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Children's Perspectives of Shyness in their Peers: Salient Elements

by

Claire Emilie James

A thesis submitted to the School of Graduate Studies and Research
in partial fulfilment of the requirements for the degree of

Doctor of Philosophy

School of Psychology, University of Ottawa

Ottawa, Ontario, Canada

September 2002

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0-612-76440-0
This thesis is dedicated to my beloved daughter,

*Kaitlyn Bliss James,*

my raison d’être
ABSTRACT

In the present study, children's perceptions of fearful and self-conscious shyness in their peers, were examined for age- and gender-related differences concerning whether they consider it a problem for a peer to be shy. Interviews with 220 children from grades one, three, five, and seven were conducted in order to elicit children's descriptions of shy peers' behaviours, emotions, and thoughts, as well as the causes of shyness. Using Buss' theory of shyness (1984, 1986), the interviews were coded for children's perceptions of the behavioural, emotional, and cognitive manifestations of shyness. The types of immediate causes and origins of shyness the children mention throughout the interview were also coded. Also, children's responses and explanations to the question, "Is shyness a problem for someone in your grade?" were contrasted across gender and grade levels. The results indicated that were significant age differences in the reported components of shyness. There was partial support for the hypothesized age differences in the types of situations children reported most often. Grade seven children viewed shyness as a problem to a significantly greater extent than did the younger children. Peer-related reasons were reported most often as the explanation of why shyness is a problem. Boys reported more future-related problems associated with shyness than did girls, and grade three and grade five children reported more emotional problems related to shyness. These results were discussed with relation to Buss' theory of shyness, as well as the importance of peer relationships, and subsequent problems. Finally, a discussion of the implications of the present study to future research was presented.
ACKNOWLEDGEMENTS

There are a number of people I would like to thank for supporting me throughout my studies. First of all, I am grateful to my committee members, Dr. Gail Crombie, Dr. Pierre Gosselin, and Dr. Barry Schneider for kindly sharing their knowledge and their time with me. Thanks to Dr. Dwayne Schindler for his time and patience. A special thank you to my thesis supervisor, Dr. Alastair Younger, who has been a key player since my undergraduate years. Your generosity and expertise has been the cornerstone of this study. I am truly grateful.

To my mentor, Dr. Iris Jackson, thank-you for sharing your strength and wisdom with me. Your example is inspiring, I am honoured to know you.

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INTRODUCTION

Much of the developmental research involving peer relationships has outlined the importance of social exchange for normal growth. Researchers have stressed the importance of positive peer relationships on children's social development (Asher & Hymel, 1981). Rubin (1985) concluded that poor peer relationships or the absence of peer relationships in childhood has deleterious consequences. When social maladjustment does occur, two patterns of behaviour have been consistently identified; social withdrawal and aggression (Achenbach, 1980).

Although aggression and its consequences have been studied extensively, there has been less research concerning social withdrawal. The study of childhood social withdrawal has grown within the past two decades. Researchers have studied other related facets of childhood experience similar to social withdrawal; behavioural inhibition, shyness, and syndromes such as social phobia. Consequently there has been an increasing amount of research directed toward the study of shyness. There are at least three important findings that have emerged from this compilation of research.

The first is that shyness is a phenomenon that has historically been considered an exception to our rules of sociability but in fact is a normative condition in our society and most others. There is evidence from both observational and self-report studies of young adults that in their recall of their childhood (e.g., Zimbardo & Radl, 1981) shyness is a common experience and is widespread in childhood. For example, in the Stanford Shyness Survey, Zimbardo, Pilkonis, and Norwood (1975) reported that 40% of the American college students sampled reported they were currently shy and that percentage increased to 73% when respondents were asked about previous (including childhood shyness) as well as current shyness. The percentage increases to
90-95% when all those who have been, or who are, temperamentally shy and those who have experienced situational shyness are considered all together (Zimbardo & Henderson, 2000).

Second, a smaller percentage (around 15%) of the general North American population, experience extreme shyness. Extreme shyness is characterized by an anxious preoccupation with the self in response to real or imagined social situations. Extremely shy individuals avoid social contact and struggle with a large number of psychophysiological correlates, such as elevated basal stress hormones (Schmidt, Fox, Rubin, Sternberg, Gold, Smith, & Schulkin, 1997), heightened baseline heart rates (Kagan, Reznick & Snidman, 1988) and low threshold startle responses (Snidman & Kagan, 1994).

Third, there are different forms or types of shyness (Buss, 1984, 1986). These types have specific behaviours associated with them (Bruch, Giordano, & Pearl, 1986; Cheek & Buss, 1981) which are correlated with distinct psychophysiological responses (Schmidt, 1999; Schmidt & Fox, 1994).

One issue that has not yet been satisfactorily explored is whether shyness, although widespread, is truly problematic for children. Some researchers believe that although shy children may have poor social relationships, they develop normally and are not at risk for later problems (Gough & Thorne, 1986). However, there is a growing body of research indicating that shy children are at risk for later problems (Caspi, Elder, & Bem, 1988; Phillips & Bruch, 1988). There have also been more recent associations made between concurrent problems and shyness, such as depression, anxiety, and negative self-esteem (i.e., Fordham & Stevenson-Hinde, 1999; Prior, Smart, Sanson, & Oberklaid, 2000; Rubin, 1993).

