find out directly what they knew about social withdrawal.

Children's knowledge about social withdrawal has been studied by exploring how children perceive withdrawn behaviours. This literature is discussed in the following section.

Children's Perceptions of Social Withdrawal

Children's perceptions and understanding of withdrawal were

the major focus of the present research. It has been reported in the extant literature (e.g., Younger et al., 1985, 1986) that younger children (i.e., Grade 1) have difficulty in perceiving withdrawal. However, with increasing age, children appear to have less difficulty in differentiating between social withdrawal and aggression. These conclusions are based on research using the RCP and PEI scales. As noted previously, there are numerous problems with these scales that could have influenced these results.

It has generally been argued that both withdrawal and aggression are factorially orthogonal dimensions in childhood (Quay, 1979; Pekarik et al., 1976). However, how younger children view these different forms of maladjustment may be quite different than older children and adults. One of the first studies to suggest this was a large scale longitudinal study conducted by Ledingham (1981). Children from Grades 1, 4, and 7 participated. Using ratings from the PEI, she identified three groups of children who were extremely (1) aggressive, (2) socially withdrawn, and (3) both aggressive and withdrawn.

Based on the findings of Quay (1979) and Pekarik et al. (1976), Ledingham (1981) hypothesized that the best estimate of the relation between aggression and withdrawal was that they were independent of each other. Thus, the joint probability of falling in the bottom 75% of one dimension (i.e., aggression) and

in the top 5% of the other dimension (i.e., withdrawal) would be the probability product of .34. It was expected that approximately 4% of the original sample would be identified as withdrawn, 4% as aggressive. In addition, the joint probability of being in the top 25% for both withdrawal and aggression would be .063. Thus, approximately 6% of the original sample was expected to be identified as aggressive-withdrawn.

Employing chi-square goodness of fit analyses, Ledingham (1981) found that children in Grade 1 tended to nominate more children as being high on both aggressive and withdrawn behaviour than was predicted using an "independent model". Conversely, children in Grade 1 nominated fewer children as either aggressive alone or socially withdrawn alone than was predicted. For Grade 4, similar patterns were found as for the Grade 1 children. In Grade 7, the opposite pattern arose. More children were identified as either aggressive or withdrawn alone than predicted, and fewer children were identified as being high on both aggression and withdrawal.

Younger and colleagues (e.g., 1985, 1986; Younger, Gentile, & Burgess, 1993) have conducted the primary studies pertaining to children's perceptions of social withdrawal and aggression. They have focused on the exploration of age-related shifts in how children perceive social withdrawal and aggression.

In their initial studies, Younger et al. (1985, 1986)

employed multidimensional scaling. This procedure was borrowed from research on social perceptions. Multidimensional scaling allows the researcher to "map out" social perceptions. Stimuli that are perceived to be similar to each other are located close to each other, while stimuli that are perceived as dissimilar are located farther away from each other in some sort of spatial representation (Younger et al., 1993).

To begin with, Younger et al. (1985) directly examined children's perceptions of aggression and withdrawal at different ages. Using ratings from the PEI, they examined peer nominations of children in Grades 1, 4, and 7. The children were requested to nominate up to four peers for each of the 34 items on the PEI scale. It was found that both aggression and social withdrawal became increasingly more distinct as a function of age. Results suggested that younger children tended to view behaviour along an evaluative dimension (good or bad dimension), while older children tended to differentiate aggression from withdrawn behaviour by using an active-passive dimension.

Since younger children (Grade 1) tended to organize behaviours according to a good/bad (i.e., deviant to nondeviant) dimension, aggression would be classified as one dimension (bad) while likeability would be classified as the other dimension (good). However, social withdrawal does not concretely fit into either one of these categories for a child within this age group.

But rather, it was seen as being between the good/bad dimension.

With increasing age (i.e., by around Grade 7), children tended to see behaviours as falling under a different set of dimensions (i.e., active-passive dimension). At this age level, children began to form cohesive and distinct clusters for all three behavioural patterns (e.g., aggression, withdrawal, and likeability).

Younger et al. (1985) found that the three factors on the PEI were not perceived the same at different grade levels. The aggression and likeability items were highly cohesive and were very distinct from each other, regardless of the age of the children. However, the social withdrawal items were not very distinct or cohesive among the first graders, but these items became increasingly cohesive and distinct as the grade level increased.

As acknowledged by Younger et al. (1985), one of the problems with this study is that while the results showed that there was an age difference with regard to how children perceive withdrawal and aggression, it was not certain as to whether the difference was due only to changes in children's perceptions of peer nominations. Thus, it was difficult for them to ascertain whether this age-related shift was due to the age of the assessor or the age of the assessee. In order to separate these two sources of variance, Younger et al. (1986) conducted three other

studies.

The first study involved the examination of teacher ratings of social withdrawal and aggression in Grades 1, 4, and 7 using PEI ratings to assess the age effects of children who were rated. By using teachers, they were able to examine age differences due to the behaviour of the assesseees by holding constant the age of the assessor. The results showed that there were no grade-related differences found in the organization of teachers' ratings. Social withdrawal, aggression, and likeability factors (as rated by teachers) were cohesive and distinct from one another at all three grade levels. For instance, all the items for the social withdrawal factors were clustered together (cohesive), as well as being distinct (separated) from the items for the two other factors. These findings replicated the results of Younger et al. (1985), who reported that children in higher grades (e.g., Grade 7) also organized the social withdrawal, aggression, and likeability factors into distinct and cohesive categories.

In a follow-up study, Younger et al. (1986) examined age of rater effects on how children of Grades 1, 4, and 7 conceptually categorized aggression, social withdrawal, and likeability of hypothetical children. Children were given behavioural descriptions of hypothetical children. Then, they were asked their opinions about what other types of behaviours may be

displayed by these hypothetical children. For instance, they were asked whether the hypothetical boy who was aggressive might also display socially withdrawn behaviour (or likeability). Thus, all possible pairs of behaviour were compared. Using multidimensional scaling, they reported that there was an age effect in children's views of how behaviours co-occur. This age effect was found to parallel the change that was previously observed in children's peer ratings.

In a third study, Younger et al. (1986) examined children's peer ratings for children who were not their age-mates. First-grade children's ratings of children in seventh grade were collected, as well as seventh-grade children's ratings of children in first grade. The researchers had to modify the PEI scale such that the 19 items that were selected (6 = withdrawal items; 9 = aggression items; 4 = likeability items) were made more "general" with respect to behaviour. They wanted to make sure that these behaviours could be observed outside of the classroom. Thus, the children were asked to think of an individual (i.e., sibling or neighbour) whom they were fairly familiar with in order to be able to rate him/her. The children were to select an individual of appropriate age (i.e., 5-7 years for children in Grade 7; 12-14 years for children in Grade 1). They were told that they would have to answer questions about the person they had selected, so they had to make sure they chose

someone of whom they had sufficient knowledge of.

The results indicated that first graders rated older children according to a social-evaluative dimension (i.e., deviant to nondeviant) just like they evaluated children of their own age group. On the other hand, seventh graders rated first graders using both a deviant-nondeviant dimension (i.e., social-evaluative dimension) and an active-passive dimension.

Overall, the results of these three studies demonstrated that children's views of deviant behaviour changed across age (especially for socially withdrawn behaviour). The results also indicated that the age of the rater (age of the assessor) was a more important aspect towards the organization of how children perceive maladjustment than was the age of those rated (age of the assessee) (Younger et al., 1986).

More recently, Crozier and Burnham (1990) examined children's age-related differences in their understanding of shyness. They were interested in two specific types of shyness: fearful shyness and self-conscious shyness. Interviews were conducted with children between the ages of 5 to 11, in order to evaluate children's perceptions of these two subtypes of shyness. They sought to determine whether fearful shyness preceded self-conscious shyness, and to assess whether the transition period between these two different types of shyness occurred between 7-8 years of age.

All the children were interviewed individually. Some of the questions they were asked were: (1) "What sorts of things make you feel... happy... (sad...shy)?" (2) "What do you think shyness is?" (3) "Do you think it is nice or not so nice to feel shy?" (4) "Do you know anyone in your class who is shy?" [if not, "Do you know anyone at all who is shy?"] (5) "Why do you think they are shy?" and so forth. Their answers were then categorized by four independent judges into three categories: fearful shyness, self-conscious shyness, and other. The definitions of fearful shyness and self-conscious shyness were based on Buss (1986).

The results showed that younger children (ages 5-6) made more references to fearful shyness than older children (ages 10-11). However, while fearful shyness tended to decline with age in regard to the percentage of responses the children made, it was still stable with respect to its frequency of use. On the other hand, references to self-conscious shyness, while rare with younger children, were more frequent with older children. Moreover, fearful shyness did not seem to replace self-conscious shyness. Although unfamiliar people and novel situations remained sources of shyness for older children (10-11 years), this age group also perceived shyness as including embarrassment and conspicuousness.

Thus, there seems to be different views regarding younger children's ability to perceive withdrawal. When using scales

such as the PEI, younger children appear to have difficulty perceiving withdrawal. However, when interviewing children, independent judges were able to categorize children's responses (ages 7-8) into different subtypes of withdrawal (e.g., fearful shyness and self-conscious shyness). As previously mentioned, it could be that the reason why younger children do not seem able to clearly perceive withdrawal is that the scales used are not sensitive enough (i.e., it is only testing for withdrawal in general - not a particular form) for younger children. Therefore, for the present study, children were interviewed in order to find out more about what children (especially younger children) know about withdrawal. Since, as previously mentioned, the word "shyness" has a lot of problems surrounding it, in the current study, children were asked if they knew of someone who tended to "play alone". By asking this initial question, younger children's perceptions and knowledge of different forms of withdrawal (i.e., fearful shyness, self-conscious shyness, active isolation, and social disinterest) could be explored directly.

Emotions

Different forms of social withdrawal are associated with differential emotional states (e.g., fear, embarrassment, anger). As such, in understanding children's perceptions of social withdrawal, it may be beneficial to explore children's perceptions of emotions. Children as young as 3 years of age are

able to understand what adults would term to be emotions that are correct responses in some situations (Borke, 1971, 1973; Mood, Johnson, & Shantz, 1978). At the age of 4 years, children can understand simple situations that would elicit the emotion "happy". Between the ages of 4 to 7 years, children are able to understand circumstances that would elicit the emotions of anger, fear, and sadness (Shantz, 1975).

Michalson and Lewis (1985) conducted a study to examine children's knowledge of emotional labels. They tested 35 children between the ages of 2 and 5 by showing them a picture (Polaroid) of a 10-year-old girl demonstrating 6 facial expressions (happiness, surprise, disgust, sadness, fear, and anger). They found that at 2 years of age only one child had knowledge of happiness and sadness. However, by the age of 5, 80% of the children were able to produce the "happy" label, all the children had the labels for "sad" and "anger", and few children had labels for "surprise" and "fear". At this age, no child was able to produce the label for "disgust". The authors concluded that of all the emotions examined, "happy" and "sad" were the two labels that were learnt the earliest.

Results from research in this area have shown that even preschoolers can differentiate between "bad" and "good" feelings (Harter, 1982). Thus, the two emotions that are the most readily identifiable at an early age are "happiness" and "sadness". As

children age, they are able to attribute correctly to emotion-eliciting circumstances emotions such as "shame", "surprise", and "pride" (Weiner, Kun, & Benesh-Weiner, 1980).

Therefore, for the present study, in order to find out more about children's perceptions of emotions which are related to the forms of social withdrawal studied, children were asked the following question "How do you think he/she is feeling when he/she is not playing with others?". The following emotions were examined based on past research and their relevance to the withdrawal types being examined: happiness, sadness, anger, and embarrassment.

Schemas

Another approach to the study of children's perceptions of social withdrawal involves the use of social schemas. Younger and colleagues (1987, 1989, 1993) have argued that the age shift in children's perceptions of social withdrawal is facilitated by children's increasing ability to take into account data regarding maladjusted behaviour in their peers. That is, their social perceptions (how children view their peers) are guided by social schemas. These schemas not only point the children's attention towards the traits or behaviours of others, but are also influential as to how children categorize and encode into memory the data as well as determining the facility in how these data will be recalled from storage (Younger & Boyko, 1987).

A schema can be defined as "an organized, structured set of cognitions about some concept or stimulus which includes knowledge about the concept or stimulus, some relations among the various cognitions about it and some specific examples" (Sears, Peplau, & Taylor, 1991, pp. 82-83). In this regard, schemas could represent characteristics of certain people, traits or behaviours. For example, one schema could be about the characteristics of behaviour of what could be thought of as a typical shy child. Furthermore, schemas are believed to assist in the interpretation of events or behaviours, direct social inferences, memories, as well as our perceptions of what is around us (Younger et al., 1993). Schemas have several important functions. First, they help determine what is important concerning the stimulus or the situation and direct our concentration to what is important about that person. Second, they help organize and categorize the relevant information into our memory. Third, they help in the remembering of information that is consistent with a particular person. Fourth, they can help in their ability to foresee future behaviours (Younger et al., 1993).

There are two commonly used methods for assessing the information processing functions of social schemas. Both begin with individuals being given a behavioural description of someone. Following this, the person's memory for this

description of the behaviours can be tested in one of two ways. Using recognition memory, the subject might be asked "Which of the following things did person X do?". Using free recall, the subject would be requested to "Tell me everything you can remember about person X". Results using both of these methods have shown that if a person is able to encode the previously presented information about someone and recall it with ease later, he/she possesses a well-defined schema (Younger & Boyko, 1987). Alternatively, if a person does not possess a well-defined schema about someone, the social information is less likely to be attended to, and will be less readily encoded into memory as well as not being easily recalled (Younger & Boyko, 1987).

Researchers have tended to focus on gender-role stereotypes in order to look at the functioning of social schemas in children (Younger et al., 1993). A "gender schema" (Bem, 1981) is seen to affect how children perceive, thereby influencing their memories of how others behave (Younger et al., 1993). Through gender schemas, children learn which behaviours are associated with their own gender.

Children will recall with greater ease information about a hypothetical person that is consistent with that person's gender. Conversely, children tend to have greater difficulty recalling information (behaviours) about a hypothetical person that is not

consistent with that person's gender (Younger et al., 1993). For example, a child is more likely to recall information that describes a girl playing with dolls than a girl playing with cars. In addition, children may also not recall the information correctly - they will reverse the person's gender and the behaviour in order to make it consistent (Bradbard & Endsley, 1983). In this regard, if children are presented with information about a boy playing with dolls, they may inaccurately recall a girl playing with dolls or a boy playing with action figures.

Social schemas of social withdrawal and aggression. Younger children seem to find it more difficult to categorize peers as socially withdrawn than as aggressive (Younger et al., 1993). This has been interpreted to mean that younger children have a better defined schema for aggression than for social withdrawal.

There seems to be some similarities between the tasks used to assess social schemas (recognition and recall) by social psychologists and the peer nomination procedures used to assess information about children's views of maladjustment (Younger et al., 1993). Both of these procedures involve memory. With regard to peer nomination procedures, children are usually presented with a list of behavioural descriptions (e.g., aggression, social withdrawal, and likeability) which they then must match with a child in his/her class who best fit the

particular behavioural description (e.g., "Who is shy in your class?"). This is similar to the recognition procedure used by social psychologists. In this case, the children would be presented with a list of behavioural descriptions. Then, they would be asked which of these behavioural descriptions had they initially heard as describing the hypothetical individual (Younger & Piccinin, 1989). Thus, it could be that when researchers are using peer nominations, they may not only be rating children's ratings of their peer's behaviour but also how well children can recall the behaviour of their peers (Younger et al., 1993). Thus, peer nomination procedures might also be affected by the false remembering of schema-consistent information (Younger & Piccinin, 1989).

Younger and Boyko (1987) examined how children from different age groups were able to encode and retrieve information about hypothetical peers. They hypothesized that previously reported age-related differences in children's perceptions of aggressive and socially withdrawn behaviour in their peers would underlie differences in social schemas reflecting children's social perceptions. Thus, they thought that younger children would have difficulty recalling withdrawn behaviour, while children of all ages would have no difficulty recalling aggressive behaviour. This would reflect that children of all ages have a well-defined schema for aggression but not for social withdrawal.

Ninety children from Grades 1, 3, 5, and 7 were presented with descriptions of two hypothetical boys (one that was aggressive and one that displayed socially withdrawn behaviour). The descriptions of these two hypothetical children were based on behaviours from existing assessment scales (peers and teachers). For example, the boy that was termed aggressive was described as "being mean and cruel to other children", "starts a fight over nothing", and so forth. The boy termed to be socially withdrawn was described as being "usually chosen last to join in a group", "gives up when things get hard", and so forth (Younger & Boyko, 1987, p. 1096).

The results showed that younger children (i.e., children in Grade 1) had more difficulty recalling descriptions of the boy who was socially withdrawn than the boy who was aggressive. This suggested that the social schema for aggressive behaviour plays a more important role in the processing of social information than the social schema for social withdrawal. Children's recall of socially withdrawn behaviours also increased with age, while recall of the aggressive behaviour remained steady. Thus, it would seem that the schema for social withdrawal becomes more developed as children age than the schema for aggression.

This is consistent with the findings of Coie and Pennington (1976), who reported that younger children seemed to perceive aggressive behaviour as being more atypical, while older children

seemed to perceive social withdrawal as being more deviant and atypical. One explanation for these findings is that children develop schemas for aggression at an earlier age than for social withdrawal. Reasons for this might be that children observe aggressive behaviour more frequently (aggression tends to be more overt than social withdrawal) and are also more likely to be the target of the aggression. Thus, aggressive behaviour from other children can have very significant consequences for them.

However, social withdrawal does not have consequences for other children - it only really affects the child in question.

Moreover, younger children may pay less attention to socially withdrawn behaviours because they tend to generally engage in more solitary types of behaviour (Rubin, 1985). On the other hand, older children tend to engage in more peer group play, therefore social withdrawal becomes more salient as being atypical.

One of the possible problems with Younger and Boyko's (1987) study (as with the PEI and RCP) is that they used descriptions that confounded the different types of social withdrawal. For example, the socially withdrawn items included references to shyness ("Bill is someone whose feelings get hurt easily"; "Bill gets scared easily"), active isolation ("Bill is usually chosen last to join in a group"), and social disinterest ("Bill isn't noticed much by other kids"). It could be that younger children

had more difficulty recalling descriptions of the boy who was socially withdrawn because they had to access information from several different schemas.

When presented with information that confounds the different types of withdrawal, younger children could have more difficulty remembering the withdrawal items because they represented many different schemas. Younger children could have a well-developed schema for certain types of withdrawn behaviour (e.g., fearful shyness) but not for others. However, because they confounded the descriptions of the withdrawal items, this is rather difficult to ascertain.

Another problem with this study was that the hypothetical children were only boys (Younger & Boyko, 1987). This makes it difficult to generalize the results. The use of female hypothetical characters may have resulted in different findings. For example, younger children may recall aggressive behaviour more in girls since it is seen as atypical, while older children may recall more socially withdrawn behaviour in boys since this behaviour is more atypical for that gender (Younger & Boyko, 1987).

In order to rectify this problem, Younger and Piccinin (1989) conducted another study which examined children's recall for socially withdrawn and aggressive behaviour by looking at their recognition memory. They were also interested in looking at

children's judgments of likeability - how desirable were these hypothetical children as friends.

One hundred and forty-four children from Grades 1, 3, 5, and 7 participated in this study. Three types of hypothetical characters (both male and female) were presented to the children (aggressive, socially withdrawn, and nonmaladjusted). These descriptions were taken from other peer assessment measures (e.g., PEI and RCP). The aggressive character was described by six aggression items (e.g., "Paul made fun of the kids who lost some money"; "Paul grabbed another kid's favourite ruler") and the socially withdrawn character by six social withdrawal items (e.g., "Steve was too shy to tell about his idea"; "Steve didn't want to play with the other kids"). The socially withdrawn character (e.g., "Steve went to the museum with his class") and the aggressive character (e.g., "Paul sat behind a kid with brown hair on the bus") were additionally described with three nonmaladjusted items each. Also, the "nonmaladjusted" character was described by nine nonmaladjusted items (e.g., "Chris found a quarter on the way to school"; "Chris had a spelling test in the morning").

The children listened to the descriptions of all three hypothetical characters and were asked to discuss their impressions of each character (e.g., "Would you want [character's name] for your friend?"; "Would the kids in your class want

[character's name] for their friend?"). Children were then told that they would be given a second list of items about the hypothetical characters. On this list, there were items that were previously shown and others that were new. The children's task was to indicate whether each item on the second list was new or had already been mentioned.

As expected, it was found that regardless of age, children were better able to recall the aggression items. Children in Grades 1 and 3 showed lower recall for social withdrawal than older children. As for older children (Grades 5 and 7), they recognized aggressive and socially withdrawn behaviour equally well. Children's ability to recall nonmaladjusted items was high, regardless of grades. Moreover, children, regardless of age, had an increasing inclination to identify false novel aggression and social withdrawal items but not nonmaladjusted items. Aggressive children were viewed as low in likeability at all ages, socially withdrawn children were viewed as increasingly less likeable with increasing age.

Younger and Piccinin (1989) cautioned against the overgeneralization of the results of this study. Children tend to gain information about others by utilizing techniques that are harder than simply hearing behavioural descriptions from others. While they tested children by using both hypothetical characters from both genders, they only used a few items on the recognition

task. They found that the observed means for the aggression items were very high, indicating that there might be ceiling effects (Bukowski, 1990). Thus, it is possible that these ceiling effects might have hindered the effects from the gender of the target peer (Bukowski, 1990). Similar to the Younger and Boyko (1987) study, this study also confounded the different types of social withdrawal (e.g., shyness and social disinterest). For example, the socially withdrawn items included references to shyness ("Steve was too shy to tell about his ideas"; "Steve's feelings got hurt when somebody called him names"), and social disinterest ("Steve didn't want to play with the other kids"). Thus, again, it is possible that younger children have a well-developed schema for certain subtypes of social withdrawal (e.g., fearful shyness).

Bukowski (1990) was also interested in exploring age-related differences in children's memory of socially withdrawn, aggressive, and prosocial behaviour in children (both boys and girls). Participants were children from Grades 2 and 6. In the first study, children (n=88) were presented with descriptions of three boys or three girls who were either aggressive, socially withdrawn, or prosocial. Half of the boys and girls in each grade listened to descriptions of peers with boys' names and the other half heard descriptions of peers with girls' names. The children were then asked to recall as many of the descriptions as

they could remember.

Bukowski's (1990) findings replicated the results of Younger and Boyko (1987). Children's ability to recall information about a hypothetical peer was affected by the peer's gender. In addition, when the hypothetical peer was a girl, there was an age-related increase in the children's ability to recall information about the three hypothetical peers (withdrawn, aggressive, and prosocial). On the other hand, when the hypothetical peer was a boy, the children showed an age-related increase in their ability to recall information about socially withdrawn behaviour and prosocial behaviour but the recall of aggressive behaviour remained constant.

In a second study, 80 children again listened to descriptions of hypothetical peers (boys or girls) who were described to them as being prosocial, aggressive, or socially withdrawn. The descriptions were only read once to the children. After each description, the children were presented with 10 items and were told to indicate which of these descriptions they had previously heard.

The results of this study were somewhat similar to Younger and Piccinin (1989). Older children showed an increase in their recognition memory to remember descriptions of socially withdrawn behaviour in hypothetical peers, as well as a slight increase in their recognition memory for the prosocial peer. Also, there was

no age-related increase found in the recognition memory for aggressive peers. However, in contrast with Younger and Piccinin's (1989) study, Bukowski (1990) found that the recognition memory of children for aggressive and socially withdrawn behaviour was affected by the gender of the hypothetical peer. In other words, children were better able to recognize information about aggressive behaviour when the hypothetical peer was a boy, while information about social withdrawal was more likely to be recognized when the hypothetical peer was a girl. Thus, for the present study, the gender of the described peer was recorded in an attempt to replicate these results.

Bukowski's (1990) results demonstrated that it is important to take into account the gender of the target peer since this might cause differences between both recall and recognition memory tasks. For younger children, the recall of information of aggressive behaviour was better when the hypothetical peer was a boy. Moreover, the recognition of information about aggressive behaviour was better when the hypothetical peer was a boy, regardless of the age of the children. As for social withdrawal, it was found that the recall or the recognition memory for information for this type of behaviour increased with age.

One of the potential problems with this study is that the items on the memory recognition task were quite difficult

(Bukowski, 1990). Children had to select not only amongst items they had previously seen but also amongst items they had not seen but were representative of the behaviour in question (Bukowski, 1990).

Another problem with this study is that the items used to describe the hypothetical withdrawn child again confounded different types of withdrawal. That is, they used descriptions that described different types of withdrawn behaviour (e.g., fearful shyness, self-conscious shyness, active isolation, and social disinterest) under one factor - withdrawal. For example, the socially withdrawn items included references to fearful shyness ("Kate gets scared easily"), self-conscious shyness ("Kate's feelings get hurt easily"), active isolation ("Kate has few friends"), and social disinterest ("Kate isn't noticed much by others"). The reason why younger children had poorer developed withdrawal schemas could be because some forms of social withdrawal have better developed schemas than others, or that it is more difficult to remember items from several different schemas.

Summary. It seems clear that there could be many reasons why the schema for social withdrawal appears to emerge later than the schema for aggression. First, younger children appear to follow a good/bad dimension (deviant to nondeviant dimension) when evaluating their peers (Younger et al., 1985). For

instance, aggressive behaviour would be classified as being deviant (bad) while likeability would be classified as being nondeviant (good). However, social withdrawal does not fit into either one of these dimensions. Younger children seem to perceive aggressive behaviour in a negative light, as they are more likely to be the targets of the aggression from their peers. On the other hand, playing alone is common during the free play of younger children and is not seen as negative by young children. Playing alone does not have any negative consequences for others (e.g., does not hurt someone else). But, as children age, they begin to see this behaviour as being more and more atypical.

Second, younger children may pay less attention to social withdrawal because solitary types of behaviour are "normal" for this age group. Older children tend to engage in more peer group play, thus social withdrawal becomes more salient. By Grade 5, children who are perceived by their peers as being socially withdrawn tend to be rejected by their peers (Rubin, 1990). Therefore, it seems that the schema for social withdrawal may develop later than the schema for aggression, because it appears to depend on how well these two behaviours fit the good/bad dimension that younger children tend to use when evaluating behaviour (Younger et al., 1993).

Another reason why the schema for social withdrawal develops

later than the schema for aggression is that the behaviours that children pay attention to differ depending on the age of the child. For instance, younger children tend to pay more attention to behaviour that is overt and salient (e.g., hitting, kicking someone or something). In contrast, older children tend to view other peers in terms of behaviours that are less concrete (e.g., feelings) (Rholes & Ruble, 1984).

The RCP and PEI, as well as the memory tests for social schemas, tend to use descriptions for aggression and social withdrawal that differ in their salience. Aggression items tend to focus on more overt characteristics (e.g., "A person who loses his/her temper easily"), while social withdrawal descriptions tend to focus more on unobservable traits (e.g., "Someone who is usually sad"). Thus, these scales and memory tests may not be accurate in their findings, since the aggression items are easier to observe than the social withdrawal items. Because the descriptions for social withdrawal tend to focus more on unobservable traits, it is not surprising that researchers have found that younger children tend to perceive aggression more than social withdrawal in their peers, as well as saying that their schema for aggression emerges earlier than for social withdrawal.

Most importantly, however, for the current study, the reason why the schema for social withdrawal appears to develop later than the schema for aggression may be because of confounds in the

assessment of social withdrawal. As mentioned throughout, there are many different reasons why children withdraw from social interaction. The PEI and RCP scales, as well as the memory tests, seem to confound all the subtypes of withdrawn behaviour under one factor. Thus, the many different subtypes of withdrawn behaviour (i.e., fearful shyness, self-conscious shyness, active isolation, and social disinterest) are not adequately differentiated. This could explain why younger children seem to have a poorer schema for social withdrawal. Younger children could have well-developed schemas for some forms of social withdrawal and not for others. Or, it could be harder for children to remember items from several diverse schemas (e.g., withdrawal) than for one schema (aggression).

Present Study

The goal of this study was to examine age and gender differences in children's ability to perceive and differentiate between different types of social withdrawal (i.e., fearful shyness, self-conscious shyness, active isolation, and social disinterest). To accomplish this goal, children's descriptions of the different reasons, behaviours, and feelings associated with "playing alone" were examined.

Following in the footsteps of Younger and Schneider (1993), children from different grades (Grades 1 and 5) were interviewed to ascertain their knowledge of the different forms of social

withdrawal. As discussed previously, interviews were chosen because established scales confound different forms of withdrawal. Instead of using the word "shy" (e.g., "Do you know someone who is shy?") (Younger & Schneider, 1993), for the present study children were asked "Do you know someone who does not play a lot with others - who plays by himself/herself?". This question was followed by asking the children why they thought the child they described did not play a lot with others. In addition, children were asked questions pertaining to behaviours and emotions when playing alone, as well as whether the various social withdrawal subtypes were a problem in their grade. Questioning the children in this way was expected to provide a more "in-depth" method of assessing children's perceptions and ability to differentiate between different types of withdrawal.

Younger and Schneider (1993) focused on two subtypes of social withdrawal, namely, fearful shyness and self-conscious shyness. In the present study, two additional subtypes of social withdrawal were also explored: active isolation and social disinterest.

Results from previous studies in this area (Younger et al., 1985, 1986, 1993) have suggested that younger children in particular have difficulty perceiving socially withdrawn behaviour. However, for reasons discussed previously, there are reasons to question the validity of these findings. Given the

new methodology employed in the current study, it was expected that younger children (Grade 1) would be able to describe different forms of withdrawn behaviours.

Younger children (Grade 1). It was not certain that younger children would make references to all the different types of social withdrawal. However, based on previous research (e.g., Crozier & Burnham, 1990; Younger & Piccinin, 1989; Younger et al., 1993), there was evidence to suggest that Grade 1 children would make references to fearful shyness and active isolation. Moreover, because solitary types of play are more normative in younger children, they would be likely to only view active isolation as being problematic.

Older children (Grade 5). Based on previous research (e.g., Crozier & Burnham, 1990; Younger & Boyko, 1987; Younger & Piccinin, 1989), it was expected that older children (Grade 5) would make references to all the different types of social withdrawal because they are all negatively salient to the peer group. For example, older children would make more references to self-conscious shyness than younger children. In addition, older children would also view all forms as being problematic.

Gender differences. There has not been a lot of research concerning gender differences and social withdrawal. As previously mentioned, Bukowski (1990) found that memory for information about aggression and withdrawal depends on the gender

of the hypothetical peer. That is, memory for information about aggression was better when the hypothetical peer was a boy while, conversely, memory for information about social withdrawal was better when the hypothetical peer was a girl. Moreover, Zargarpour and Kratzer (1993) found that the schema for passive withdrawal was more accessible for girls than boys. They found also that the schema for passive withdrawal was more accessible to both genders when the hypothetical peer was a girl.

It has been found that mothers tend to have more affectionate and tender relationships with their daughters who were shy. However, when their sons were shy, mothers were found to be less accepting (Radke-Yarrow, Richters, & Wilson, 1988). Thus, it seems that shyness in girls is more acceptable than shyness in boys. Hence, shyness in girls is more likely to be rewarded and accepted by parents, whereas shyness in boys is likely to be discouraged (Engfer, 1993). As for aggressive behaviour, it has been found that boys expect less parental disapproval than girls (Perry, Perry, & Weiss, 1989). It would seem then that these socialization practices would affect how problematic both genders view social withdrawal and aggression.

However, in the present study, gender differences were explored in terms of children's understanding, perceptions, and knowledge of the various reasons, behaviours, and feelings associated with different types of social withdrawal. As such,

hypotheses were predominately exploratory in nature.

Gender differences were expected in terms of the described peer. It was expected that girls would be more likely to be described as either fearfully shy or self-consciously shy than boys. On the other hand, boys would be more likely to be described as actively isolated than girls. Moreover, since shyness is more likely to be problematic in boys than girls, boys were expected to be more likely to view fearful shyness and self-conscious shyness as being problematic.

Method

Subjects

The participants in this study were 84 English-speaking children who were attending local elementary schools in the Ottawa-Carleton area. There were 42 children from Grade 1 (20 males and 22 females, $M_{age} = 80.95$ months, $SD = 4.42$ months), and 42 children from Grade 5 (22 males and 20 females, $M_{age} = 129.14$ months, $SD = 3.66$ months). School Board policy did not permit the collection of ethnicity or racial data but the SES of the sample varied from lower to upper-middle class.

Procedure

Each child was interviewed individually for approximately 10-15 minutes. Forty-five children were interviewed in the school setting either in the library or in an empty classroom. Thirty-nine children were interviewed in a quiet location in their home.

See Appendix H for a copy of the letters sent to the parents.

All children were asked if it was all right for their answers to be tape-recorded. They were told that it was "to help me remember what he/she said". The researcher spent a bit of time at the beginning of each interview to get to know the child and vice versa. For example, the child was asked some questions about his/her family, favourite activities and academic subjects. This helped make the child more comfortable with the researcher, so that he/she was able to answer the questions in a more comfortable atmosphere. See Appendix G for the instructions given to the child prior to the interview.

At the beginning of the interview, the children were told that their answers would be kept confidential. They were also told that they were able to stop the interview at any time they wanted with no penalty. Once the interviews were completed, they were transcribed for later coding and analyses.

Materials

The interview was comprised of 15 questions. Some of the questions were derived from Crozier and Burnham (1990), and Younger and Schneider (1993). To begin with, the children were asked to think of children that they knew who "did not play a lot with others". The name of each child they described was not recorded. Following this, the children were asked to speculate on that child's reasons for playing alone (e.g., "Why do you

think that he/she does not play a lot with others?)", behaviours (e.g., "What is he/she doing when he/she is not playing with others?"), and emotions (e.g., "How do you think he/she is feeling?"). These questions were repeated for each "child who did not play a lot with others" that the child being interviewed could think of.

Once the children had finished describing peers that they knew who played alone, they were then asked to think of "What are some other reasons why children might not want to play with others?". This question was also followed by questions (as described above) concerning behaviours and emotions. In addition, they were asked whether the behaviours in question (i.e., fearful shyness, self-conscious shyness, active isolation, and social disinterest) were problematic in their grade, as well as whether these behaviours were more problematic for some boys and/or for some girls in their grade.

Throughout the interview, children were "probed" accordingly in order to ascertain the limit of what the child knew and understood. Only used when necessary, these probes helped to clarify what the child said and meant, particularly in the presence of difficulties in expression. For example, in response to a particular question, the child may not know the words to what he/she wants to say but he/she may be able to act it out. By probing or by trying to give them a verbal description of

their actions, this will help clarify what they want to say. A complete copy of the interview protocol is displayed in Appendix A.

Interview questions were piloted with parents (n=7), teachers (n=4), and children (n=9) of various ages. In response, the wording of the questionnaire was adjusted.

Coding

A coding scheme was derived to assess the children's responses to the various interview questions. The coding was divided into five parts.

Part I: Coding for the "why" questions (questions 2, 6, and 9). The content of the children's explanations as to **why** a particular child did not play a lot with others was coded for indications of children's awareness of fearful shyness, self-conscious shyness, active isolation, or social disinterest. The content of the children's responses for all the "why" questions was coded for references to each of the four subtypes of social withdrawal. Responses were scored as 0 or 1 for each subtype. For example, if the child made no reference to fearful shyness in any of their responses to the "why" questions, he/she got a score of 0 for fearful shyness. If, on the other hand, a child made at least one reference to fearful shyness in any of their responses to the "why" questions, he/she got a score of 1 for fearful shyness. A separate rating was given for each withdrawal

subtype. For instance, if a child was able to think of three peers but for all three peers the child gave a good description of only fearful shyness as the reason why these three peers played alone, he/she received a score of 1 for fearful shyness and a score of 0 for the other subtypes. If, however, this child thought of three peers and gave a different explanation as to why each of these three peers played alone (e.g., fearful shyness for one child, active isolation for another, and social disinterest for the third), then he/she received a score of 1 for all three of these withdrawal subtypes and a 0 for self-conscious shyness. A more detailed explanation of the coding is presented in Appendix B.