One cause of the controversy of whether shyness is problematic stems from problems
within the field of shyness research, one of which is the lack of agreement among experts regarding the definition of three particular constructs. They are intertwined and carry very different meanings; social withdrawal, shyness, and behavioural inhibition. The common thread that runs between them is the behavioural expression of solitude. Social withdrawal, as an “umbrella” terms relates to all forms of behavioural solitude. It simply refers to the act of being alone, of not interacting with others (Rubin & Asendorpf, 1993).

Shyness is one form of social withdrawal that is motivated by social evaluative concerns, primarily in new settings (Crozier, 1995; Asendorpf, 1993). Kagan and colleagues (1993) regard shyness with unfamiliar children or adults as only a feature of a much broader temperamentental category which they term behavioural inhibition. Behavioural inhibition can be identified at a very young age and is thought to be an extreme form of shyness. If the inhibition is due to the unfamiliarity of people, parents call the child “shy”. However if the child is sensitive to novel situations then the child is labelled as “timid”.

Besides the many faces of social withdrawal there are many views of shyness as well. Cheek and his colleagues view shyness as an enduring quality of personality (i.e., a trait; see e.g., Cheek and Krasnoperova, 1999) while others view shyness more as a psychological process (i.e., an emotion; see, e.g., Crozier, 2000). Some researchers have highlighted the behavioural aspects of shyness (Pilkonis, 1977), shyness as an emotion (Cheek & Briggs, 1990; Leary & Schlenker, 1981) and others have combined shyness as an array of emotions and behaviours (Asendorpf, 1989; Leary, 1986). These definitions are somewhat limited because they apply only one or two aspects of shyness to their definitions. However, shyness is a multi-dimensional condition and requires a definition that encompasses several different levels of experience such as the
behavioural, emotional, and cognitive elements of shyness.

One approach that accommodates all shyness aspects is to view shyness, not as a single experience, but as two separate experiences. Buss (1984, 1986) has proposed a theory that offers an account of how these components interconnect and makes predictions about the development of shyness. Shyness is a phenomenon that, according to Buss (1984, 1986), can be identified by behaviours, emotions and thoughts. According to Buss there are two discernible forms of shyness, fearful and self-conscious shyness, and there are developmental trends associated with these two forms of shyness.

The above theoretical and clinical issues necessitate the study of shyness. The following discussion will examine the empirical findings concerning the types of shyness and developmental and gender-related trends in shyness. This will be followed by a discussion delineating the importance of peer relationships, the impact of shyness on peer relationships, and the relationship between shyness and subsequent difficulties.

**Buss’s Theory of Shyness: Types, Components, Causes and Origins**

As mentioned above, Buss (1984, 1986) proposes two types of shyness; one based on fearfulfulness and the other on self-consciousness. The following section describes these two kinds of shyness experiences.

*Fearful shyness.*

Fearfulness refers to the tendency to become aroused in the face of perceived threat and to react with escape or avoidance behaviour, or the desire to escape or avoid. Fearful shyness is first evident at about 6 months of age. At this age, it is commonly referred to as "stranger anxiety", occurring in the presence of unfamiliar people, and/or in novel social situations. Although Buss
does not offer a specific time line, he suggests that the occurrence of fearful shyness decreases as the child becomes older. This is thought to be a result of the child's increasing ability to cope with threats in novel social situations. Buss does suggest, however, that fearful shyness continues for some individuals through adolescence and into adulthood, when it is related to social evaluative concerns, as will be discussed in the following section. Once children reach sufficient maturity, they discover that they can evaluate others and therefore realize that others can evaluate them. Consequently children become aware of the possibility that they may experience social rejection. Fear of social rejection is the form of fearful shyness that occurs in adulthood.

The empirical association between shyness and fearfulness has been investigated in studies assessing fearfulness in university students (Cheek et al., 1981; Jones, Briggs, & Smith, 1986). Cheek and Buss used the Fearfulness scale of the EASI Temperament Survey (Buss & Plomin, 1975). Cheek and Buss reported a correlation between siyness and fearfulness of .50. Similar results were found by Jones, Briggs, and Smith (1986). Using the same measure of fearfulness as Cheek and Buss (1981), these investigators found that correlations with five different shyness measures ranged from .41 to .49.

Self-conscious shyness.

Self-consciousness refers to the tendency to be focussed on, and aware of, oneself. Self-conscious shyness, according to Buss (1986), first appears at around 5 years of age when a sense of self as object begins to develop. He bases this conclusion on research concerning embarrassment which he feels is the extreme manifestation of self-consciousness in children. Specifically, he and his colleagues asked parents to report on the occurrence of embarrassment in their children and found that it was rarely reported by parents in children under the age of five.
years (Buss, Iscoe, & Buss, 1979). Self-conscious shyness is marked by the child’s concern with the kinds of impression that he or she makes on others and his or her perceptions of others’ reactions to those impressions. This concern, in turn, results in anxiety and the inhibition of social behaviour.

The correlation between shyness and public self-consciousness has been examined in several studies. First, Cheek and Buss (1981) obtained an overall correlation of .26 between public self-consciousness and their measure of shyness with only very limited gender differences. Second, in a study of older adolescents attributions of shyness-resembling behaviours, differences between shy and non-shy participants were differences in their focus of attention, shy individuals were more self-focussed than non-shy ones (Alm & Lindberg, 1999).

Jones, Briggs, and Smith (1986) assessed self-consciousness simply by asking adult subjects to rate themselves on this characteristic on a 7-point scale. Correlations between these self-ratings of self-consciousness and five self-report shyness measures ranged from .30 to .38. From these studies it can be concluded that, in adults, shyness and self-consciousness are moderately related. The occurrence of self-consciousness in children will be discussed in the following paragraph.