Part II: Coding for the "behaviour" questions (questions 3, 7, and 10). In this case, each child's answer as to what a particular child was "doing" when he/she was not playing with others was coded as to whether or not the child made reference to various behaviours (i.e., internalizing behaviours, externalizing behaviours, solitary-active behaviours, solitary-passive behaviours, and seeking contact/play partners). Coding only the responses to the question "What is he/she doing when he/she is not playing with others?" throughout the interview, each child received a score of 0 (made no reference to a behavioural type) or 1 (made reference to a behavioural type) for each behavioural type, no matter how many times that behavioural subtype was

mentioned throughout the interview. See Appendix C for more information.

Part III: Coding for the "emotion" questions (questions 4, 8, and 11). Similar to the coding used for the behaviour question, each child's answer as to how he/she thought a particular child was "feeling" when that child played alone was coded as to whether or not the child made reference to various emotions (i.e., happy, sad, scared/fearful, embarrassed, angry, guilty, and neutral). Scoring only responses to the question "How do you think he/she is feeling?" throughout the interview, each child received a score of 0 (made no reference to that particular emotion) or 1 (made reference to that particular emotion) for each emotion subtype, no matter how many times that emotion subtype was mentioned throughout the interview. See Appendix D for more information.

Part IV: Coding for described peers. This coding scheme pertained to the overall descriptions of each described peer. Each **described** peer received a code that pertained to his/her predominate overall content, including responses to the "why", "behaviours", and "emotions" questions. Described peers were coded as either reflecting predominately (1) fearful shyness; (2) self-conscious shyness; (3) active isolation; (4) social disinterest; or (5) uncodeable. For example, if the child who was being interviewed described one peer (i.e., peer 1) as being

scared, afraid to play with others, and as watching other kids play, then this described peer received the code **fearful shyness**. If the child being interviewed described a peer as being embarrassed when around others, blushed a lot and was afraid, the predominate behaviour of **self-conscious shyness** would be coded. Note that each subject could describe several different described peers or no described peers. See Appendix E for more details.

Part V: Coding for the "problem" questions (questions 12 to 15). For questions (12) to (15), children were asked if they believed the social withdrawal type in question (i.e., fearful shyness, self-conscious shyness, active isolation, and social disinterest) was a problem in their grade, as well as whether it was problematic for some boys and/or for some girls in their grade. Their answers were coded as (1) yes; (2) no; (3) maybe/sometimes; or (4) unsure. See Appendix F for more complete details.

Interrater Reliability

The principal investigator trained a female undergraduate student on the interview data coding scheme to be used. Interrater reliability data were coded for 30 interviews (15 interviews in each grade - about 37% of the data). Interrater reliability was calculated using Cohen's kappa. If there were any discrepancies in the coding scheme, they were discussed and an appropriate code was assigned.

Interrater reliability for the "why" questions was computed separately for each of the four subtypes of social withdrawal. For fearful shyness, Cohen's kappa was .94; for self-conscious shyness, $k=.77$; for active isolation, $k=.83$; and for social disinterest, $k=.88$.

Interrater reliability for the "behaviour" questions was computed separately for each of the behaviours. For internalizing behaviours, Cohen's kappa was .93; for externalizing behaviours, $k=1.00$; for solitary-active behaviours, $k=.78$; for solitary-passive behaviours, $k=.86$; and for seeking contact/play partners, $k=1.00$.

Interrater reliability for the "emotion" questions was computed separately for each of the feelings. For the emotion "happy", Cohen's kappa was .94; for "sad", $k=1.00$; for "scared/fearful", $k=.86$; for "embarrassed", $k=1.00$; for "angry", $k=1.00$; for "guilty", $k=1.00$; and for "neutral", $k=.81$.

Interrater reliability for the "described peer" coding was $k=.87$.

Interrater reliability for the "problem" questions was computed separately for each social withdrawal subtype. For "Is [fearful shyness] a problem in your grade?", Cohen's kappa was equal to $k=.95$; for "Is [fearful shyness] a problem for some boys in your grade?", $k=.95$; and for "Is [fearful shyness] a problem for some girls in your grade?", $k=1.00$. For "Is [self-

conscious shyness] a problem in your grade?", Cohen's kappa was equal to $k=1.00$; for "Is [self-conscious shyness] a problem for some boys in your grade?", $k=1.00$; and for "Is [self-conscious shyness] a problem for some girls in your grade?", $k=.95$. As for "Is [active isolation] a problem in your grade?", Cohen's kappa was equal to $k=1.00$; for "Is [active isolation] a problem for some boys in your grade?", $k=.95$; and for "Is [active isolation] a problem for some girls in your grade?", $k=1.00$. As for social disinterest, Cohen's kappa was equal to $k=1.00$ for all three questions (i.e., Is it a problem in your grade?, Is it a problem for some boys in your grade?, Is it a problem for some girls in your grade?).

Results

Overview

The goal of these analyses was to explore the main effects and interactions between grade and gender, on the responses to the interview questions. This was accomplished by using a subtype of loglinear analyses - logit analyses.

When examining the relation between three or more discrete (categorical) variables, a multiway frequency analysis such as loglinear analysis is conducted (Tabachnick & Fidell, 1996). There are three different subtypes of loglinear analyses: logit, general, and model selection. The one that is of primary importance for this study is logit. Logit loglinear analyses are

conducted when one variable is considered the dependent/response variable and others are considered as the independent/predictor variables. Thus, the main advantage of logit loglinear analysis over multiple chi-square analyses is that it permits for tests of main effects and interactions (Epperson, Brushway, & Warman, 1983). Therefore, only relations between the independent and dependent variables are measured, while the relations between the independent variables are not measured. In addition, for logit analyses, the main effect is the independent variable - dependent variable association, while the interaction is the two independent variables and their association with the dependent variable (Tabachnick & Fidell, 1996). In addition, a separate analysis is conducted on the dependent variable "against the hypothesis that the frequencies are equal in each cell" (Tabachnick & Fidell, 1989, p. 271). Odd ratios or parameter estimates are used to ascertain the cell frequency and the importance of each effect to the frequency of each cell. The significance of parameter estimates are based on standardizing the parameters and comparing them to a $z = 2.58$ (since using an alpha level of $\alpha = .01$).

The results section is subdivided into five subsections pertaining to analyses of: (1) "why" does this child play alone questions; (2) what do you think this child is "doing" questions (behaviours); (3) how do you think this child is "feeling"

questions (emotions); (4) the described peer; and (5) the "problem" questions.

"Why" Questions

Overall, 56 (66.7%) children made reference to active isolation as a reason why children play alone, 33 (39.3%) referred to social disinterest, 31 (36.9%) to fearful shyness, and 20 (23.8%) to self-conscious shyness. Results from Cochran's Q test analyses (used to compare the frequency distribution of related variables) indicated that active isolation was referred to by more children than any other type of shyness ($Q(3) = 30.95$, $p < .01$).

A series of logit loglinear analyses was conducted to examine the main effects and interactions between references to different reasons why a child does not play a lot with others and children's grade and gender. Separate analyses were conducted for references to fearful shyness, self-conscious shyness, active isolation, and social disinterest as the dependent variable while grade and gender were the independent variables. Examination of the expected cell frequencies for all the two-way associations for each reason "why" children play alone indicated that all had less than 20% of the cells with expected frequencies less than the minimum 5 counts required. A more conservative alpha level was used ($\alpha = .01$) in order to decrease the probability of Type 1 errors since several logit analyses were performed. No

significant grade by gender interactions were found for any of the responses to the "why" questions. As such, only main effects are reported in the text.

Fearful shyness. A logit analysis was performed with the frequency of whether or not children mentioned fearful shyness as the dependent variable, and grade (Grade 1 and Grade 5) and gender as the independent variables.

Examination of the parameter estimates revealed that the main effects of grade and gender were both nonsignificant. Thus, children's references to fearful shyness as an explanation as to why a child plays alone did not differ across grade or gender. See Table 4 for the logit loglinear parameter estimates in raw and standardized form for the main effects (2-way associations) and for a breakdown of the observed and expected frequencies by grade and gender see Tables 8 and 9 at the end of this section.

Insert Table 4 about here

Self-conscious shyness. Examination of the parameter estimates for self-conscious shyness indicated that the main effect of gender was nonsignificant. This indicated that children's references to self-conscious shyness as a reason why a child plays alone did not differ across gender. However, the main effect of grade was significant. Examination of the

Table 4

Parameter Estimates and Standardized Parameters for the Main Effects (2-way Associations) of Grade and Gender by Whether or Not Children Mentioned Fearful Shyness as a Way of Explaining Why a Child Plays Alone

Main effects	Parameters (λ)	Standardized parameters (λ/SE)
<u>Fearful shyness (FEARSHY) by grade (GR)</u>		
FEARSHY (no reference) X GR 1	.71	1.55
FEARSHY (no reference) X GR 5	-.71	-1.55
FEARSHY (reference) X GR 1	.71	1.55
FEARSHY (reference) X GR 5	-.71	-1.55
<u>Fearful shyness (FEARSHY) by gender (GE)</u>		
FEARSHY (no reference) X GE (male)	-.28	-.61
FEARSHY (no reference) X GE (female)	.28	.61
FEARSHY (reference) X GE (male)	-.28	-.61
FEARSHY (reference) X GE (female)	.28	.61

observed frequencies revealed that significantly more children in Grade 5 (40.5%(n=17)) and less children in Grade 1 (7.1%(n=3)) made reference to self-conscious shyness than expected ($z = 3.6$, $p < .01$). See Table 5 for the logit loglinear parameter estimates in raw and standardized form for the main effects (2-way associations) and for a breakdown of the observed and expected frequencies by grade and gender see Tables 8 and 9 at the end of this section.

Insert Table 5 about here

Active isolation. Examination of the parameter estimates for active isolation revealed that the main effects of grade and gender were both nonsignificant. Thus, children's references to active isolation as an explanation as to why a child plays alone did not differ across grade or gender. See Table 6 for the logit loglinear parameter estimates in raw and standardized form for the main effects (2-way associations) and for a breakdown of the observed and expected frequencies by grade and gender see Tables 8 and 9 at the end of this section.

Insert Table 6 about here

Table 5

Parameter Estimates and Standardized Parameters for the Main Effects (2-way Associations) of Grade and Gender by Whether or Not Children Mentioned Self-Conscious Shyness as a Way of Explaining Why a Child Plays Alone

Main effects	Parameters (λ)	Standardized parameters (λ/SE)
<u>Self-conscious shyness (SELFCON) by grade (GR)</u>		
SELFCON (no reference) X GR 1	2.18***	3.22***
SELFCON (no reference) X GR 5	-2.18***	-3.22***
SELFCON (reference) X GR 1	2.18***	3.22***
SELFCON (reference) X GR 5	-2.18***	-3.22***
<u>Self-conscious shyness (SELFCON) by gender (GE)</u>		
SELFCON (no reference) X GE (male)	.10	.19
SELFCON (no reference) X GE (female)	-.10	-.19
SELFCON (reference) X GE (male)	.10	.19
SELFCON (reference) X GE (female)	-.10	-.19

Note.

*** $p < .001$

Table 6

Parameter Estimates and Standardized Parameters for the Main Effects (2-way Associations) of Grade and Gender by Whether or Not Children Mentioned Active Isolation as a Way of Explaining Why a Child Plays Alone

Main effects	Parameters (λ)	Standardized parameters (λ/SE)
<u>Active isolation (ACTISO) by grade (GR)</u>		
ACTISO (no reference) X GR 1	-.19	-.40
ACTISO (no reference) X GR 5	.19	.40
ACTISO (reference) X GR 1	-.19	-.40
ACTISO (reference) X GR 5	.19	.40
<u>Active isolation (ACTISO) by gender (GE)</u>		
ACTISO (no reference) X GE (male)	.64	1.36
ACTISO (no reference) X GE (female)	-.64	-1.36
ACTISO (reference) X GE (male)	.64	1.36
ACTISO (reference) X GE (female)	-.64	-1.36

Social disinterest. Examination of the parameter estimates for social disinterest revealed that the main effects of grade and gender were both nonsignificant. Thus, this indicated that children's references to social disinterest as an explanation as to why a child plays alone did not differ across grade or gender. See Table 7 for the logit loglinear parameter estimates in raw and standardized form for the main effects (2-way associations) and for a breakdown of the observed and expected frequencies by grade and gender see Tables 8 and 9.

Insert Table 7 about here

Summary. To summarize, results from logit analyses revealed that children's references to fearful shyness, active isolation, and social disinterest as reasons why children did not play with others did not differ as a function of grade or gender. However, children in Grade 5 were more likely to refer to self-conscious shyness than children in Grade 1.

Insert Tables 8 and 9 about here

Table 7

Parameter Estimates and Standardized Parameters for the Main Effects (2-way Associations) of Grade and Gender by Whether or Not Children Mentioned Social Disinterest as a Way of Explaining Why a Child Plays Alone

Main effects	Parameters (λ)	Standardized parameters (λ/SE)
<u>Social disinterest (SOCDIS) by grade (GR)</u>		
SOCDIS (no reference) X GR 1	.33	.73
SOCDIS (no reference) X GR 5	-.33	-.73
SOCDIS (reference) X GR 1	.33	.73
SOCDIS (reference) X GR 5	-.33	-.73
<u>Social disinterest (SOCDIS) by gender (GE)</u>		
SOCDIS (no reference) X GE (male)	.52	1.15
SOCDIS (no reference) X GE (female)	-.52	-1.15
SOCDIS (reference) X GE (male)	.52	1.15
SOCDIS (reference) X GE (female)	-.52	-1.15

Table 8

Observed and Expected Frequencies of "Why" Children Play Alone Across Grade

Subtypes of Social Withdrawal				
Grade	Fearful	Self-conscious	Active isolation	Social disinterest
Grade 1				
No Refer.	30 (26.5)	39 (32)	13 (14)	27 (25.5)
Reference	12 (15.5)	3 (10)	29 (28)	15 (16.5)
Grade 5				
No Refer.	23 (26.5)	25 (32)	15 (14)	24 (25.5)
Reference	19 (15.5)	17 (10)	27 (28)	18 (16.5)

Table 9

Observed and Expected Frequencies of "Why" Children Play Alone Across Gender

Gender	Subtypes of Social Withdrawal			
	Fearful	Self-conscious	Active isolation	Social disinterest
Males				
No Refer.	25 (26.5)	32 (32)	17 (14)	28 (25.5)
Reference	17 (15.5)	10 (10)	25 (28)	14 (16.5)
Females				
No Refer.	28 (26.5)	32 (32)	11 (14)	23 (25.5)
Reference	14 (15.5)	10 (10)	31 (28)	19 (16.5)

"Behaviour" Questions

Overall, 54 (64.3%) children made reference to internalizing behaviours as a way of explaining what a child is doing when he/she is playing alone, 43 (51.2%) referred to solitary-passive behaviours, 30 (35.7%) to externalizing behaviours, 18 (21.4%) to solitary-active behaviours, and 8 (9.5%) to seeking contact/play partner. Results from Cochran's Q test analyses (used to compare the frequency distribution of related variables) indicated that more children referred to internalizing behaviours and solitary-passive behaviours than any other type of behaviour ($Q(4) = 66.56, p < .01$).

A series of logit loglinear analyses was conducted in order to examine the main effects and interactions between behaviours, children's grade and gender. Separate analyses were performed for externalizing behaviours, internalizing behaviours, solitary-active behaviours, and solitary-passive behaviours as the dependent variable while gender and grade were the independent variables. The behaviour "seeking contact/play partner" was excluded from further analyses because it had more than 20% of cells that had an expected frequency of less than 5; the other behaviours had less than 20% of cells that had an expected frequency of less than 5. In addition, a more conservative alpha level was used ($\alpha = .01$) in order to decrease the probability of Type 1 errors since several logit analyses were performed. No

significant grade by gender interactions were found for any of the responses to the "behaviour" questions. As such, only main effects are reported in the text.

Internalizing behaviours. A logit analysis was performed with the frequency of whether or not children mentioned internalizing behaviours as the dependent variable, and grade and gender as the independent variables.

Examination of the parameter estimates revealed a nonsignificant main effect of gender. Children's references to internalizing behaviours as an explanation of what a child is doing when he/she plays alone did not differ across gender. However, there was a significant main effect found for grade. Examination of the observed frequencies revealed that significantly more children in Grade 5 (81%(n=34)) and less children in Grade 1 (47.6%(n=20)) mentioned internalizing behaviours as a way of describing what a child is doing when he/she is playing alone than expected ($z = 3.2, p < .01$). See Table 10 for the logit loglinear parameter estimates in raw and standardized form for the main effects (2-way associations) and for a breakdown of the observed and expected frequencies by grade and gender see Tables 14 and 15 at the end of this section.

Insert Table 10 about here

Table 10

Parameter Estimates and Standardized Parameters for the Main Effects (2-way Associations) of Grade and Gender by Whether or Not Children Mentioned Internalizing Behaviours as a Way of Explaining What a Child is Doing When he/she Plays Alone

Main effects	Parameters (λ)	Standardized parameters (λ/SE)
<u>Internalizing behaviours (INTER) by grade (GR)</u>		
INTER (no reference) X GR 1	1.54**	3.06**
INTER (no reference) X GR 5	-1.54**	-3.06**
INTER (reference) X GR 1	1.54**	3.06**
INTER (reference) X GR 5	-1.54**	-3.06**
<u>Internalizing behaviours (INTER) by gender (GE)</u>		
INTER (no reference) X GE (male)	-.39	-.81
INTER (no reference) X GE (female)	.39	.81
INTER (reference) X GE (male)	-.39	-.81
INTER (reference) X GE (female)	.39	.81

Note.