Although Buss does not suggest when self-conscious shyness may be most salient in children, the literature on adolescent development gives light to this issue. There is evidence that for a brief period during early adolescence an increase in self-consciousness is experienced. Simmons and colleagues (Simmons, Burgeson, Carlton-Ford, & Blyth, 1987; Simmons & Rosenberg, 1975; Simmons, Rosenberg, & Rosenberg, 1973) conducted a series of studies that examined various problems experienced in adolescents' self-image. They looked at adolescent
self-esteem, self-consciousness, and self-image stability. Simmons and her colleagues found that fluctuations in the self-image are most likely to occur between the ages of 12 and 14. Compared with older adolescents (15 years and older) and with pre-adolescents (8 to 11 years), early adolescents have lower self-esteem and are more self-conscious. Given that early adolescence is a period where a peak in self-consciousness is experienced along with lower self-esteem and self-image, it is also highly likely that these children will also be susceptible to self-conscious shyness.

Further evidence linking early adolescence to a peak in self-consciousness was found in a study examining the "imaginary audience" phenomenon in adolescence. Elkind and Bowen (1976) administered a series of multiple choice questions to 697 students in grades 4, 6, 8, and 12 asking about the self (transient and abiding self). Their aim was to determine whether children and adolescents respond differently to situations involving these types of selves. They found that there were significant age trends in self-consciousness. Although self-consciousness was present at all grades, the eighth grade students had significantly higher scores on the items endorsing shyness than did students in the remaining three grades. They also found that girls scored higher than boys at all grade levels on measures of self-consciousness. These results agree with the findings of Simmons and colleagues (Simmons et al., 1987; Simmons et al., 1975) also indicating that it is possible that the self-conscious form of shyness may peak during early adolescence.

**Manifestations of Shyness: Action, Emotional/Physiological and Cognitive**

Buss (1984, 1986) hypothesizes that there are three components or manifestations of shyness associated with both fearful and self-conscious shyness: an action component, an emotional/physiological component, and a cognitive component. Fearful shyness and self-conscious shyness are differentiated from each other within each of these three components. The
following subsections will provide a description of each component for both types of shyness (see Table 1 for examples of action, emotional, and cognitive components for both types of shyness).

Action Component.

The most readily observable aspect of shyness is the action or instrumental component. In fact, it is the absence of social activity that defines this fearful shyness component. Buss characterizes the action component of self-conscious shyness by inhibition or disorganization of social behaviour.

Emotional Component.

The emotional component of fearful shyness is comprised of all the affective and physiological reactions to fear. Unlike fearful shyness, the emotional and physiological components of self-conscious shyness are characterized by feelings of embarrassment.

Cognitive component.

The cognitive component consists of the thoughts that are activated in the shy individual under specific situations. The cognitive component of fearful shyness consists simply of thoughts that are fear-based. The cognitive component of self-conscious shyness is acute awareness of oneself as a social object.

These three components generally occur together in both types of shyness. The behavioural components tend to be more obvious to the observer, whereas emotions are usually felt by the individual and are inferred by others. The cognitive components are only known if the shy person reveals what is being experienced. Also, there are important differences as to which component is most salient for each shy individual. Of course this experience is variable, for example one shy individual may be aware of behavioural inhibition whereas someone else may be
Table 1

Manifestations of Shyness defined by Action, Emotional, and Cognitive Components (Buss 1984, 1986)

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<th>Component</th>
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<td>Fearful Shyness</td>
<td><strong>Action</strong> Does not speak, mumbles; cries; wariness; flees or avoids social situations; seeks comfort from a caregiver; body language (averts gaze, keeps their head down, shrinks back or defensive body language)</td>
</tr>
<tr>
<td></td>
<td><strong>Emotional</strong> Frightened in social situations; panic in the extreme form; reactivity of sympathetic division of autonomic nervous system (rapid breathing, quickened heart rate, elevated blood pressure, sweating)</td>
</tr>
<tr>
<td></td>
<td><strong>Cognitive</strong> Worry about future social encounters; concern about past fearful social events</td>
</tr>
<tr>
<td>Self-Conscious Shyness</td>
<td><strong>Action</strong> Inhibition of social behaviour; behavioural disorganization including (shaking of limbs, clumsy gestures and stuttering)</td>
</tr>
<tr>
<td></td>
<td><strong>Emotional</strong> Feelings of embarrassment, awkwardness, foolishness, and vulnerability; accompanied by reactivity of the parasympathetic nervous system, resulting in blushing.</td>
</tr>
<tr>
<td></td>
<td><strong>Cognitive</strong> Self-awareness: acute self-awareness of oneself as social object; intense discomfort accompanied with thoughts of being inept, vulnerable; concern with saying or doing something dumb, awkward, or foolish</td>
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more aware of his or her feelings of panic.

These behavioural, emotional, and cognitive components share some commonalities with Asendorpf's conception of shyness in children. Asendorpf (1989; 1990) defines a shy individual as someone who experiences an approach-avoidance conflict in a social situation. According to Asendorpf, shy individuals want to approach others by this approach tendency is inhibited by a simultaneously avoidance tendency. Within his theory, shyness includes experiential, motor-expressive, and physiological components. In contrast to Buss' theory, Asendorpf believes that the concern about being socially evaluated is "nearly inevitably accompanied by heightened public self-awareness". Therefore he suggests that the sensitivity of novelty characterizes one type of shyness, whereas the sensitivity to social evaluation and to public awareness gives rise to another kind of inhibition. Unlike Buss, Asendorpf's perspective does not include embarrassment as an emotional manifestation of self-conscious shyness.