** $p < .01$

Externalizing behaviours. Examination of the parameter estimates for externalizing behaviours indicated that the main effects of grade and gender were both nonsignificant. Thus, children's references to externalizing behaviours as an explanation as to what a child is doing when he/she plays alone did not differ across grade or gender. See Table 11 for the logit loglinear parameter estimates in raw and standardized form for the main effects (2-way associations) and for a breakdown of the observed and expected frequencies by grade and gender see Tables 14 and 15 at the end of this section.

Insert Table 11 about here

Solitary-passive behaviours. Examination of the parameter estimates for solitary-passive behaviours indicated that the main effects of grade and gender were both nonsignificant. Thus, children's references to solitary-passive behaviours as an explanation as to what a child is doing when he/she plays alone did not differ across grade or gender. See Table 12 for the logit loglinear parameter estimates in raw and standardized form for the main effects (2-way associations) and for a breakdown of the observed and expected frequencies by grade and gender see Tables 14 and 15 at the end of this section.

Table 11

Parameter Estimates and Standardized Parameters for the Main Effects (2-way Associations) of Grade and Gender by Whether or Not Children Mentioned Externalizing Behaviours as a Way of Explaining What a Child is Doing When he/she Plays Alone

Main effects	Parameters (λ)	Standardized parameters (λ/SE)
<u>Externalizing behaviours (EXTER) by grade (GR)</u>		
EXTER (no reference) X GR 1	.02	.04
EXTER (no reference) X GR 5	-.02	-.04
EXTER (reference) X GR 1	.02	.04
EXTER (reference) X GR 5	-.02	-.04
<u>Externalizing behaviours (EXTER) by gender (GE)</u>		
EXTER (no reference) X GE (male)	.42	.91
EXTER (no reference) X GE (female)	-.42	-.91
EXTER (reference) X GE (male)	.42	.91
EXTER (reference) X GE (female)	-.42	-.91

Insert Table 12 about here

Solitary-active behaviours. Examination of the parameter estimates for solitary-active behaviours indicated that the main effects of grade and gender were both nonsignificant. Thus, children's references to solitary-active behaviours as an explanation as to what a child is doing when he/she plays alone did not differ across grade or gender. See Table 13 for the logit loglinear parameter estimates in raw and standardized form for the main effects (2-way associations) and for a breakdown of the observed and expected frequencies by grade and gender see Tables 14 and 15.

Insert Table 13 about here

Summary. To summarize, results from logit analyses revealed that children's references to externalizing behaviours, solitary-passive behaviours, and solitary-active behaviours as explanations as to what a child is doing when he/she plays alone did not differ as a function of grade or gender. However, children in Grade 5 were more likely to refer to internalizing

Table 12

Parameter Estimates and Standardized Parameters for the Main Effects (2-way Associations) of Grade and Gender by Whether or Not Children Mentioned Solitary-Passive Behaviours as a Way of Explaining What a Child is Doing When he/she Plays Alone

Main effects	Parameters (λ)	Standardized parameters (λ/SE)
<u>Solitary-passive behaviours (SOLPAS) by grade (GR)</u>		
SOLPAS (no reference) X GR 1	-.07	-.15
SOLPAS (no reference) X GR 5	.07	.15
SOLPAS (reference) X GR 1	-.07	-.15
SOLPAS (reference) X GR 5	.07	.15
<u>Solitary-passive behaviours (SOLPAS) by gender (GE)</u>		
SOLPAS (no reference) X GE (male)	.67	1.51
SOLPAS (no reference) X GE (female)	-.67	-1.51
SOLPAS (reference) X GE (male)	.67	1.51
SOLPAS (reference) X GE (female)	-.67	-1.51

Table 13

Parameter Estimates and Standardized Parameters for the Main Effects (2-way Associations) of Grade and Gender by Whether or Not Children Mentioned Solitary-Active Behaviours as a Way of Explaining What a Child is Doing When he/she Plays Alone

Main effects	Parameters (λ)	Standardized parameters (λ/SE)
<u>Solitary-active behaviours (SOLACT) by grade (GR)</u>		
SOLACT (no reference) X GR 1	-.87	-1.55
SOLACT (no reference) X GR 5	.87	1.55
SOLACT (reference) X GR 1	-.87	-1.55
SOLACT (reference) X GR 5	.87	1.55
<u>Solitary-active behaviours (SOLACT) by gender (GE)</u>		
SOLACT (no reference) X GE (male)	.25	.46
SOLACT (no reference) X GE (female)	-.25	-.46
SOLACT (reference) X GE (male)	.25	.46
SOLACT (reference) X GE (female)	-.25	-.46

behaviours than children in Grade 1.

Insert Tables 14 and 15 about here

"Emotion" Questions

Overall, 74 (88.1%) children made reference to the emotion "sad" as an explanation as to how a child is feeling when he/she is playing alone, 30 (35.7%) referred to the emotion "happy", 7 (8.3%) referred to the emotion "scared/fearful", 4 (4.8%) referred to the emotion "guilty", 4 (4.8%) referred to the emotion "neutral", 3 (3.6%) referred to the emotion "angry", and 1 (1.2%) referred to the emotion "embarrassed". Results from Cochran's Q test analyses (used to compare the frequency distribution of related variables) indicated that the emotion "sad" was referred to by more children than any other type of emotion ($Q(6) = 281.68, p < .01$).

Logit loglinear analyses were performed to examine the interactions and main effects between references to various emotions and children's grade and gender. Separate analyses were conducted for the emotions happy, sad, scared, neutral, guilty, embarrassed, and angry as the dependent variable while grade and gender were the independent variables. However, only 7 (8.3%) children mentioned "scared/fearful", 4 (4.8%) children mentioned "guilty", 4 (4.8%) children mentioned "neutral", 3 (3.6%)

Table 14

Observed and Expected Frequencies of "Behaviours" of Children Who
Play Alone Across Grade

Types of Behaviours					
Grade	Exter- nalizing	Inter- nalizing	Seek contact	Solitary passive	Solitary active
Grade 1					
No Refer.	27 (27)	22 (15)	40 (38)	20 (20.5)	30 (33)
Reference	15 (15)	20 (27)	2 (4)	22 (21.5)	12 (9)
Grade 5					
No Refer.	27 (27)	8 (15)	36 (38)	21 (20.5)	36 (33)
Reference	15 (15)	34 (27)	6 (4)	21 (21.5)	6 (9)

Table 15

Observed and Expected Frequencies of "Behaviours" of Children Who
Play Alone Across Gender

Gender	Types of Behaviours				
	Exter- nalizing	Inter- nalizing	Seek Contact	Solitary passive	Solitary active
Males					
No Refer.	29 (27)	13 (15)	37 (38)	24 (20.5)	34 (33)
Reference	13 (15)	29 (27)	5 (4)	18 (21.5)	8 (9)
Females					
No Refer.	25 (27)	17 (15)	39 (38)	17 (20.5)	32 (33)
Reference	17 (15)	25 (27)	3 (4)	25 (21.5)	10 (9)

children mentioned "anger", and 1 (1.2%) child mentioned "embarrassed". As such, these emotions were excluded from further analyses since all of them had more than 20% of cells with an expected frequency of less than the minimum 5 counts required; the other emotions (e.g., sad and happy) had less than 20% of cells that had an expected frequency of less than 5. In addition, a more conservative alpha level was used ($\alpha = .01$) in order to decrease the probability of Type 1 errors since several logit analyses were performed. No significant grade by gender interactions were found for any of the responses to the "emotion" questions. As such, only main effects are reported in the text.

Happy. A logit analysis was performed with the frequency of whether or not children mentioned the emotion "happy" as the dependent variable, and grade and gender as the independent variables.

Examination of the parameter estimates indicated that the main effects of grade and gender were both nonsignificant. Thus, children's references to the emotion "happy" as an explanation as to how a child is feeling when he/she plays alone did not differ across grade or gender. See Table 16 for the logit loglinear parameter estimates in raw and standardized form for the main effects (2-way associations) and for a breakdown of the observed and expected frequencies by grade and gender see Tables 18 and 19 at the end of this section.

Insert Table 16 about here

Sad. Examination of the parameter estimates for sadness indicated that the main effects for grade and gender were both nonsignificant. Thus, children's references to the emotion "sad" as an explanation as to how a child is feeling when he/she plays alone did not differ across grade or gender. See Table 17 for the logit loglinear parameter estimates in raw and standardized form for the main effects (2-way associations) and for a breakdown of the observed and expected frequencies by grade and gender see Tables 18 and 19.

Insert Table 17 about here

Summary. To summarize, results from logit analyses revealed that children's references to the emotions "happy" and "sad" as an explanation as to how a child is feeling when he/she plays alone did not differ as a function of grade or gender.

Insert Tables 18 and 19 about here

Table 16

Parameter Estimates and Standardized Parameters for the Main Effects (2-way Associations) of Grade and Gender by Whether or Not Children Mentioned the Emotion "Happy" as a Way of Explaining How a Child is Feeling When he/she Plays Alone

Main effects	Parameters (λ)	Standardized parameters (λ/SE)
<u>Emotion "happy" (HAPPY) by grade (GR)</u>		
HAPPY (no reference) X GR 1	-.61	-1.31
HAPPY (no reference) X GR 5	.61	1.31
HAPPY (reference) X GR 1	-.61	-1.31
HAPPY (reference) X GR 5	.61	1.31
<u>Emotion "happy" (HAPPY) by gender (GE)</u>		
HAPPY (no reference) X GE (male)	.61	1.31
HAPPY (no reference) X GE (female)	-.61	-1.31
HAPPY (reference) X GE (male)	.61	1.31
HAPPY (reference) X GE (female)	-.61	-1.31

Table 17

Parameter Estimates and Standardized Parameters for the Main Effects (2-way Associations) of Grade and Gender by Whether or Not Children Mentioned the Emotion "Sad" as a Way of Explaining How a Child is Feeling When he/she Plays Alone

Main effects	Parameters (λ)	Standardized parameters (λ/SE)
<u>Emotion "sad" (SAD) by grade (GR)</u>		
SAD (no reference) X GR 1	1.53	1.86
SAD (no reference) X GR 5	-1.53	-1.86
SAD (reference) X GR 1	1.53	1.86
SAD (reference) X GR 5	-1.53	-1.86
<u>Emotion "sad" (SAD) by gender (GE)</u>		
SAD (no reference) X GE (male)	-.41	-.59
SAD (no reference) X GE (female)	.41	.59
SAD (reference) X GE (male)	-.41	-.59
SAD (reference) X GE (female)	.41	.59

Table 18

Observed and Expected Frequencies of "Emotions" of Children Who
Play Alone Across Grade

Grade	Types of Emotions		
	Happy	Sad	Scared/Fearful
Grade 1			
No Refer.	24 (27)	8 (5)	40 (38.5)
Reference	18 (15)	34 (37)	2 (3.5)
Grade 5			
No Refer.	30 (27)	2 (5)	37 (38.5)
Reference	12 (15)	40 (37)	5 (3.5)

Table 19

Observed and Expected Frequencies of "Emotions" of Children Who
Play Alone Across Gender

Gender	Types of Emotions		
	Happy	Sad	Scared/Fearful
Males			
No Refer.	30 (27)	4 (5)	38 (38.5)
Reference	12 (15)	38 (37)	4 (3.5)
Females			
No Refer.	24 (27)	6 (5)	39 (38.5)
Reference	18 (15)	36 (37)	3 (3.5)

"Described Peer"

The "described peer" pertains to the specific peer the child being interviewed is describing in response to the question "Do you know someone who does not play a lot with others?". Each described peer received a code that pertained to his/her predominate overall content, which included references to "why", "behaviours", and "emotions". Described peers were coded as either reflecting predominately (1) fearful shyness; (2) self-conscious shyness; (3) active isolation; (4) social disinterest; or (5) uncodeable. It must be noted that some interviewed children described several different described peers, and some described none.

Overall, 10 (20.4%) peers were described as fearful shy, 8 (16.3%) as self-conscious shyness, 17 (34.7%) as socially disinterested, and 14 (28.6%) as actively isolated. Results from a Cochran's Q test analysis (used to compare the frequency distribution of related variables) indicated that children did not differ significantly in how they described the peers they knew who played alone ($Q(3) = 3.98$, n.s.).

A logit analysis was not performed for several reasons. First of all, one of the constraints of logit loglinear analyses is that the dependent variable must be dichotomous (which is not the case in this instance). Second, even if the data were to be recoded so as to have a dichotomous dependent variable, the

sample size being very small for this part of the data (useable data for only $n=49$) would make it difficult to interpret potential interactions. Thus, three simple chi-square analyses for contingency tables were conducted in its place.

Grade. A chi-square analysis for contingency tables was performed to examine the relation between subtypes of social withdrawal (fearful shyness, self-conscious shyness, active isolation, and social disinterest) and grade. The 14 (22.2%) descriptions that were deemed uncodeable were removed from further analyses. However, when the chi-square analysis was run, 3 cells out of 8 possible cells had an expected count less than 5. Thus, in order to increase the size of the expected frequencies, fearful shyness (20.4% ($n=10$)) and self-conscious shyness (16.3% ($n=8$)) were combined into a new variable "shy" for further analyses. Therefore, a chi-square analysis was rerun to examine the relation between subtypes of withdrawal (shyness, active isolation, and social disinterest) and children's grade.

The relation between social withdrawal subtypes and grade of the child was found to be significant ($\chi^2(2) = 17.16$, $p < .05$), indicating that social withdrawal subtypes and grade were not independent. Examination of the observed frequencies of social withdrawal subtypes for each grade revealed that significantly more children in Grade 5 (70.6% ($n=12$)) and less children in Grade 1 (18.8% ($n=6$)) were described as shy (fearful shyness and self-

conscious shyness) than expected ($z = 3.6, p < .01$), while significantly more children in Grade 1 (53.1%(n=17)) and less children in Grade 5 (n=0) were described as socially disinterested than expected ($z = 3.7, p < .01$). No significant effect of grade was found for active isolation, indicating that children's descriptions across grade did not differ significantly for active isolation. See Table 20 for a breakdown of the distribution across grade.

Insert Table 20 about here

Gender of the described peer. In addition, a chi-square analysis for contingency tables was performed to examine the relation between social withdrawal subtypes (shyness, active isolation, and social disinterest) and gender of the **described** peer. A significant finding was obtained ($\chi^2(2) = 13.77, p < .05$), indicating that social withdrawal subtypes and gender of the described peer were not independent. Examination of the observed frequencies of social withdrawal subtypes for each gender of the described peer revealed that peers described as shy (fearful shyness and self-conscious shyness) were significantly more likely to be females (56.5%(n=13)) and less likely to be males (19.2%(n=5)) than expected ($z = 2.7, p < .01$). In contrast, actively isolated peers were significantly more likely

Table 20

Observed and Expected Frequencies of Children's Descriptions of the
"Described Peer" Across Grade

Grade	Subtypes of Social Withdrawal		
	Shy	Active isolation	Social disinterest
Grade 1	6 (11.8)	9 (9.1)	17 (11.1)
Grade 5	12 (6.2)	5 (4.9)	0 (5.9)

to be males (50%(n=13)) and less likely to be females (4.3%(n=1)) ($z = 3.5$, $p < .01$) than expected. No significant effect of grade was found for socially disinterested peers. This indicated that children's descriptions of socially disinterested peers did not differ significantly for male peers (30.8%(n=8)) or female peers (39.1%(n=9)).

Gender of the perceiver. A third chi-square analysis for contingency tables was performed to examine the relation between social withdrawal subtypes and gender of the **perceiver**. A nonsignificant finding was obtained ($\chi^2(2) = .73$, n.s.), indicating that social withdrawal subtypes and gender of the perceiver were independent. Males and females were just as likely to describe a peer as being either shy (fearful shyness and self-conscious shyness), actively isolated, or socially disinterested.

Summary. To summarize, results from chi-square analyses for contingency tables revealed that children's ability to describe peers as shy (fearful shyness and self-conscious shyness), actively isolated, or socially disinterested did not differ as a function of the gender of the perceiver. However, while children in Grade 5 were more likely to describe a peer as shy than children in Grade 1, children in Grade 1 were more likely to describe a peer as socially disinterested. Moreover, females were more likely to be described as shy than males, while

males were more likely to be described as actively isolated than females.

"Problem" Questions

Overall, 53 (67.1%) children viewed active isolation as being a problem in their grade, 35 (44.3%) viewed fearful shyness as a problem, 25 (31.6%) viewed self-conscious shyness as a problem, and 11 (13.9%) viewed social disinterest as a problem. Results from Cochran's Q test analyses (used to compare the frequency distribution of related variables) indicated that active isolation was viewed as most problematic by more children than the other types of social withdrawal ($Q(3) = 57.31, p < .01$).

When examining which social withdrawal subtype is more of a problem for some boys in their grade, overall it was found that 41 (55.4%) of the children viewed active isolation to be a problem, 26 (35.1%) viewed fearful shyness as a problem, 21 (28.4%) viewed self-conscious shyness as a problem, and 11 (14.9%) viewed social disinterest as a problem. Results from Cochran's Q test analyses indicated that active isolation was again viewed as most problematic by more children than the other types of social withdrawal ($Q(3) = 38.79, p < .01$).

As for which subtype of social withdrawal is more of a problem for some girls in their grade, overall it was found that 30 (41.7%) of the children viewed active isolation to be a problem, 27 (37.5%) viewed fearful shyness as a problem, 22 (30.6%) viewed

self-conscious shyness as a problem, and 8 (11.1%) viewed social disinterest as a problem. Results from Cochran's Q test analyses indicated that active isolation, fearful shyness, and self-conscious shyness were viewed as more problematic by more children than social disinterest ($Q(3) = 26.08, p < .01$).