A reconsideration: Two types of shyness proposed by Buss

One issue that needs to be discussed is the association between fearful and self-conscious shyness types. To this point, self-conscious and fearful shyness have been discussed as though they are distinct and independent tendencies. Indeed, in the current conceptual literature this is how they are generally presented. However, as LeMare (1994) indicates, there is room for confusion in this conceptualization. For example, both LeMare (1994) and Asendorpf (1989, 1990) believe there to be a theoretical overlap between the emotional manifestations of fear of social evaluation which is associated with fearful shyness, and anxiety about oneself as a social object which is the emotional component of self-conscious shyness. Following from these two positions, LeMare (1994) suggested that fearfulness and self-consciousness, as they relate to
shyness, are developmentally linked.

In her doctoral thesis, LeMare (1994) examined individual differences in shy behaviours of 59 children age 5.5 to 10 years in two social situations: one characterized by social novelty and the other characterized by attention focused on the child. In Session 1 (social novelty) each child was taken to an unfamiliar room and placed in a situation which demanded interaction with an unfamiliar adult. Session 2 was designed to heighten self-consciousness. This included the child being the focus of two adult’s attention (known to the child), being asked to disclose information about him- or herself, being asked to speak about what is good about him- or herself, and being seated in such a way that the child would observe his or her reflection in a mirror. The child’s mother watched both sessions and rated her child’s behaviour on three personality characteristics: sociability, wariness, and self-consciousness. The results indicated that mothers perceive their children exhibiting fearful or wary behaviour in novel situations, whereas when children are the focus of others’ attention, their mothers rate them as being self-conscious. Each of these affective states had an inhibiting effect on social behaviour.

Further, LeMare (1994) found support for her hypothesis that as the development of perspective-taking skills increased, so did the rate of self-consciousness. A developmental link between fearful shyness and self-conscious shyness was supported whereby children who were fearfully shy in the first laboratory setting were at greater risk for self-conscious shyness in the second laboratory setting once they had developed perspective taking abilities.

LeMare (1994), however, highlights one potential problem with the notion that fearful and self-conscious shyness types are developmentally related. This problem is based upon Buss's (1984, 1986) conceptualization that the self-conscious awareness of self is not fear based, as is the
fearful social evaluation, but based upon feelings of embarrassment.

The present study is based upon the premise that the science of psychology has long viewed and studied symptoms such as fear, anxiety, and embarrassment as three discrete types of human experience. Clearly Buss (1984, 1986) uses these terms to mean these differentiated emotions, and the remainder of this study views these three distinct emotions as separate from each other. However, the notion that fearful shyness may put some young children at risk to experience self-conscious shyness when they are older seems plausible. It also seems possible for certain components of fearful and self-conscious shyness to be simultaneously experienced. However, these ideas do not support the premise that fearful shyness will inevitably develop into self-conscious shyness, nor that there are adolescents and adults who do not experience the fearful type of shyness.

Still another consideration is that even if fearful shyness does develop into self-conscious shyness for some individuals, it should not be assumed that the pure forms of both shyness types do not exist. This study will provide insight as to how much, or even if, children view the components of shyness as distinct manifestations, or if they are somewhat overlapping in children’s impressions of their age-mates.

A preliminary unpublished study was conducted utilizing the same data that this study is based upon. Bussiere (1996) attempted to categorize children’s understanding of three types of shyness that she labelled fearful/temperamental, self-conscious and self-evaluative shyness based on the combined theories of Buss (1984; 1986) and Asendorpf (1989). Each shyness type was coded when any aspect of it was mentioned. A stage score between 1 and 6 was assigned to each interview indicating the number of statements made about shyness. An average score for each
grade and gender for the three types of shyness. Bussiere (1996) found that the most common form of shyness was associated with fear regardless of gender and grade level. This study did indicate that there is an increase in the self-evaluative shyness as age increased which supports LeMare's (1994) study which indicated an increase of self-conscious shyness as children's social perspective capabilities increased.

Causes and origins of shyness

Situational Shyness

One important aspect in understanding shyness in children is recognizing the conditions in which children are most likely to experience shyness. The current literature on the etiology of childhood shyness has been dominated by two main schools of thinking: one leaning more towards biological determinants (cf. Kagan, 1994; Reznick, 1989) the other consisting of environmental origins (Carducci, 2000; Stevenson-Hinde, 2000). Few researchers would disagree that shyness derives, at least in part, from situational factors. Currently very little knowledge is available with regard to this issue, particularly as it concerns children (Asendorpf, 1986).

In considering the situational determinants of shyness, Crozier (1990) suggests that conceptual approaches to classifying shyness-eliciting situations tend to be of two broad types. The first of these focuses on social novelty whereas the second type is composed of two sub-types emphasizing either the fear-based evaluation of social performance and/or the self-presentational concerns as experienced in self-conscious shyness.

Buss conceives of these two broad situational categories that elicit shyness within his theory in children and adults. He suggests that one reason for differentiating the two kind of shyness may be their different origins (Buss, 1986). In addition to the immediate causes of
shyness, Buss considers other origins of shyness which include inheritance and personal history origins. (Table 2 on page 15 presents examples of the immediate causes, inheritance and personal history origins of shyness).

**Evidence for situational shyness**

The evidence for the two broad types of shyness situations comes from a small number of studies (Jones, Russell, and Cutrona, as cited in Russell, Cutrona, & Jones, 1986; Zimbardo et al., 1981). College students’ descriptions of situations that resulted in their feeling shy were grouped according to thematic content. Meeting strangers (a form of novelty) was a common elicitor of shyness (79% of the respondents) in adults. An equal percentage of respondents indicated that authority figures made them feel shy (Russell et al., 1986). One can speculate that the shyness-eliciting value of authority figures lies in their ability to elicit social-evaluative and self-presentational concerns. In another study, Zimbardo and Radl (1981, p. 121) asked parents and teachers to rate the situations that elicit shyness in 4 to 5 year olds. They found that both “meeting strangers” and “being the focus of attention” were the two most important causes reported by the adults.

A more recent study by Asendorpf (1990) followed a group of children from the beginning of preschool to grade one examining their behaviour in multiple settings including interaction with adult strangers, dyadic play with unfamiliar and familiar peers, and regular free play in class. Asendorpf (1990) found that inhibition toward strangers in an unfamiliar environment showed a high stability of .75 between ages 4 and 6 years. He also found that parents’ ratings of their child’s social-evaluative concerns increased with age, because of experiences of being ignored or rejected by peers. Finally, a comparison between play sessions with unfamiliar and familiar peers
showed that inhibition toward strangers could be accounted for by the unfamiliarity of the peer and the observational setting. Thus it appears that Buss's notion of immediate causes is supported by the available studies assessing shyness-inducing situations. Buss (1984) suggests that there are two other broad factors that are important when considering the origins of shyness: inheritance and personal history.

*Evidence for inherited tendencies.*

Buss (1984, 1986) suggests that there are three inherited tendencies that predispose children to become shy: low sociability, fearfulness, and unattractiveness. By using the word "tendencies" he does not imply that genetic dispositions directly lead to shyness. He does believe however that there is a built in tendency to act in a way that is likely to lead to shyness, but always within certain environmental conditions.

In the aforementioned study of fearfulness, Cheek and Buss (1981) also found that the inherited tendency of sociability correlated -.30 with shyness. Consequently, Buss hypothesizes that low sociability can lead to shyness because it reduces social contact, which prevents becoming accustomed to social novelty, which, in turn, affects acquiring the necessary social skills that help minimize shyness. Recall that fearfulness, a strong inherited tendency, correlated significantly .50 with shyness, (Buss et al., 1975). Buss suggests that children who are generally fearful will also be more likely to be fearful in social situations, and thus he links these two inherited tendencies to fearful shyness.

According to Buss, another inherited tendency to shyness is physical unattractiveness. Buss believes that unattractive people are likely to be less successful in their social interactions, but does not link unattractiveness specifically to either type of shyness. To this date there have
been no studies linking physical attractiveness to shyness in children. This view finds very little support in the literature on adult interpersonal competence and disclosure as well. One study found that attractiveness tends to facilitate interaction, and that shyness tends to suppress interactional involvement in adults (Garcia, Stinson, Ickes, Bissonnette, & Briggs, 1991). Bruch, Berko and Haase (1998) tested a model in which emotional inexpressiveness fully mediates the relation of shyness, gender identity, and physical attractiveness with men’s interpersonal competence. At best these results suggest that unattractiveness and shyness may occur together but they offer no insight into the type of relationship between these two factors.

Evidence for Personal History Origins

Buss (1984, 1986) also believes that personal history or environmental determinants contribute to the tendency to be shy. He hypothesized that one source of fearful shyness is the social isolation of children so that they do not encounter strangers and new social situations. Buss suggested that self-conscious shyness is related to excessive socialization training; the child may develop a negative sense of self as a social object, which therefore may contribute to lowering his or her self-esteem.

Finally, Buss believes that personal history or environmental factors play a major role in the development of shyness. If a child is not exposed to new social situations frequently enough, the child will not habituate to the physiological arousal experienced with social novelty, nor will the child develop the necessary social skills. Further, Buss suggests that fearful shyness may be linked to intense and frequent classical conditioning of fear during childhood. For example, if children are the target of bullying by strangers, they may begin to associate strangers with being hurt.
Table 2

Causes and Origins of Shyness (Buss, 1984, 1986)

<table>
<thead>
<tr>
<th>Cause or Origin</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Immediate Causes of Fearful Shyness</strong></td>
<td></td>
</tr>
<tr>
<td>Social Novelty:</td>
<td>A situation that induces fear: strangers, newness in social roles or contexts</td>
</tr>
<tr>
<td>Intrusiveness:</td>
<td><strong>Psychological:</strong> Especially in older children and adults: occurs when there is excessive intimacy such as when other discloses personal information or asks for a similar disclosure. <strong>Spatial:</strong> child is approached too quickly, moves too close</td>
</tr>
<tr>
<td>Social Evaluation:</td>
<td>As children mature, they become aware that they are socially evaluated. Occurs when one’s self or person is fearful of being evaluated i.e., attractiveness, friendliness, social skills, conformity to standards</td>
</tr>
<tr>
<td><strong>Immediate Causes of Self-conscious Shyness</strong></td>
<td></td>
</tr>
<tr>
<td>Conspicuousness</td>
<td>Child is given too much attention, i.e., stared at or teased.</td>
</tr>
<tr>
<td>Being different</td>
<td>Child is obviously different from group, i.e., one girl among all boys</td>
</tr>
<tr>
<td>Breaches of privacy</td>
<td>Occurs when the private/public barrier is broken: bodily functions, sexual acts are made public; personal thoughts, feelings, ambitions are made public</td>
</tr>
<tr>
<td>Formality</td>
<td>School ceremonies, religious ceremonies, weddings, funerals</td>
</tr>
<tr>
<td><strong>Origins of Shyness</strong></td>
<td></td>
</tr>
<tr>
<td>Inherited tendencies</td>
<td>The notion that low sociability, fearfulness, low physical attractiveness are traits that run in the target child’s family</td>
</tr>
<tr>
<td>Personal History Factors</td>
<td>Low exposure to frequent new social situations, frequent and intense classical conditioning of fear, or excessive socialization training</td>
</tr>
</tbody>
</table>
Another environmental determinant Buss considers is the experience of excessive socialization of the child. He argues that differences among families and cultures in socialization processes (i.e., making a good impression) vary and have a significant consequence on each child’s public self-consciousness.