A series of logit loglinear analyses were conducted to examine the main effects and interactions between grade and gender of the child and whether or not the various subtypes of social withdrawal were a problem in their grade, as well as whether or not they were a problem for some boys and/or for some girls in their grade. Separate analyses were conducted for each of the questions as the dependent variable and grade and gender as the independent variables. However, in order to increase the expected frequencies, the answers coded sometimes/maybe (3.7%) were changed to "yes" it is a problem and the "I don't know" responses (3.5%) were eliminated from further analyses. Examination of the expected cell frequencies for all the two-way associations for each of the problem questions indicated that all had expected frequencies with less than 20% of the cells with expected frequencies less than the minimum 5 counts required. In addition, a more conservative alpha level was used ($\alpha = .01$) in order to decrease the probability of Type 1 errors since several logit analyses were performed. No significant grade by gender interactions were found for any of the responses to the "problem"

questions. As such, only main effects are reported in the text.

Fearful shyness as a problem. A logit analysis was performed with the frequency of whether or not children viewed fearful shyness as a problem as the dependent variable, and grade and gender as the independent variables.

Examination of the parameter estimates indicated that the main effects of grade and gender were both nonsignificant. Thus, children's views of whether fearful shyness is a problem in their grade did not differ across grade or gender. See Table 21 for the logit loglinear parameter estimates in raw and standardized form for the main effects (2-way associations) and for a breakdown of the observed and expected frequencies by grade and gender see Tables 24 and 25 at the end of this subsection.

Insert Table 21 about here

Examination of the parameter estimates for fearful shyness as a problem for boys indicated that the main effects of grade and gender were both nonsignificant. Useable data were obtained from 81 subjects. Thus, children's views of whether fearful shyness is a problem for some boys in their grade did not differ across grade or gender. See Table 22 for the logit loglinear parameter estimates in raw and standardized form for the main effects

Table 21

Parameter Estimates and Standardized Parameters for the Main Effects (2-way Associations) of Grade and Gender by Whether or Not Children Viewed Fearful Shyness as a Problem in Their Grade

Main effects	Parameters (λ)	Standardized parameters (λ/SE)
<u>Fearful shyness as a problem (PFEARSHY) by grade (GR)</u>		
PFEARSHY (yes) X GR 1	.18	.42
PFEARSHY (yes) X GR 5	-.18	-.42
PFEARSHY (no) X GR 1	.18	.42
PFEARSHY (no) X GR 5	-.18	-.42
<u>Fearful shyness as a problem (PFEARSHY) by gender (GE)</u>		
PFEARSHY (yes) X GE (male)	-.18	-.42
PFEARSHY (yes) X GE (female)	.18	.42
PFEARSHY (no) X GE (male)	-.18	-.42
PFEARSHY (no) X GE (female)	.18	.42

(2-way associations) and for a breakdown of the observed and expected frequencies by grade and gender see Tables 24 and 25 at the end of this subsection.

Insert Table 22 about here

Examination of the parameter estimates for fearful shyness as a problem for girls indicated that the main effects of grade and gender were both nonsignificant. Useable data were obtained from 80 subjects. Thus, children's views of whether fearful shyness is a problem for some girls in their grade did not differ across grade or gender. See Table 23 for the logit loglinear parameter estimates in raw and standardized form for the main effects (2-way associations) and for a breakdown of the observed and expected frequencies by grade and gender see Tables 24 and 25.

Insert Table 23 about here

Insert Tables 24 and 25 about here

Table 22

Parameter Estimates and Standardized Parameters for the Main Effects (2-way Associations) of Grade and Gender by Whether or Not Children Viewed Fearful Shyness as a Problem for Some Boys in Their Grade

Main effects	Parameters (λ)	Standardized parameters (λ/SE)
<u>Fearful shyness as a problem for some boys (PFEARSHY_BOY) by grade (GR)</u>		
PFEARSHY_BOY (yes) X GR 1	.16	.35
PFEARSHY_BOY (yes) X GR 5	-.16	-.35
PFEARSHY_BOY (no) X GR 1	.16	.35
PFEARSHY_BOY (no) X GR 5	-.16	-.35
<u>Fearful shyness as a problem for some boys (PFEARSHY_BOY) by gender (GE)</u>		
PFEARSHY_BOY (yes) X GE (male)	.29	.63
PFEARSHY_BOY (yes) X GE (female)	-.29	-.63
PFEARSHY_BOY (no) X GE (male)	.29	.63
PFEARSHY_BOY (no) X GE (female)	-.29	-.63

Table 23

Parameter Estimates and Standardized Parameters for the Main Effects (2-way Associations) of Grade and Gender by Whether or Not Children Viewed Fearful Shyness as a Problem for Some Girls in Their Grade

Main effects	Parameters (λ)	Standardized parameters (λ/SE)
<u>Fearful shyness as a problem for some girls (PFEARSHY_GIRL) by grade (GR)</u>		
PFEARSHY_GIRL (yes) X GR 1	.82	1.74
PFEARSHY_GIRL (yes) X GR 5	-.82	-1.74
PFEARSHY_GIRL (no) X GR 1	.82	1.74
PFEARSHY_GIRL (no) X GR 5	-.82	-1.74
<u>Fearful shyness as a problem for some girls (PFEARSHY_GIRL) by gender (GE)</u>		
PFEARSHY_GIRL (yes) X GE (male)	-.37	-.79
PFEARSHY_GIRL (yes) X GE (female)	.37	.79
PFEARSHY_GIRL (no) X GE (male)	-.37	-.79
PFEARSHY_GIRL (no) X GE (female)	.37	.79

Table 24

Observed and Expected Frequencies of Fearful Shyness as a Problem
Across Grade

Is Fearful Shyness a Problem:			
Grade	In general	For some boys	For some girls
Grade 1			
Yes	20 (19)	15 (14.3)	19 (15.1)
No	22 (23)	25 (25.7)	20 (23.9)
Grade 5			
Yes	18 (19)	14 (14.7)	12 (15.9)
No	24 (23)	27 (26.3)	29 (25.1)

Table 25

Observed and Expected Frequencies of Fearful Shyness as a Problem
Across Gender

Is Fearful Shyness a Problem:			
Gender	In general	For some boys	For some girls
Males			
Yes	18 (19)	16 (14.7)	14 (15.9)
No	24 (23)	25 (26.3)	27 (25.1)
Females			
Yes	20 (19)	13 (14.3)	17 (15.1)
No	22 (23)	27 (25.7)	22 (23.9)

Self-conscious shyness as a problem. A logit analysis was then performed with the frequency of whether or not children viewed self-conscious shyness as a problem as the dependent variable, and grade (Grade 1 and Grade 5) and gender as the independent variables. Useable data were obtained from 81 subjects.

Examination of the parameter estimates indicated that the main effects of grade and gender were both nonsignificant. Thus, children's views of whether self-conscious shyness is a problem in their grade did not differ across grade or gender. See Table 26 for the logit loglinear parameter estimates in raw and standardized form for the main effects (2-way associations) and for a breakdown of the observed and expected frequencies by grade and gender see Tables 29 and 30 at the end of this subsection.

Insert Table 26 about here

Examination of the parameter estimates for self-conscious shyness as a problem for boys indicated that the main effects of grade and gender were both nonsignificant. Useable data were obtained from 79 subjects. Thus, children's views of whether self-conscious shyness is a problem for some boys in their grade did not differ across grade or gender. See Table 27 for the

Table 26

Parameter Estimates and Standardized Parameters for the Main Effects (2-way Associations) of Grade and Gender by Whether or Not Children Viewed Self-Conscious Shyness as a Problem in Their Grade

Main effects	Parameters (λ)	Standardized parameters (λ/SE)
<u>Self-conscious shyness as a problem (PSELFCON) by grade (GR)</u>		
PSELFCON (yes) X GR 1	-.22	-.46
PSELFCON (yes) X GR 5	.22	.46
PSELFCON (no) X GR 1	-.22	-.46
PSELFCON (no) X GR 5	.22	.46
<u>Self-conscious shyness as a problem (PSELFCON) by gender (GE)</u>		
PSELFCON (yes) X GE (male)	-.66	-1.36
PSELFCON (yes) X GE (female)	.66	1.36
PSELFCON (no) X GE (male)	-.66	-1.36
PSELFCON (no) X GE (female)	.66	1.36

logit loglinear parameter estimates in raw and standardized form for the main effects (2-way associations) and for a breakdown of the observed and expected frequencies by grade and gender see Tables 29 and 30 at the end of this subsection.

Insert Table 27 about here

Examination of the parameter estimates for self-conscious shyness as a problem for girls indicated that the main effects of grade and gender were both nonsignificant. Useable data were obtained from 76 subjects. Thus, children's views of whether self-conscious shyness is a problem for some girls in their grade did not differ across grade or gender. See Table 28 for the logit loglinear parameter estimates in raw and standardized form for the main effects (2-way associations) and for a breakdown of the observed and expected frequencies by grade and gender see Tables 29 and 30.

Insert Table 28 about here

Insert Tables 29 and 30 about here

Table 27

Parameter Estimates and Standardized Parameters for the Main Effects (2-way Associations) of Grade and Gender by Whether or Not Children Viewed Self-Conscious Shyness as a Problem for Some Boys in Their Grade

Main effects	Parameters (λ)	Standardized parameters (λ/SE)
<u>Self-conscious shyness as a problem for some boys (PSELFCON_BOY) by grade (GR)</u>		
PSELFCON_BOY (yes) X GR 1	.15	.31
PSELFCON_BOY (yes) X GR 5	-.15	-.31
PSELFCON_BOY (no) X GR 1	.15	.31
PSELFCON_BOY (no) X GR 5	-.15	-.31
<u>Self-conscious shyness as a problem for some boys (PSELFCON_BOY) by gender (GE)</u>		
PSELFCON_BOY (yes) X GE (male)	-.15	-.31
PSELFCON_BOY (yes) X GE (female)	.15	.31
PSELFCON_BOY (no) X GE (male)	-.15	-.31
PSELFCON_BOY (no) X GE (female)	.15	.31

Table 28

Parameter Estimates and Standardized Parameters for the Main Effects (2-way Associations) of Grade and Gender by Whether or Not Children Viewed Self-Conscious Shyness as a Problem for Some Girls in Their Grade

Main effects	Parameters (λ)	Standardized parameters (λ/SE)
<u>Self-conscious shyness as a problem for some girls (PSELFCON_GIRL) by grade (GR)</u>		
PSELFCON_GIRL (yes) X GR 1	.03	.06
PSELFCON_GIRL (yes) X GR 5	-.03	-.06
PSELFCON_GIRL (no) X GR 1	.03	.06
PSELFCON_GIRL (no) X GR 5	-.03	-.06
<u>Self-conscious shyness as a problem for some girls (PSELFCON_GIRL) by gender (GE)</u>		
PSELFCON_GIRL (yes) X GE (male)	-.58	-1.16
PSELFCON_GIRL (yes) X GE (female)	.58	1.16
PSELFCON_GIRL (no) X GE (male)	-.58	-1.16
PSELFCON_GIRL (no) X GE (female)	.58	1.16

Table 29

Observed and Expected Frequencies of Self-Conscious Shyness as a
Problem Across Grade

Is Self-Conscious Shyness a Problem:			
Grade	In general	For some boys	For some girls
Grade 1			
Yes	12 (12.8)	13 (12.3)	12 (11.7)
No	28 (27.2)	26 (26.7)	25 (25.3)
Grade 5			
Yes	14 (13.2)	12 (12.7)	12 (12.3)
No	27 (27.8)	28 (27.3)	27 (26.7)

Table 30

Observed and Expected Frequencies of Self-Conscious Shyness as a
Problem Across Gender

Is Self-Conscious Shyness a Problem:			
Gender	In general	For some boys	For some girls
Males			
Yes	10 (12.8)	12 (12.7)	9 (11.4)
No	30 (27.2)	28 (27.3)	27 (24.6)
Females			
Yes	16 (13.2)	13 (12.3)	15 (12.6)
No	25 (27.8)	26 (26.7)	25 (27.4)

Active isolation as a problem. A logit analysis was then performed with the frequency of whether or not children viewed active isolation as a problem as the dependent variable, and grade and gender as the independent variables. Useable data were obtained from 83 subjects.

Examination of the parameter estimates indicated that the main effect of gender was nonsignificant. Thus, this indicated that children's views of whether active isolation is a problem in their grade did not differ across gender. However, a significant main effect for grade was found. Examination of the observed frequencies revealed that more children in Grade 5 (78.6%(n=33)) and less children in Grade 1 (53.7%(n=22)) indicated that active isolation is a problem in their grade than expected ($z = 2.4$, $p < .05$). See Table 31 for the logit loglinear parameter estimates in raw and standardized form for the main effects (2-way associations) and for a breakdown of the observed and expected frequencies by grade and gender see Tables 34 and 35 at the end of this subsection.

Insert Table 31 about here

Examination of the parameter estimates for active isolation as a problem for boys indicated that the main effects of grade and gender were both nonsignificant. Useable data were obtained

Table 31

Parameter Estimates and Standardized Parameters for the Main Effects (2-way Associations) of Grade and Gender by Whether or Not Children Viewed Active Isolation as a Problem in Their Grade

Main effects	Parameters (λ)	Standardized parameters (λ/SE)
<u>Active isolation as a problem (PACTISO) by grade (GR)</u>		
PACTISO (yes) X GR 1	-1.16**	-2.36**
PACTISO (yes) X GR 5	1.16**	2.36**
PACTISO (no) X GR 1	-1.16**	-2.36**
PACTISO (no) X GR 5	1.16**	2.36**
<u>Active isolation as a problem (PACTISO) by gender (GE)</u>		
PACTISO (yes) X GE (male)	-.11	-.23
PACTISO (yes) X GE (female)	.11	.23
PACTISO (no) X GE (male)	-.11	-.23
PACTISO (no) X GE (female)	.11	.23

Note.

** $p < .01$

from 79 subjects. Thus, children's views of whether active isolation is a problem for some boys in their grade did not differ across grade or gender. See Table 32 for the logit loglinear parameter estimates in raw and standardized form for the main effects (2-way associations) and for a breakdown of the observed and expected frequencies by grade and gender see Tables 34 and 35 at the end of this subsection.

Insert Table 32 about here

Examination of the parameter estimates for active isolation as a problem for girls indicated that the main effect of grade was nonsignificant. Useable data were obtained from 80 subjects. Thus, children's views of whether active isolation is a problem for some girls in their grade did not differ across grade. However, there was a significant main effect for gender. Examination of the observed frequencies indicated that less males (28.9%(n=11)) and more females (54.8%(n=23)) than expected viewed active isolation as being a problem for some girls in their grade ($z = 2.3, p < .05$). See Table 33 for the logit loglinear parameter estimates in raw and standardized form for the main effects (2-way associations) and for a breakdown of the observed and expected frequencies by grade and gender see Tables 34 and 35.

Table 32

Parameter Estimates and Standardized Parameters for the Main Effects (2-way Associations) of Grade and Gender by Whether or Not Children Viewed Active Isolation as a Problem for Some Boys in Their Grade

Main effects	Parameters (λ)	Standardized parameters (λ/SE)
<u>Active isolation as a problem for some boys (PACTISO_BOY) by grade (GR)</u>		
PACTISO_BOY (yes) X GR 1	-.89	-1.89
PACTISO_BOY (yes) X GR 5	.89	1.89
PACTISO_BOY (no) X GR 1	-.89	-1.89
PACTISO_BOY (no) X GR 5	.89	1.89
<u>Active isolation as a problem for some boys (PACTISO_BOY) by gender (GE)</u>		
PACTISO_BOY (yes) X GE (male)	-.14	-.30
PACTISO_BOY (yes) X GE (female)	.14	.30
PACTISO_BOY (no) X GE (male)	-.14	-.30
PACTISO_BOY (no) X GE (female)	.14	.30

Insert Table 33 about here

Insert Tables 34 and 35 about here

Social disinterest as a problem. A logit analysis was performed with the frequency of whether or not children viewed social disinterest as a problem as the dependent variable, and grade and gender as the independent variables. Useable data were obtained from 82 subjects.

Examination of the parameter estimates indicated that the main effects of grade and gender were both nonsignificant. Thus, children's views of whether social disinterest is a problem in their grade did not differ across grade or gender. See Table 36 for the logit loglinear parameter estimates in raw and standardized form for the main effects (2-way associations) and for a breakdown of the observed and expected frequencies by grade and gender see Tables 39 and 40 at the end of this subsection.

Insert Table 36 about here

Examination of the parameter estimates for social disinterest as a problem for some boys indicated that the main effects of

Table 33

Parameter Estimates and Standardized Parameters for the Main Effects (2-way Associations) of Grade and Gender by Whether or Not Children Viewed Active Isolation as a Problem for Some Girls in Their Grade

Main effects	Parameters (λ)	Standardized parameters (λ/SE)
<u>Active isolation as a problem for some girls (PACTISO_GIRL) by grade (GR)</u>		
PACTISO_GIRL (yes) X GR 1	-.90	-1.84
PACTISO_GIRL (yes) X GR 5	.90	1.84
PACTISO_GIRL (no) X GR 1	-.90	-1.84
PACTISO_GIRL (no) X GR 5	.90	1.84
<u>Active isolation as a problem for some girls (PACTISO_GIRL) by gender (GE)</u>		
PACTISO_GIRL (yes) X GE (male)	-1.21**	-2.46**
PACTISO_GIRL (yes) X GE (female)	1.21**	2.46**
PACTISO_GIRL (no) X GE (male)	-1.21**	-2.46**
PACTISO_GIRL (no) X GE (female)	1.21**	2.46**

Note.