Summary

Buss’s (1984, 1986) theory of early- and later-developing shyness has received support and merges with other related research. Studies with adults have indicated an early developing shyness that is fear-based and is related to specific causes. There is a later-developing kind of shyness based on self-consciousness which emerges during early adolescence. The theoretical and empirical work reviewed in this section raises some interesting hypotheses about the nature of shyness in children and children’s understanding of shyness and is extended to children’s beliefs about shyness in their peers in the present study. Knowing more about the sources of children’s shyness would help researchers to understand the nature of this kind of inhibition better. Do children’s perceptions of shyness indicate that they are aware of differences between the two shyness types? Bussiere’s study indicated that children tend to describe fearful shyness most often and that there is an increase in self-evaluative shyness during early adolescence. However, no study has yet examined children’s understanding of the behavioural, emotional, and cognitive manifestations of shyness in their peers. What factors do children attribute to the origins of shyness in their peers?

Children’s Perspectives

The shyness literature has been predominantly based upon adults’ perspectives and is marked by a need to examine children’s perceptions of shy peers. This is an important gap to be
filled as children's perspectives are created from their unique vantage point which is only accessed by their experiences with their peers.

Little is known about how children view the contents and consequences of the shy behaviours they observe. For example, what types of behaviours are most significantly related to shyness at various ages? Do children anticipate certain types of problems for the shy youngster? It is intriguing to speculate how children themselves perceive and interpret their peers' social difficulties and the likelihood of negative outcomes. Thus this study takes into account the likelihood that children's perspectives add to our understanding of shyness in children in a unique way.

In order to highlight rater differences, the Zimbardo and Radl (1981) study previously described can be used as an illustrative example of this problem. The adults, who were rating situations that would evoke shyness, agreed on the first two causes of shyness in children. However they disagreed on the third cause of shyness. Teachers rated "being with peers" as the third most important cause of shyness whereas parents rated this eighth on the list. Two important considerations can be gleaned from this example. First, there is an apparent rater bias or perhaps a difference in perspective depending on where the shyness elicitors are taking place, at home or at school. Second, Zimbardo and Radl's (1981) findings point out that we should attend to who the interactive partners are with the child. For instance, children who are shy with adults may not be shy with children or vice versa. As Asendorpf (1986) points out, shyness towards adults may be a different phenomenon than shyness towards peers. A systematic examination of the manifestations of shyness and the situations that elicit them according to children will be an important contribution to this field of research.
The child's perspective may be useful in clarifying research on childhood shyness by enriching the definition of childhood shyness, and offering the child's unique experience of what it is like to be shy as well as the problems that may result from being shy. The majority of research conducted on childhood shyness has either been retrospective, asking adults to recall their childhood, or, has relied heavily upon adult ratings of children's behaviours, thoughts and feelings. For example, in both sessions of LeMare's (1994) study, the participants interacted with an adult female, and children's behaviours were rated by mothers' perceptions of their child's behaviours, while the children themselves were not asked about their own conceptions of shyness.

Both shy and non-shy children can offer unique perspectives from adults. Both shy and non-shy children can convey their own experiences because they are exposed to different social situations than adults. In fact children are often the judges of social reputations and probably have knowledge about the difficulties shy children endure. Further research is needed to examine potential differences in shyness reactions given different shyness eliciting situations, such as with whom the shy child may interact, and other situational variables of which children have exclusive knowledge. The present research will address these issues.

**Developmental Trends in Shyness**

As already discussed, 40% of young adults who responded to the Stanford Shyness Survey (Zimbardo et al., 1975) considered themselves to be currently shy. This statistic has been represented in other age groups. In one such study conducted with 396 fifth grade students, 38% labelled themselves as shy (Lazarus, 1982). However, the percentage of people who label themselves as being currently shy shows one important age difference (Cheek, Carpentieri, Smith, Rierdan, & Koff, 1986). Zimbardo (1977) found that 54% of seventh and eighth graders labelled
themselves as shy. Although this evidence indicates an increase in experienced shyness during early adolescence, this global self-report method does not offer information concerning the type of shyness adolescents experience and possible developmental trend in shyness (Cheek et al., 1986).

To date, there have been five studies that have tested the existence of the possibility of a developmental trend in Buss's different forms of shyness. Cheek, Carpentieri, Smith, Rierdan, and Koff (1986) conducted a study that surveyed 118 female undergraduate students asking them whether they considered themselves to be shy. These authors hypothesized that since some believe fearful shyness has a genetic component and a strong basis of physiological correlates of social anxiety (Daniels & Plomin, 1985; Kagan et al., 1988), it should be a more enduring type of shyness than the self-conscious type. Therefore, they hypothesized that participants who reported being currently shy during the study would show no significant differences in early versus late onset of shyness, whereas those who no longer saw themselves as shy would tend to identify the onset of their shyness in the age ranges Buss suggests for self-conscious type. Their results indicated that 43% said they were currently shy, 41% reported previous but not current shyness, and 16% said they had never been shy. The currently shy and previously shy respondents identified the age range in which they first remembered feeling shy.

Of the currently shy students, 45% said they were first shy before age 6, which is the age range Buss (1986) specifies for fearful shyness, and 55% answered in the later age range for the self-conscious type of shyness. In contrast, 79% of the previously shy students identified the age range of self-conscious shyness as their time of first feeling shy whereas only 21% said they had been shy in early childhood. These data are consistent with Buss's conceptualization of the developmental trends in the two types of shyness.
Crozier and his colleagues have examined this developmental trend in two studies. The first study consisted of interviews with 60 children between 5 and 11 years of age (Crozier & Burnham, 1990). Children were asked a series of questions intended to elicit their understanding of trait shyness and the feelings related to shyness. Judges decided on the basis of each child's responses whether the child perceived shyness in a fearful or self-conscious way. They found that although references to fearful shyness were frequent at all age groups, there was a tendency for references to self-conscious shyness to increase and fearful shyness to decrease with age. These researchers reported very few references to self-conscious shyness in the 5- to 6-year-old group, self-conscious shyness appeared in 20% of the 7- to 8-year-olds' descriptions, with the greatest frequency in the 10- to 11-year-old group.

In the second study Crozier (1995) attempted to examine children's conceptions of fearful and self-conscious shyness by asking them to free associate to words that came to mind when presented with a list of target words. Responses were coded as fearful or self-conscious shyness using Buss's description of the two forms. The results indicated that the mean proportion of "fearful" words were significantly higher than the mean proportion of "self-conscious" words. These findings were consistent with Crozier's early finding that fearful shyness emerges earlier in children's conceptions of shyness.

However, it is clear from Crozier and Burnham's (1990) results that by the ages of 10-11, the self-conscious form of shyness does not replace the fearful form. The authors interpreted their findings as an indication of an expansion in children's understanding of shyness, rather than the replacement of one form by another. However, it is likely that given the peak of self-consciousness occurs in early adolescence, the sample needs to be older to see if the trend
continues. To this end, the present study includes children who are two years older than Crozier's sample from his studies.

As previously discussed, LeMare (1994) and Bussiere (1996) have also provided empirical evidence indicating an increase in shyness to be linked to self-consciousness, which may be explained by the appearance of self-conscious shyness as described by Buss (1986).

There are still questions about the relationship between age and the type of shyness experienced by children. Although Crozier and Burnham (1990) found an increase in self-conscious shyness in children's descriptions, they did not substantiate the hypothesis that fearful shyness would be replaced by self-conscious shyness. This is probably due to the fact in this particular study, the oldest participants were 11 years old and self-consciousness does not peak until early adolescence. With regard to Bussiere's (1996) study, as previously described, the combination of Asendorpf (1989) and Buss's (1984, 1986) theories did not effectively scope the breadth of children's perceptions of shy behaviours, emotions and thoughts in shy peers. The manifestations that are most salient to children in various age groups was not ascertained. Finally, the potential age differences in situational elicitors were not identified in either study.

Gender Differences in Shyness

It is known that patterns of development and behaviour differ for boys and girls (see Ruble & Martin, 1998). Surprisingly little research has been devoted to the study of the gender-related differences in the development and occurrence of shyness in younger children.

There seems to be conflicting evidence for gender differences in shyness in young childhood. For example, Zimbardo (1977) found in an elementary school sample that boys and girls were equally likely to label themselves as shy. In direct contrast to Zimbardo's findings, a
prospective study conducted by Engfer (1993) examined conditions that increased or decreased shyness between birth and 6 years of age in boys and girls. Interestingly, more girls (33 percent) than boys (<10 percent) "outgrew" their shyness, indicating that shyness was more stable for boys. Engfer (1993) found that early-appearing shyness appears to be more predictive of later shyness in males than it does in females in a young population.

In support of the notion that self-consciousness increases with age and is more pronounced in girls, Elkind and Bowen (1976) found that, as the participants' age increased, their self-conscious shyness scores also increased, especially for the girls in the sample. Indeed, by age 12, girls reported experiencing significantly higher levels of self-conscious shyness than boys. Simmons and Rosenberg (1975) found similar results in their sample, reporting that girls become significantly more self-conscious shy than boys at around age 11.

Further evidence for gender differences among adolescents comes from a study by Cheek and colleagues (Cheek et al., 1986). These researchers administered a set of personality questionnaires to a sample of 100 ninth-grade students. The questionnaires included the Cheek and Buss (1981) Shyness Scale, the Public Self-consciousness Scale (Fenigstein, Scheier, & Buss, 1975), the short form of the Beck Depression Inventory (Beck, Rial, & Rickels, 1972), and Rosenberg's (1979) Self Esteem Scale. Although no gender differences were found on the mean scores of any of the scales, there was a significant correlation with public self-consciousness and shyness for girls but not for boys.