** $p < .01$

Table 34

Observed and Expected Frequencies of Active Isolation as a Problem
Across Grade

Is Active isolation a Problem:			
Grade	In general	For some boys	For some girls
Grade 1			
Yes	22 (27.2)	17 (21.2)	13 (16.6)
No	19 (13.8)	21 (16.8)	26 (22.4)
Grade 5			
Yes	33 (27.8)	27 (22.8)	21 (17.4)
No	9 (14.2)	14 (18.2)	20 (23.6)

Table 35

Observed and Expected Frequencies of Active Isolation as a Problem
Across Gender

Is Active Isolation a Problem:			
Gender	In general	For some boys	For some girls
Males			
Yes	27 (27.2)	21 (21.2)	11 (16.2)
No	14 (13.8)	17 (16.8)	27 (21.9)
Females			
Yes	28 (27.8)	23 (22.8)	23 (17.9)
No	14 (14.2)	18 (18.2)	19 (24.2)

Table 36

Parameter Estimates and Standardized Parameters for the Main Effects (2-way Associations) of Grade and Gender by Whether or Not Children Viewed Social Disinterest as a Problem in Their Grade

Main effects	Parameters (λ)	Standardized parameters (λ/SE)
<u>Social disinterest as a problem (PSOCDIS) by grade (GR)</u>		
PSOCDIS (yes) X GR 1	-.41	-.65
PSOCDIS (yes) X GR 5	.41	.65
PSOCDIS (no) X GR 1	-.41	-.65
PSOCDIS (no) X GR 5	.41	.65
<u>Social disinterest as a problem (PSOCDIS) by gender (GE)</u>		
PSOCDIS (yes) X GE (male)	-.36	-.56
PSOCDIS (yes) X GE (female)	.36	.56
PSOCDIS (no) X GE (male)	-.36	-.56
PSOCDIS (no) X GE (female)	.36	.56

grade and gender were both nonsignificant. Thus, children's views of whether social disinterest is a problem for some boys in their grade did not differ across grade or gender. See Table 37 for the logit loglinear parameter estimates in raw and standardized form for the main effects (2-way associations) and for a breakdown of the observed and expected frequencies by grade and gender see Tables 39 and 40 at the end of this subsection.

Insert Table 37 about here

Examination of the parameter estimates for social disinterest as a problem for some girls indicated that the main effects of grade and gender were both nonsignificant. Thus, children's views of whether social disinterest is a problem for some girls in their grade did not differ across grade or gender. See Table 38 for the logit loglinear parameter estimates in raw and standardized form of the main effects (2-way associations) and for a breakdown of the observed and expected frequencies by grade and gender see Tables 39 and 40.

Insert Table 38 about here

Table 37

Parameter Estimates and Standardized Parameters for the Main Effects (2-way Associations) of Grade and Gender by Whether or Not Children Viewed Social Disinterest as a Problem for Some Boys in Their Grade

Main effects	Parameters (λ)	Standardized parameters (λ/SE)
<u>Social disinterest as a problem for some boys (PSOCDIS_BOY) by grade (GR)</u>		
PSOCDIS_BOY (yes) X GR 1	.02	.03
PSOCDIS_BOY (yes) X GR 5	-.02	-.03
PSOCDIS_BOY (no) X GR 1	.02	.03
PSOCDIS_BOY (no) X GR 5	-.02	-.03
<u>Social disinterest as a problem for some boys (PSOCDIS_BOY) by gender (GE)</u>		
PSOCDIS_BOY (yes) X GE (male)	.39	.62
PSOCDIS_BOY (yes) X GE (female)	-.39	-.62
PSOCDIS_BOY (no) X GE (male)	.39	.62
PSOCDIS_BOY (no) X GE (female)	-.39	-.62

Table 38

Parameter Estimates and Standardized Parameters for the Main Effects (2-way Associations) of Grade and Gender by Whether or Not Children Viewed Social Disinterest as a Problem for Some Girls in Their Grade

Main effects	Parameters (λ)	Standardized parameters (λ/SE)
<u>Social disinterest as a problem for some girls (PSOCDIS_GIRL) by grade (GR)</u>		
PSOCDIS_GIRL (yes) X GR 1	-.63	-.95
PSOCDIS_GIRL (yes) X GR 5	.63	.95
PSOCDIS_GIRL (no) X GR 1	-.63	-.95
PSOCDIS_GIRL (no) X GR 5	.63	.95
<u>Social disinterest as a problem for some girls (PSOCDIS_GIRL) by gender (GE)</u>		
PSOCDIS_GIRL (yes) X GE (male)	.18	.28
PSOCDIS_GIRL (yes) X GE (female)	-.18	-.28
PSOCDIS_GIRL (no) X GE (male)	.18	.28
PSOCDIS_GIRL (no) X GE (female)	-.18	-.28

Insert Tables 39 and 40 about here

Summary. To summarize, results from logit analyses revealed that children's views of whether fearful shyness, self-conscious shyness, and social disinterest are a problem overall did not differ in terms of grade or gender. However, children in Grade 5 were more likely to view active isolation as being a problem in their grade than children in Grade 1. Moreover, females were more likely to view active isolation as being a problem for some girls in their grade than males.

Discussion

The purpose of this study was to examine age and gender differences in children's ability to perceive and differentiate between different subtypes of social withdrawal (i.e., fearful shyness, self-conscious shyness, active isolation, and social disinterest). Children in Grade 1 and Grade 5 were interviewed concerning the different reasons, behaviours, and feelings associated with various forms of social withdrawal. Results indicated that younger children were able to generate different reasons, behaviours, and emotions that describe different forms of social withdrawal.

Results from previous research (e.g., Younger et al., 1985, 1986) examining children's perceptions of social withdrawal

Table 39

Observed and Expected Frequencies of Social Disinterest as a Problem
Across Grade

Is Social Disinterest a Problem:			
Grade	In general	For some boys	For some girls
Grade 1			
Yes	5 (6)	6 (6)	4 (5.5)
No	36 (35)	36 (36)	38 (36.5)
Grade 5			
Yes	7 (6)	6 (6)	7 (5.5)
No	34 (35)	36 (36)	35 (36.5)

Table 40

Observed and Expected Frequencies of Social Disinterest as a Problem
Across Gender

Is Social Disinterest a Problem:			
Gender	In general	For some boys	For some girls
Males			
Yes	5 (5.9)	7 (6)	6 (5.5)
No	35 (34.1)	35 (36)	36 (36.5)
Females			
Yes	7 (6.1)	5 (6)	5 (5.5)
No	35 (35.9)	37 (36)	37 (36.5)

suggest that younger children have difficulty perceiving social withdrawal in their peers as compared to older children.

However, these findings were based on data collected using the PEI and RCP scales which do not differentiate between different subtypes of social withdrawal. Social withdrawal is not a homogeneous construct as once thought but rather heterogeneous (Coplan & Rubin, 1998) - children play alone for many different reasons (Rubin, 1982).

The results discussed below are interpreted in terms of children's differential references to the different reasons, behaviours, and emotions that are associated with different subtypes of social withdrawal. There is also a discussion of whether or not children view each subtype of social withdrawal as being problematic in their grade. Finally, the present study's limitations are described and suggestions are made for future research in this area.

"Why" Questions

To recapitulate, the children were asked to explain why they thought a child might play alone. These questions were coded for indications of whether they mentioned fearful shyness, self-conscious shyness, active isolation, and social disinterest.

Overall, regardless of age, it was found that the largest proportion of children (66.7%(n=56)) gave **active isolation** as a reason why some children play alone, with the next largest

proportion of children mentioning social disinterest (39.3%(n=33)), fearful shyness (36.9%(n=31)), and self-conscious shyness (23.8%(n=20)). Results from past research (e.g., Younger & Boyko, 1987; Younger & Piccinin, 1989) have shown that children at any age seem to have a facility to encode and recall descriptions of peers who are aggressive. This type of behaviour has been found to be equally salient to both younger and older children. Thus, given its conceptual and empirical association with aggression, it is not surprising that more children mentioned active isolation as a reason why a child plays alone.

What was most striking about children's answers in this area was that they were able to mention several different reasons why a child plays alone. Thus, consistent with researchers, children also seemed to view playing alone from a multidimensional perspective. Moreover, both Grade 5 and Grade 1 children mentioned with almost equal frequency several different reasons. Some of the reasons the children mentioned are: "he/she plays alone 'cause he/she is mean to others and no one likes to play with him/her"; "he/she plays alone 'cause he/she likes to play alone"; "he/she plays alone 'cause he/she is scared to play with others"; and "he/she plays alone 'cause he/she feels that other children tend to make fun of him/her - he/she feels embarrassed for some reason". Thus, Grade 1 children as well as Grade 5 children seemed to perceive that a child plays alone for more

than one reason - they perceive social withdrawal as multidimensional. This provides further support for the notion that the withdrawal "items" on the PEI and RCP scales would be potentially confusing for children because the items from these scales confound the different reasons why a child plays alone.

Grade differences. No significant age differences were found for fearful shyness, active isolation, and social disinterest as reasons that children gave to explain why a child plays alone. This could be interpreted to mean that an equal proportion of younger and older children reported with similar frequency these three different reasons why a child plays alone - thus, even younger children do not view "playing alone" as a unidimensional concept.

Since fearful shyness occurs in the first year of life and is therefore prevalent among younger children (Buss, 1986), younger children were expected to refer to fearful shyness - "playing alone 'cause he/she is scared to play with others" - more than older children as a reason why a child plays alone. Contrary to what was expected, no age difference emerged. However, going back to Crozier and Burnham's study (1990), while most older children did not mention fearful shyness as a way of explaining what they thought shyness meant, some still did. Thus, it seems that as with the present study, the reason why older children may have described a reason why a child plays alone that pertains to

fearful shyness is that, as stated by Buss (1986), fearful shyness may still exist in older children but it is of a different type (e.g., inhibition of behaviour and speech). As well, children were prompted to reveal every reason that they knew why children played alone. Older children may have mentioned fearful shyness as a reason, even if it was not that common compared to the frequency that they mentioned other reasons why a child plays alone (e.g., active isolation).

As previously mentioned, results from past research have shown that younger children are just as capable as older children at encoding and describing overt behaviours such as aggression (e.g., Younger & Boyko, 1987; Younger & Piccinin, 1989). It was not surprising that the present study found that an equal proportion of younger and older children mentioned active isolation as a reason why a child plays alone. Children who tend to be mean to other children or act in an aggressive manner are salient at any age. Not surprisingly, at neither age group would children want to play with children who behave in this manner.

There were also no age differences in the frequency of social disinterest as a reason why a child plays alone. Children who are socially disinterested are motivated to play by themselves not because they have to but because they want to. Asendorpf (1990) described these children as having a low social avoidance motivation as well as a low social approach motivation. These

children seem to be more object oriented than people oriented (Jennings, 1975). They will accept social invitations (if they are attractive) but they will not initiate many social invitations.

It is interesting to note that children in both grades made reference to children who want to play alone, children who play alone because other children do not want to play with them (they are actively isolated by others), as well as children who want to play with others but play alone because they are anxious. Social disinterest, in particular, has been the focus of the least amount of research. It seems that more research in understanding social disinterest would be valuable since children are able to recognize it as a reason why a child plays alone.

As for self-conscious shyness, a significant age difference was found. Comparison of the two age groups revealed that, as expected, children in Grade 5 mentioned with greater frequency self-conscious shyness as a possible reason why a child plays alone than children in Grade 1. This replicated the findings of Crozier and Burnham (1990) who reported that while references to self-conscious shyness were rare in young children (ages 5-6), in older children (ages 10-11) it was more prevalent. These findings are in contrast with Buss's (1986) assertion that self-conscious shyness develops as early as 4-5 years of age. In the present study, only 3 (7.1%) children in Grade 1 made reference

to self-conscious shyness as a way of explaining why a child is playing alone.

It has been argued (Asendorpf, 1989; Crozier & Burnham, 1990) that self-conscious shyness, which tends to appear later than fearful shyness, is not a substitute for fearful shyness but rather both can be present in older children. The findings from the present study support this contention. That is, older children were able to refer to (and possibly distinguish) both subtypes of social withdrawal. With older children (i.e., Grade 5), novel situations and meeting new people seem to remain probable explanations as to why a child plays alone.

"Behaviour" Questions

When the children were asked the question "What is this child doing when he/she is playing alone?", their answers accounted for various types of behaviours corresponding to various social withdrawal subtypes. Across both age groups, it was found that the largest proportion of children made more references to internalizing behaviours (64.3%(n=54)) and solitary-passive behaviours (51.2%(n=43)) than the other types of behaviours, namely, externalizing behaviours (35.7%(n=30)), solitary-active behaviours (21.4%(n=18)), and seeking contact/play partners (9.5%(n=8)). Thus, it seems that children do recognize that there is more than one behavioural subtype of social withdrawal. This again seems to be an important indication that, when

examining social withdrawal in children, it is important to break it down into its different behavioural subtypes, otherwise valuable information may be lost.

The breakdown of subtype frequencies is consistent with the results of nonsocial play research indicating the low frequency of occurrence of solitary active behaviours and the higher frequency of occurrence of solitary-passive and reticent/internalizing types of behaviours. For instance, it has been reported that solitary-active behaviour only occurs approximately 3% of the time during free play (Coplan et al., 1994). On the other hand, Rubin and colleagues (Rubin, Maioni, & Hornung, 1976; Rubin, Watson, & Jambor, 1978) have reported that between 40-60% of nonsocial activity in the preschool or kindergarten classroom involves some sort of constructive activity (e.g., solitary-passive play).

Grade differences. Overall, there were no age differences found for externalizing behaviours, solitary-passive behaviours, and solitary-active behaviours as a way of explaining what a child is doing when he/she plays alone. This seems to indicate that children regardless of age do notice that children behave differently when playing alone.

Past research has shown that externalizing forms of behaviour, such as aggression, render both adults (i.e., teachers) and peer raters comparable assessors (Ledingham et al.,

1982). Relatedly, it has been reported that aggressive types of behaviour are highly salient and overt, thereby rendering it easily recognizable by both younger and older children (Younger et al., 1985, 1986). Therefore, it is not surprising that there were no age differences found in the frequency children mentioned this type of behaviour as a way of explaining what a child is doing when he/she plays alone.

Rubin et al. (1995) have reported that solitary-passive behaviour is the chosen "play modality" of preschoolers who demonstrate low social interaction but who are also emotionally well-regulated. This behaviour tends to be positively reinforced by peers, parents, and teachers, as well as being associated with peer acceptance (Rubin, 1982). Thus, it was not surprising that equal proportions of younger and older children mentioned this type of behaviour to describe a child playing alone.

Another behaviour that has been mentioned in the literature for describing children's play is solitary-active behaviour. In this study, proportions of both younger and older children also mentioned this type of behaviour to describe the behaviours of children who play alone. Solitary-active behaviour involves more active forms of behaviour (e.g., solitary-dramatic play and solitary-functional play). While this behaviour is highly salient to children of all ages (as shown from this study) one must also note that this behaviour was mentioned the least by

both younger and older children. However, as mentioned previously, this is not surprising given that this behaviour seems to only occur 3% of the time during free play (Coplan et al., 1994).

A significant age difference was found for internalizing behaviours. Children in Grade 5 mentioned this type of behaviour with more frequency than children in Grade 1. These results are consistent with the literature suggesting that younger children are more likely to perceive external, overt behaviour as compared to covert, internal types of behaviour (Shantz, 1983). Internalizing behaviours are not equally salient to both younger and older children. It has been found that while younger children seem to be poorer assessors of social withdrawal (which tends to be associated with internalizing behaviours) in their peers, as they age, their ability to assess withdrawal is comparable to teachers' ability to assess withdrawal (Ledingham et al., 1982). Social withdrawal becomes more important as children age (Coie & Pennington, 1976), therefore they are more likely to see this behaviour as being deviant.

This finding was also not surprising given that past research has shown that older children were more capable at perceiving less overt behaviours than younger children (Shantz, 1983). In addition, this finding is also consistent with some of the same arguments used for social withdrawal which state that younger

children have difficulty in perceiving withdrawal (Younger et al., 1985, 1986). As for older children, they have less difficulty in differentiating between social withdrawal and aggression (Younger et al., 1985, 1986).

"Emotion" Questions

In the present study, it was found that while the proportion of children's answers accounted for a wide variety of different emotions, namely, sadness (88.1%(n=74)), happiness (35.7%(n=30)), scared/fearful (8.3%(n=7)), guilty (4.8%(n=4)), neutral (4.8%(n=4)), anger (3.6%(n=3)), and embarrassment (1.2%(n=1)) only two emotions were mentioned the vast majority of the time: "sadness" and "happiness" as a way of describing how they thought a child who was playing alone was feeling. Results from past research (e.g., Michalson & Lewis, 1985) have indicated that the emotions "happy" and "sad" are two that are learnt the earliest as well as being the most readily understood, even in children who are older, as compared to other emotions.

Other emotions, such as the "neutral" expression, are very difficult for children to recognize (Carlson, Felleman, & Masters, 1983). Most studies in this area have tended to focus on the basic emotions of "anger", "happiness", "sadness", and "fear". The emotion "embarrassment" has not been widely explored. However, it has been found that as with the emotions "shame" and "pride", the manifestation of "embarrassment" only

occurs when children are not only able to perceive that those around them are making fun of them for one reason or another but they must also have a sense of self (Denham, 1998). In one study that looked at embarrassment, it was found that as compared to "primary" or "basic" emotions (e.g., sadness, happiness), situations that depicted "embarrassment", "nervousness", and "fear" "were not matched better than chance by either preschoolers or third and fourth grade children" (Brody & Harrison, 1987, p.347).

It is interesting to note that regardless of grade, some children mentioned the emotion "happy" to describe children who play alone. Thus, some children seemed to notice that not all children are upset/sad when they play alone - some might actually enjoy it. This ties in nicely with the previous findings regarding children's explanations as to the reasons why (e.g., social disinterest) and the types of behaviours (e.g., solitary-passive behaviours) that children exhibit while playing alone.

Grade differences. No significant age differences were found for the emotions "happy" and "sad". This means that equal proportions of younger and older children mentioned both of these emotions. It was somewhat surprising that even some younger children were actually able to perceive that some children might actually be happy to play alone - that not all children who play alone are sad.

However, when examining more closely the emotion "sad", the present study found that slightly more children in Grade 5 (95.2%(n=40)) mentioned "sad" as a way of explaining how a child is feeling when he/she plays alone than Grade 1 children (81%(n=34)). While the emotion "sad" has been found to be an easily recognizable emotion by younger children (Michalson & Lewis, 1985), it has also been found that older children (i.e., Grade 3) were even more accurate in the recognition of the emotion "sad" than preschool children (Reichenbach & Masters, 1983). This was explained as being due to younger children selecting the emotion "happy" in answer to questions that pertain to the emotion of others as well as their own (Gross & Ballif, 1991).

Gender Differences

As expected, there was a general lack of gender differences in children's understandings, perceptions, and knowledge about the different reasons, behaviours, and feelings associated with the four subtypes of social withdrawal being examined in the present study. While several studies have demonstrated that there are age differences in children's perceptions of social withdrawal (e.g., Younger et al., 1985, 1986, 1993), no gender differences (gender of the perceiver) have been reported. Relatedly, it has been found that the schema for social withdrawal is relevant to both males and females and emerges at

approximately the same age for both genders (Younger et al., 1993). As for aggression, this behaviour is also equally salient to both males and females. Given all this, it was not surprising that males and females would mention with equal frequency different reasons (i.e., fearful shyness, self-conscious shyness, active isolation, and social disinterest), behaviours (e.g., externalizing behaviours, internalizing behaviours, solitary-passive behaviours, and solitary-active behaviours), and emotions (e.g., happiness and sadness).

Described Peer

When the children's descriptions of each peer they described were coded, their answers referred to different subtypes of social withdrawal, namely, shyness (fearful shyness and self-conscious shyness combined), active isolation, and social disinterest. This is a different approach than the previous sections because it allowed for more concrete explorations of children's knowledge. Children had to describe peers that they knew who played alone. This is similar to the nomination procedures of the RCP and PEI scales where children were given a list of withdrawal "items" and they had to nominate up to three peers from their classroom whom they thought fit each of the "items".

Grade differences. As previously mentioned, according to Buss (1986), fearful shyness is more prevalent in younger

children; therefore, it was hypothesized that younger children would be more likely to describe a peer as such. On the other hand, since self-conscious shyness tends to appear later in childhood, it was hypothesized that older children would be more likely to describe a peer as such. Unfortunately, due to a small sample size, the expected frequencies for fearful shyness and self-conscious shyness were too small, rendering the chi-square test no longer robust. Thus, these two forms of "shyness" were combined.

In the present study, it was revealed that more children in Grade 5 (70.6%(n=12)) significantly described peers as being shy (fearful shyness and self-conscious shyness combined) than children in Grade 1 (18.8%(n=6)). Breaking this down further, for Grade 5 children, 29.4% (n=5) peers were described as fearfully shy, while for Grade 1 children, 15.6% (n=5) peers were also described as such. As for self-conscious shyness, 41.2% (n=7) peers in Grade 5 were described as such, while only 3.1% (n=1) peers in Grade 1 were also described as such.

These results were consistent with the findings of Crozier and Burnham (1990). They reported that while fearful shyness (e.g., fear of novel situations and people) was prominent in Grade 1 children, it still remains a source of shyness for Grade 5 children. On the other hand, self-consciousness (e.g., feeling embarrassed and conspicuous) which tends to increase with age

also causes a related increase in self-conscious shyness. There are two ways that we could interpret the findings of the present study. Grade 1 children may have mentioned self-conscious shyness with less frequency: (1) because they had difficulty perceiving it; or (2) because it simply does not occur at this age. Based on past research results, the latter would seem to be the more plausible interpretation. Buss (1986, p.40) stated that self-conscious shyness tends to occur in later childhood when children begin to see themselves "as a social object". Children become more conscious about being the focus of attention (Buss, 1984). Since Grade 1 children do not have these same feelings of embarrassment and conspicuousness, it was not surprising that they mentioned self-conscious shyness with less frequency - they are accurately portraying what is occurring in their grade. For future research, it would be interesting to follow a similar procedure as Younger et al. (1986). That is, have Grade 1 children "talk" about children in Grade 5 that they know who play alone and have Grade 5 children "talk" about Grade 1 children that they know who play alone to examine if Grade 1 children would mention with more frequency self-conscious shyness as a way of describing children in Grade 5 who play alone, as well as seeing if Grade 5 children would mention with more frequency fearful shyness as a way of describing children who play alone in Grade 1.

As previously mentioned, social disinterest seems to describe children who prefer to play alone than with others (Asendorpf, 1990). These children have a low social approach and a low social avoidance motivation (Asendorpf, 1990). In the present study, it was found that children in Grade 1 (53.1%(n=17)) described significantly more peers who play alone as being socially disinterested than Grade 5 children (n=0). This finding likely is reflective of the fact that social disinterest is more prevalent among children in Grade 1 than Grade 5; this is not surprising given that younger children tend to spend more of their free play not interacting with other children (Parten, 1932).

In the present study, both younger (28.1%(n=9)) and older children (29.4%(n=5)) did not differ in the frequency to describe a peer as being actively isolated, since this behaviour is very salient and is perceived very negatively by the peer group regardless of age. This finding was consistent with the notion that both younger and older children are equally likely to perceive aggression in their peers (e.g., Younger et al., 1985, 1986) and thereby describe a peer as such.

Gender of the described peer. As expected, results from the present study revealed that children described as "shy" were more likely to be females (56.5%(n=13)) than males (19.2%(n=5)). Moreover, children described as actively isolated were more

likely to be males (50%(n=13)) than females (4.3%(n=1)).

Bukowski (1990) found that information about aggressive behaviour was more likely to be recognized when the peer was a boy, while information about social withdrawal was more likely to be recognized when the peer was a girl. In the present study similar findings were revealed in that male peers were significantly more likely to be described as actively isolated, while female peers were significantly more likely to be described as "shy" (fearful shyness and self-conscious shyness).

Another interpretation of these findings is that females were more likely to be described as "shy" than males because there were more females who were shy. Relatedly, since boys tend to engage in more "rowdy" types of behaviours (solitary-active behaviour) (Rubin, 1982), males were more likely to be described as actively isolated than females. This could be another explanation as to why more females were described as "shy" and more males were described as actively isolated.

Solitary-passive play (which describes the play of socially disinterested children) is a common "play modality" in young children (Rubin, 1982). It was expected that more female peers would be described as socially disinterested than male peers. However, it was found that male and female peers were both equally likely to be described as socially disinterested. While this finding was initially surprising, one needs to remember that

solitary-passive play, which tends to involve constructive/exploratory types of play, is highly encouraged by parents, teachers, and peers (Rubin, 1982). Thus, while this play modality may be more encouraged in females, males and females are both equally likely at one time or another to engage in solitary-passive play which describes the play of socially disinterested children.

Gender of the perceiver. Previous research (Younger & Boyko, 1987; Younger & Piccinin, 1989) has shown that for males and females the schema for social withdrawal emerges at approximately the same age (Younger et al., 1993). Moreover, the schema for social withdrawal has been found to be equally relevant to both genders (Younger et al., 1993). However, Bukowski (1990) found that the aggression schema may be used at a younger age in order to process information about aggressive behaviour in males rather than females (Younger et al., 1993). Correspondingly, in the present study it was found that both males and females did not differ in their frequency to describe a peer as being shy, actively isolated, or socially disinterested.

"Problem" Questions

It has been reported that social withdrawal in children (especially during middle childhood) is associated with numerous problems such as poor peer acceptance (Hymel, Rubin, Rowden, & LeMare, 1990). Few researchers to date have specifically asked

children of different ages if they viewed social withdrawal as being a problem. Solitary types of play (e.g., solitary-passive play) are generally considered normative behaviours in early childhood, and are not seen as deviant by the peer group (Rubin, 1982). However, by middle childhood, it has been found that socially withdrawn behaviour becomes more negatively salient and deviant - by age 11, children spend approximately 50% of their time with peers (Barker & Wright, 1955). Thus, older children (i.e., Grade 5) would be expected to be more likely to view socially withdrawn behaviour as being a problem.

The results from the present study indicated that regardless of age and gender, children (67.1%(n=53)) viewed active isolation as being significantly more of a problem in their grade as compared to other forms of playing alone. This was followed by fearful shyness (44.3%(n=35)), self-conscious shyness (31.6%(n=25)) (fearful shyness significantly more than self-conscious shyness), and social disinterest (13.9%(n=11)).

When children were asked whether they viewed each of the social withdrawal subtypes as being a problem for some boys in their grade, a similar pattern emerged. However, a somewhat different pattern emerged when children were asked if each of the social withdrawal subtypes were a problem for some girls in their grade. Children viewed (almost equally) active isolation (41.7%(n=30)), fearful shyness (37.5%(n=27)), and self-conscious

shyness (30.6%(n=22)) as being a problem in their grade as compared to the other form of playing alone, social disinterest. As before, social disinterest (11.1%(n=8)) was viewed as the least problematic of all social withdrawal subtypes.

Thus, it seems that in general, while both fearful shyness and self-conscious shyness were seen as somewhat problematic, children viewed them as less problematic than active isolation. In the past, researchers did not consider children who were more socially withdrawn to be "at risk" (Kohlberg et al., 1972; Ensminger et al., 1983). In recent years, researchers have come to a clearer picture that withdrawn children, as with aggressive children, may also be experiencing some problems (e.g., Rubin et al., 1990). For instance, social withdrawal has been associated with internalizing problems such as loneliness and depression, both of which can have detrimental effects on children's social development (Rubin et al., 1990). It seems that from the child's perspective, "shy" behaviours are indeed problematic, but not as much as aggressive types of behaviour (i.e., active isolation).

Of all the subtypes of social withdrawal, children who play alone because they are socially disinterested was viewed as being the least problematic by all the children. Children who are socially disinterested are thought to engage in solitary-passive behaviours which, in early childhood, tend to be positively reinforced by parents, teachers, and peers (Rubin, 1982).

Moreover, it was also believed that children who engaged in solitary-passive behaviours during free play in later childhood would be seen as deviating from the social norm (Younger & Daniels, 1992). However, results from the study suggest that children at both age groups tend to view the construct social disinterest as being less problematic as compared to other types of social withdrawal.

The present results provided additional evidence that children were able to perceive different subtypes of social withdrawal: children attributed different risk outcomes to different subtypes, with some social withdrawal subtypes (e.g, active isolation) viewed as more problematic than others.

Grade differences. Starting in middle childhood, as social play becomes more important for children, solitary types of play (i.e., social withdrawal) become more negatively salient and are perceived as being deviant from the norm (Rubin & Mills, 1988). Therefore, it was expected that older children would view all social withdrawal subtypes as being more problematic. On the other hand, solitary play is more normative in young children (Rubin & Mills, 1988) and is not noticeable as being deviant. It was expected that younger children would only view active isolation as being problematic since this behaviour appears to lead to rejection by the peer group regardless of age (Rubin, 1982; Coplan et al., 1994; Coplan & Rubin, 1998).

Generally, no age differences were found in terms of children's perceptions of fearful shyness as a problem. Results from past research have indicated that fearful shyness is unrelated to a child's self-esteem level (Asendorpf & van Aken, 1994). Relatedly, it has been found that it is only during adolescence or adulthood that fearful shyness becomes characterized by behavioural inhibition, heightened physiological arousal, and lower levels of self-esteem (Bruch, Giordano, & Pearl, 1986). Thus, not surprisingly, Grade 5 children did not significantly view fearful shyness as a problem in their grade, or for boys and girls. It seems that Bruch et al. were correct in stating that it is only around adulthood that fearful shyness really becomes a problem or is perceived as such.

There were also no age differences found in terms of children's perceptions of self-conscious shyness as a problem. As described earlier, it has been argued (e.g., Buss, 1986) that this type of social withdrawal occurs later than for fearful shyness (5-6 years of age according to Buss) and its associated problems (i.e., cognitive distress over negative evaluations) are also likely to emerge almost immediately. In contrast to fearful shyness, self-conscious shyness has been associated with lower levels of self-esteem (Asendorpf & van Aken, 1994) as well as increased self-consciousness (Elkind & Bowen, 1979).

However, contrary to what was expected, both Grade 1 and

Grade 5 children showed a similar pattern - there was no significant effect of grade. That is, more children in both grades viewed self-conscious shyness as being less problematic than active isolation. It was somewhat surprising that children in Grade 5 did not view self-conscious shyness as more problematic than children in Grade 1. This finding could simply be because this type of shyness was described/perceived less than other subtypes of withdrawal regardless of age. The reason why even Grade 5 children tended to view this withdrawal type as less problematic than active isolation is because it is not perceived as much as other types. Also, it could just be that the question posed to the children "Some children play alone because they do not like to be noticed" did not capture fully what self-conscious shyness means. For instance, rewording the question to "Some children play alone because they feel that other children tend to make fun of them" may have captured its meaning more efficiently.

There was a significant age difference found in terms of children's perceptions of active isolation as a problem for the whole sample. However, no age differences were found in terms of children's perceptions of active isolation as a problem for some boys or for some girls in their grade.

Active isolation is a type of social withdrawal that has been associated with aggressive and immature forms of behaviour, which may lead children who exhibit this form of behaviour to be

rejected by others (Rubin & Mills, 1988). This type of behaviour has also been associated with maternal ratings of externalizing problems (Rubin & Mills, 1988; Coplan & Rubin, 1998). The present results suggested that children from both grades viewed this form as being the most problematic compared to the other subtypes of social withdrawal. However, while Grade 1 children seemed to view active isolation as being somewhat of a problem in their grade, Grade 5 children tended to view this behaviour as being significantly more problematic. Perhaps it is because Grade 5 children spend more of their time in group play than Grade 1 children - a child who is actively isolated would probably be more disruptive to Grade 5 children than Grade 1 children who tend to spend more of their time in solitary types of play.

While there were no significant age differences found in children's perceptions of active isolation as a problem for some boys or for some girls in their grade, an interesting pattern emerged. More children in Grade 5 viewed active isolation as a problem for some boys in their grade while more children in Grade 1 viewed it as somewhat of a problem. On the other hand, more children in Grade 5 viewed active isolation as somewhat of a problem for some girls in their grade while more children in Grade 1 did not view it as a problem.

The reason for this differing pattern between Grade 1 and

Grade 5 children could just have to do with the frequency of occurrence of this behaviour in both genders. Since boys have been found to engage in more "rowdy", aggressive types of behaviours than girls (Coplan & Rubin, 1998), it was not surprising that this behaviour was viewed as more problematic in boys than in girls because this behaviour tends to be seen more in boys than girls. Additionally, as previously suggested, since children in Grade 5 tend to engage in more social types of play than in Grade 1, a child (more likely a boy than a girl) who is actively isolated would be more disruptive to the play of Grade 5 children; therefore, this behaviour would be seen as being more problematic the older the age of the child.

As for social disinterest, no age differences were found in terms of children's perceptions of this withdrawal subtype as a problem. As stated previously, researchers have found that solitary-passive play (associated with the construct social disinterest) is positively reinforced by peers, teachers, and parents in early childhood (Rubin, 1982). In early childhood, this behaviour is also associated with peer acceptance and competent problem-solving (Rubin, 1982). However, as children age, solitary types of play, while being more normative in younger children, becomes more salient as being perceived as negative by the peer group (Younger & Daniels, 1992). Relatedly, if children display frequently solitary-passive behaviours in

middle and later childhood, it becomes associated with peer rejection, negative self-perceptions, and internalizing difficulties (Rubin & Mills, 1988).

Contrary to what was expected, both Grade 1 and Grade 5 children viewed social disinterest similarly. Regardless of age, children do not seem to associate any risk factors to children who play alone because they are socially disinterested compared to the other subtypes of social withdrawal (e.g., active isolation). That is, children tended to view social disinterest as being the least problematic across grade. The reason for this finding could be that regardless of grade, the majority believed that if a child (boy or girl) chooses to play alone, it is their choice and it is not looked down upon.

Gender differences. There were no significant gender differences found for the whole sample, for some boys or for some girls for fearful shyness, self-conscious shyness, and social disinterest. There were also no significant gender differences found for the whole sample, and for some boys in their grade for active isolation. However, there was a significant gender difference found for active isolation as a problem for some girls in their grade.

There is very little research examining gender differences regarding the four subtypes of social withdrawal. It seems that children view "shyness" and "aggression" differently than adults

do. Adults tend to perceive shyness in girls as less problematic than in boys (Engfer, 1993) and aggression in boys is less likely to incur parental disapproval than aggression in girls (Perry et al., 1989). Results from this study demonstrated that both males and females did not view "shyness" as being more of a problem for males and "aggression" as being more of a problem for females.

However, interestingly, more males (71%(n=27)) stated that active isolation was not a problem for some girls in their grade while only 28.9% (n=11) of males said that it was a problem. On the other hand, 54.8% (n=23) of females said that active isolation was a problem for some girls in their grade while 45.2% (n=19) said that it was not a problem. Thus, while males viewed active isolation as definitely not being a problem for some girls in their grade, females viewed it as somewhat of a problem.

While this finding was somewhat surprising, it could just be that males and females in Grades 1 and 5 tended to predominately socialize with same sex peers. Thus, males at this age would not necessarily have a good perspective of female behaviour in their grade. Additionally, while boys tend to engage in more "rowdy", overt types of aggressive behaviours, girls may also engage in a form of aggressive behaviour but it is less salient (e.g., relational aggression). The reason why males did not view active isolation as a problem for some girls in their grade is that since they tend not to engage in peer play with them they may not

perceive this more subtle form of aggression. However, other females are likely to view active isolation as somewhat of a problem in other girls since they predominately spend more time engaging in same sex play and therefore are more likely to perceive relational aggression in other girls.

Summary of Findings

The purpose of this study was to examine age and gender differences in children's abilities to perceive different subtypes of social withdrawal. Evidence was found to dispute the finding that younger children have difficulty in perceiving social withdrawal in their peers. Children in Grade 1 attributed different reasons, behaviours, and emotions to describe children who play alone. This suggested that younger children realize that children play alone and that their peers can play alone for more than one reason.

When the children were asked to give reasons why they thought a child might play alone, both Grade 1 and Grade 5 children mentioned active isolation more often than any other reason. Evidence was also found indicating that older children (Grade 5) were significantly more likely to give self-conscious shyness as a reason why a child plays alone. However, contrary to what was expected, younger and older children did not differ in the frequency that they mentioned fearful shyness. Actually, fearful shyness was mentioned slightly more often in Grade 5 than in

Grade 1. Finally, there was no difference found in Grade 1 and Grade 5 children's referrals to social disinterest. What is interesting to note is that regardless of grade, children were able to differentiate between children who play alone because they want to with children who play alone because they are "shy" or actively isolated by others.

When the children were asked to describe different behaviours to explain what a child is doing when he/she is playing alone, only one significant difference was found. Grade 5 children significantly mentioned with more frequency internalizing behaviours as a reason why a child plays alone compared to Grade 1 children. It was also found that Grade 1 and Grade 5 children did not differ in the frequency that they mentioned externalizing behaviours, solitary-active behaviours, and solitary-passive behaviours.

When the children were asked to describe how they think a child is feeling when he/she plays alone, the two emotions that were mentioned the most were "happy" and "sad". It was found that while children in Grade 1 and Grade 5 did not differ in the frequency that they mentioned either the emotion "happy" or "sad", one should note that children in Grade 5 mentioned with slightly more frequency the emotion "sad" than Grade 1 children. This result was consistent with the findings that older children were more likely to mention reasons (i.e., fearful shyness and

self-conscious shyness), behaviours (i.e., internalizing behaviours), as well as feelings (i.e., sad) that would correspond with children who would be described as "shy". On the other hand, younger and older children did not differ in the frequency that they mentioned reasons (i.e., social disinterest), behaviours (i.e., solitary-passive behaviour), as well as feelings (i.e., happy) that would correspond with describing children who are socially disinterested.

In sum, the results from the present study provide some convincing evidence to suggest that younger children are able to attribute different reasons, behaviours, and feelings to describe children who play alone. We could then extend these findings to say that younger children have knowledge of and are able to perceive different subtypes of social withdrawal, some better than others, in their peers.

Children were also asked if they thought the various subtypes of social withdrawal were a problem in their grade. It was found that overall, most children regardless of grade or gender viewed fearful shyness and self-conscious shyness as being somewhat problematic while social disinterest was not seen as being problematic. However, most children viewed active isolation as being a problem in their grade, particularly for some boys in Grade 5. In addition, females were more likely than males to view active isolation as being a problem for some girls in their

grade.

What was most striking about the results concerning the problem questions was the lack of grade differences. Grade 1 and Grade 5 children had a similar pattern in their responses. This should also be seen as support for the notion that younger children do perceive different subtypes of social withdrawal and, like Grade 5 children, are able to perceive some subtypes as being more problematic than others in their grade.

Gender differences were conspicuously absent throughout the study. Not surprisingly, there were no gender differences (gender of the perceiver) in children's understandings, perceptions, and knowledge about the different reasons, behaviours, and feelings associated with the four subtypes of social withdrawal being examined in the present study. However, gender differences were expected with the "described peer". It was found that children described as "shy" (fearful shyness and self-conscious shyness) were more likely to be females than males. Moreover, children described as actively isolated were more likely to be males than females. This follows past research (e.g., Engfer, 1993; Stevenson-Hinde & Glover, 1996) which stated that shyness was more acceptable in girls and aggressive behaviour in boys was less likely to cause parental disapproval; it is not surprising then that girls are more likely to be seen as "shy" and boys as actively isolated.

Thus, younger children appear to have some knowledge of certain subtypes of social withdrawal - but perhaps they did not reveal this in past studies because they have not been asked the right questions. Clearly, further research is needed to replicate these findings. Furthermore, the measures that have been previously used to examine children's perceptions of social withdrawal (e.g., PEI and RCP scales) need to be updated to reflect the changing face of the withdrawal literature.

Limitations and Future Research

While the present study represents an attempt to extend the research in this area, a few limitations need to be mentioned. First, a larger sample size would increase the power of statistical tests. In the present study, some of the categories had to be collapsed, and this possibly caused some of the associations to disappear. Moreover, some of the uninterpreted trends may become significant with a larger sample.

Second, while interviewing children in the schools can be very fruitful, it was important to keep the interviews down to a minimum length of time in order not to be too disruptive to the class schedule. The principal investigator was not able to always probe as much as she would have liked due to these time constraints.

This study involved only the comparison between two grades (Grade 1 vs. Grade 5). The main purpose of this study was to see

if younger children do have knowledge of certain subtypes of social withdrawal as compared to older children. Now that the findings of the present study suggest that younger children do have knowledge of all the different subtypes of social withdrawal, it would be worthwhile to examine the progression of children's knowledge of social withdrawal (as did Younger & Schneider, 1993) in Grade 3, as well as extending the research to even older children than in Grade 5, to see if all the subtypes examined in this study still apply. It might also be very important for future research to examine gender differences in children's perceptions of various subtypes of social withdrawal in order to see if the results of the present study can be replicated.

The present study was a first step into learning more about children's perceptions of social withdrawal. However, at present, the risk status of shy and socially withdrawn children still remains unclear. There is conflicting evidence as to whether different forms of social withdrawal are associated with social and academic maladjustment in the school. Thus, a better understanding of these constructs and their meaningfulness for children of this age is the first step in improving the identification process for potentially "at risk" children and in the development and implementation of intervention programs.

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Appendix A

Children Questionnaire

I would like you to think of children whom you feel fit the following description.

- (1) Sometimes children play in large groups, in smaller groups, and sometimes children play by themselves. Do you know someone who does not play a lot with others - who plays by himself/herself?
- (2) Why do you think that he/she does not play a lot with others?
Probe - Can you give me some examples of when he/she does not play a lot with others?
- (3) What is he/she doing when he/she is not playing with others?
- (4) How do you think he/she is feeling? Why?
- (5) You just described me someone who plays alone because he/she is [name behaviour given by child]. Do you know someone else who plays alone for a different reason?
- (6) Why do you think that he/she does not play a lot with others?
- (7) What is he/she doing when he/she is not playing with others?
- (8) How do you think he/she is feeling? Why?

Repeat questions (5) to (8) until the child is no longer able to describe different peers. Then he/she will be asked the following questions:

- (9) What are some other reasons why children might not want to play with others?

(10) What do you think a child who is [description of behaviour by the child] is doing when he/she is not playing with others?

(11) How do you think this child is feeling? Why?

Repeat questions (9) to (11) until the child is no longer able to come up with different reasons why someone may play alone.

(12) Some children play alone because they are scared to play with others. Do you think that this is a problem in your grade? Do you think that this is a problem for some boys in your grade? Do you think that this is a problem for some girls in your grade?

(13) Some children play alone because they do not like to be noticed. Do you think that this is a problem in your grade? Do you think that this is a problem for some boys in your grade? Do you think that this is a problem for some girls in your grade?

(14) Some children play alone because other children do not like them. Do you think that this is a problem in your grade? Do you think that this is a problem for some boys in your grade? Do you think that this is a problem for some girls in your grade?

(15) Some children play alone because they like to play by themselves. Do you think that this is a problem in your grade? Do you think that this is a problem for some boys in

your grade? Do you think that this is a problem for some girls in your grade?

Appendix B

Coding for the "Why" Questions (Questions 2, 6, and 9)

For the "Why do think that he/she does not play a lot with others?" question, one must code only the responses to the "why" questions (i.e., don't read the rest of the child's description for the child he/she was talking about since it might influence the coding). Once the "why" questions are read, try to code the responses for references to fearful shyness, self-conscious shyness, active isolation, or social disinterest.

Score of 1:

- the child makes reference as to a reason why a peer plays alone
e.g., he/she plays alone 'cause he/she wants to - he/she likes to play alone - social disinterest=1

Score of 0:

- child makes no reference as to why a peer might play alone
e.g., I don't know

Appendix C

Coding for the "Behaviour" Questions (Questions 3, 7, and 10)

For the coding of the "behaviour" questions, only code the child's answers for the behaviour questions. Then, for each of the behaviours, assign a code of

- 0 = makes no reference to a particular behaviour
- 1 = makes reference to a particular behaviour

Different behaviours coded:

- internalizing behaviours
e.g., hovering, avoiding, hiding, unoccupied, onlooking, thinking about things
- externalizing behaviours
e.g., bullying, teasing, showing off, getting into trouble, bug people, bossing other kids, hurting others, playing tricks on others, throwing toys around, walking around, looking for trouble
- solitary-active behaviours (functional and/or dramatic play)
e.g., playing with an imaginary friend, talking to himself/herself, skipping, running, playing with a yo-yo, fantasizing
- solitary-passive behaviours (constructive and/or dramatic play)
e.g., playing by himself/herself, reading, playing on the computer (i.e., Gameboy)
- seeking contact/play partners
e.g., looking for someone to play with; trying to find someone to play with

Appendix D

Coding for the "Emotion" Questions (Questions 4, 8, and 11)

For the coding of the "emotion" questions, only code the child's answers for the emotion questions. Then, for each emotion, assign the child either a

- 0 = makes no reference to a particular emotion
- 1 = makes reference to a particular emotion

Different emotions coded:

- happy
- sad
- scared/fearful
- embarrassed
- angry
- guilty
- neutral (e.g., in-between sad and happy)

Note:

e.g., "kind of sad and kind of happy" - code as happy=1 and sad=1

Appendix E

Coding for Described Peers

This coding only pertains to the peer the child being interviewed is describing. For each described peer, read the entire description (e.g., questions 2-4) before deciding on a code. Then, each described peer will receive one code between 1-5 depending on how the coders would place the peer being described based only on the descriptions the child being interviewed is giving. It is important to note that the predominate behaviour being described is coded.

Coding Scheme:

- (1) = Fearful shyness
- (2) = Self-conscious shyness
- (3) = Active isolation
- (4) = Social disinterest
- (5) = Uncodeable

(appendix continues)

Appendix E (continued)

Definitions for the Four Social Withdrawal Subtypes

Fearful shyness: (Buss, 1986)

Why: because they are scared

Behaviours: retreat from the situation; seeking comfort from someone with whom they feel secure with (e.g., mother); crying; shrinking back; inhibition of speech and of behaviour interactions; onlooking behaviour with no accompanying play; unoccupied; hover around others

Feelings: wariness; scared; frightened of the unknown; upset about social interactions; lonely; worried

Self-conscious shyness: (Buss, 1986)

Why: because they are embarrassed

Behaviours: blushing; fumbling; disorganized; inhibited social behaviour; stuttering

Feelings: embarrassed; feel that they are under the scrutiny of others; feel awkward; foolish and vulnerable

Active isolation: (Rubin, 1982; Rubin & Mills, 1988; Coplan, Rubin, Fox, Calkins, & Stewart, 1994)

Why: because no one wants to play with them

Behaviours: rambunctious behaviour; immature behaviour; impulsive, aggressive; demonstrate noxious behaviour to the peer group; engage in solitary-active play (e.g., sensorimotor play or dramatic play); initiate unskilled attempts at interaction

(appendix continues)

Appendix E (continued)

Feelings: feel disliked; rejected by the peer group; feel
 angry

Social disinterest: (Rubin, 1982; Asendorpf, 1990; Coplan,
 et al., 1994; Harrist, Zaia, Bates, Dodge,
 & Pettit, 1997)

Why: because they want/prefer to play alone

Behaviours: play more with objects than with others; will accept
 social invitations (if they are attractive); will
 not initiate many social interactions

Feelings: content to play alone

Appendix F

Coding for the "Problem" Questions (Questions 12-15)

Code the child's answers as:

- 1 = yes it is a problem
- 2 = no it is not a problem
- 3 = sometimes/maybe it is a problem
- 4 = I don't know/unsure

Note:

- if child says "a little bit" code as 3
- if child says "it is a problem for two boys/two girls" for the question "Is [social withdrawal subtype] a problem in your grade?" and/or for the question "Is [social withdrawal subtype] a problem for some boys and/or for some girls in your grade?" code as 1
- if child says "I think so" code as 1
- if child says "kind of yes/kind of no" code as 3

Appendix G

Instructions for Children Interviews

Hi, My name is Marie-Hélène. I am a student at Carleton University. Today, I will be asking you some questions; but this is not a test. There are no right or wrong answers - I just want to know what you think. Your answers will remain private. That means that your parents, teachers, and friends will not know what your answers are. These questions should not make you feel uncomfortable. However, if at any time you want to stop, please tell me and we will. Also, if at any time you have difficulty understanding some of the questions, please let me know. Do you have any questions? I will be taping us to help me remember what we said. Okay?

Before we begin, I would like us to get to know each other a little better. Is there anything you would like to know about me?

Okay! Now it is your turn.

- (1) How old are you?
- (2) Do you have any pets?
- (3) Do you have any brothers and sisters?
- (4) What is your favourite subject at school?
- (5) What sports do you like to do?
- (6) Anything else you would like to share with me?

Any other questions before we begin? Let's get started...

Appendix H

Letters of Permission Sent to the Parents

Dear Parent(s) or Guardian(s):

I am writing to ask your permission to let your child participate in a study which is being conducted at your child's school this winter. The focus of this study is on children who tend to play alone more than they play with other children. It is certainly the case that young children play alone for many different reasons. For instance, some children play alone because they are anxious or afraid, some prefer to play alone and still others may play alone because they have a hard time to get others to play with them.

In this study, we are interested in what children know and understand about the different forms of shyness. Children who participate in this study will be interviewed once by a female researcher. The location of the interview will either be in a quiet corner of the classroom or in another room designated for that purpose. The choice of location will be at the discretion of the school board. The interview should last approximately 20 minutes. The scheduling for the children's interview will be at the teacher's convenience in order to minimize disruption to the daily routine. Your child will be asked if it is all right for his/her answers to be tape-recorded and will be told that it is "to help me remember what he/she says". Once the data has been transcribed, the tapes will be destroyed. Your child will be asked to think of children whom he/she knows who "do not play a lot with others". The names of these children will not be recorded. Following this, your child will be asked to speculate on these peers' behaviours, feelings and thoughts. In addition, your child will be asked whether different types of shyness are a problem in his/her grade. If you agree to let your child participate, all that will be required of you is to fill out the consent form and return it to your child's school within the next few days. If you give your child permission to participate, your child will also be asked if he/she wants to participate. Only the children that have parental consent and give their own personal consent will participate.

The data collected in this study are strictly confidential and are made available only to researchers associated with this project. All the data collected are coded such that your child's name is not associated with the data. A brief summary of research results will be made available to your child's school once the study is completed. You are free to discontinue the participation of your child from the study at any time. This study has been approved by the Ottawa-Carleton Research Advisory Committee, your child's Teacher and Principal of your child's school, and by the Department of Psychology Ethics Committee.

If you have any questions or comments about this research, please feel free to contact my advisor, Dr. Robert Coplan (520-2600, ext. 8691) or myself, Marie-Hélène Gavinski Molina (729-5725). If you have any ethical concerns about this study please contact Dr. Mary Gick (Chair, Department of Psychology Ethics Committee (520-2600, ext. 2664) or Dr. Kim Matheson, (Chair, Department of Psychology, 520-2600, ext. 2648).

Thank you very much for your cooperation.

Sincerely yours,

Marie-Hélène Gavinski Molina
Marie-Hélène Gavinski Molina

Carleton
UNIVERSITY

Department of Psychology
Faculty of Arts and Social Sciences
8550 Loeb Building
1125 Colonel By Drive
Ottawa, ON K1S 5B6 Canada
Tel: (613) 520-2644
Fax: (613) 520-3667

Dear Parent(s) or Guardian(s):

I am writing to ask your permission for your child to participate in a study. The focus of this study is on children who tend to play alone more than they play with other children. It is certainly the case that young children play alone for many different reasons. For instance, some children play alone because they are anxious or afraid, some prefer to play alone and still others may play alone because they have a hard time to get others to play with them.

In this study, we are interested in what children know and understand about these different forms of shyness. Children who participate in this study will be interviewed once by a female researcher. The location of the interview will be up to your discretion (i.e., at the child's home or anywhere which is convenient for you). The interview should last approximately 15 minutes. The scheduling for the child's interview will be at your convenience in order to minimize disruption to the daily routine. Your child will be asked if it is all right for his/her answers to be tape-recorded and will be told that it is "to help me remember what he/she says". Once the data has been transcribed, the tapes will be destroyed. Your child will be asked to think of children whom he/she knows who "do not play a lot with others". The names of these children will not be recorded. Following this, your child will be asked to speculate on these peers' behaviours, feelings and thoughts. In addition, your child will be asked whether different types of shyness are a problem in his/her grade. If you agree to let your child participate, all that will be required of you is to fill out the consent form and return it to me as soon as possible. If you give your child permission to participate, your child will also be asked if he/she wants to participate. Only the children that have parental consent and give their own personal consent will participate.

The data collected in this study are strictly confidential and are made available only to researchers associated with this project. All the data collected are coded such that your child's name is not associated with the data. A brief summary of research results will be made available to you once the study is completed. You are free to discontinue the participation of your child from the study at any time. This study has been approved by the Department of Psychology, Ethics Committee.

If you have any questions or comments about this research, please feel free to contact my advisor, Dr. Robert Coplan (520-2600, ext. 8691) or myself, Marie-Hélène Gavinski Molina (729-5725). If you have any ethical concerns about this study please contact Dr. Mary Gick (Chair, Department of Psychology Ethics Committee (520-2600, ext. 2664) or Dr. Kim Matheson, (Chair, Department of Psychology, 520-2600, ext. 2648).

Thank you very much for you cooperation.

Sincerely yours.

Marie-Hélène Gavinski Molina
Marie-Hélène Gavinski Molina

(detach and return)

CONSENT FORM

Date: _____

(name of child - please print)

(name of parent or guardian - please print)

gender of child: male____ female____

child date of birth: _____
 month day year

child age (in months): _____

Please check appropriate line(s):

____ I give permission for my child to participate in this study.

NOTE: If you give permission for your child to participate in this study, please indicate if you give permission for the following:

____ I give permission for my child's interview to be tape-recorded with the understanding that these tapes will be destroyed once the material has been transcribed.

____ I do not give permission for my child's interview to be tape-recorded.

____ I do not give permission for my child to participate in this study.

(Signature of parent or guardian)

Please return the signed consent form to your child's school as soon as possible (even if you do not want your child to participate in the study).