On the basis of the existing data concerning gender differences in shyness among adolescents, Cheek and colleagues (1986) have indicated a qualification to Buss's (1984, 1986) conceptualization of late developing, self-conscious shyness. These authors suggest that the
appearance of self-conscious shyness may be more pronounced among girls. While this interpretation of the data may be correct, another interpretation exists (LeMare, 1994). It may be that teenage boys are equally likely as girls to be self-conscious, but differ from girls in what they are self-conscious about and so reported it less. For example, Crozier (1990) has suggested that responses to shyness questionnaires may reflect situational factors in that only items that refer to certain kinds of concerns produce gender differences. The implications of this suggestion are twofold. First, it would seem that differences in total scores on questionnaires may mask important situational factors that distinguish between the genders. Second, the specific content of a given questionnaire may bias the direction of an obtained gender difference.

Although Bussiere (1996) found no gender-related differences in children's references to fearful, self-conscious, and evaluative kinds of shyness, this issue will be pursued further in the present study. The basis for continuing to look at the same sample used by Bussiere (1996) for gender differences is based on three key notions. First, much like Crozier's concern about shyness questionnaires mentioned in the previous paragraph, nonsignificant gender differences may be an artifact Bussiere's design of her study. Recall that the method utilized did not separately examine the components, causes and origins of fearful and self-conscious shyness, but instead were pooled together to create one stage score per interview. Thus gender differences may have been masked due to the use of total scores for every interview rather than examining the components and situations in themselves.

The second reason for continuing to look at gender differences in this sample is based on the well-established gender differences that have been found with regard to perspective taking in children (Ruble et al., 1998). It has been shown, for example, that boys are superior in nonsocial
spatial perspective taking (Coie & Dorval, 1973) but that girls are superior in social perspective taking and in affective empathy (Feshbach, 1978; Zahn-Waxler, Radke-Yarrow, & Brady-Smith, 1977). It is therefore a logical prediction that questions, such as the ones used in this study, asking children to form opinions partly on their social perspective taking skills, should show some of the gender differences other researchers have found if studied in a thematic way (i.e. components and situations of shyness).

Finally, it is also noteworthy that the relationships of boys and girls are based on different foundations. Those of girls are primarily based on the importance of personal, intimate self-disclosure, whereas those of boys are mainly based on shared activities and common interests (Ichiyama, Colbert, Laramore, Hein, Carone, Schmidt, 1993). The implications of these differences are relevant to the present study as it is likely that the different components and the situations that elicit shyness will be differentially salient to boys and girls. Boys might be aware of shy children because they do not participate in shared activities, whereas girls may notice others who do not reciprocate self-disclosure.

**Gender Differences in the Experience of Being Shy**

Evidence has been provided that shyness is found more often in early adolescent girls than boys in our culture. Moreover, shyness may be viewed as more appropriate for girls than for boys. Bronson (1969) argues that in terms of sex-role stereotypes in child development, it is more appropriate for girls than for boys to be shy. More recently these stereotypes have also been reflected in our own psychological literature. Buss (1984) identified shyness as the relative absence of traditionally masculine behaviour, while Cheek and colleagues (1986) note that the adjective ‘shy’ is scored on the Femininity Scale of the Bem (1981) Sex Role Inventory. Indeed,
shyness as bashful, expressive behaviour is not only accepted as "feminine" (Hinde & Stevenson-Hinde, 1988), but may even have flirtative qualities (Engfer, 1993). Shyness in boys may be associated with more negative feedback from peers than shyness in girls.

It is possible then that the higher occurrence of self-conscious shyness in adolescent girls may be masking a more severe sex role related problem for boys (Cheek et al., 1986). In a survey looking at adolescents' concerns about attracting members of the opposite sex, girls reported concerns of physical attractiveness, whereas boys were concerned about problems related to their shyness (Porteus, 1979). Cheek and his colleagues (1986) argue that traditional male sex roles make the assumption that boys naturally take initiative in social situations, as opposed to the traditional passivity of females. These authors posit that the burden of shyness on adolescent boys may be seen as a behavioural problem, rather than a self-concept problem for adolescent boys.

Consequently, if a boy shows symptoms of shyness with people who hold traditional sex role expectations, he is likely to experience negative feedback. Bacon and Ashmore (1985), Mills and Rubin (1993) and Stevenson-Hinde and Glover (1996) provide evidence that both fathers and mothers are more likely to reprimand their sons than their daughters for shy and inhibited behaviour, implying worries about improper sex-role behaviours. Similar findings have been reported by Radke-Yarrow, Richters, and Wilson (1988), who found that shyness in girls was associated with tender and affectionate mother-daughter relationships whereas mothers of shy boys were less pleased with and less accepting of their sons. Also, behavioural interactions with other children indicate that shy girls appear to be more acceptable than shy boys (Alfieri, T.J., Ruble, & Higgins, 1996; Simpson & Stevenson-Hinde, 1985; Stevenson-Hinde & Hinde, 1986).

Summary
The literature on gender related differences in shyness shows that the experience of shyness is different for boys and girls. Younger boys tend to be fearfully shy longer than girls and it appears that the self-conscious form of shyness is more predominant in adolescent girls. The latter part of the previous statement is consistent with the literature indicating that girls struggle with self-consciousness and self-concept issues at this age. However, shy behaviours are viewed differently for girls and boys in western society. It seems that it is more acceptable for girls to be shy whereas shy behaviours that are inconsistent with traditional male sex-role expectations are particularly problematic for boys.

The Importance of Peer Relationships

There has been an emerging theme in the peer literature of the notion that peer relationships play several essential roles in the development of social competence. This "necessities-not-luxuries" conviction (Parker & Asher, 1987) comes from the theories of Piaget (1932), Mead (1934), and Sullivan (1953). Piaget (1926, 1932) found that children learn by interacting with their environment, thus peer relationships provide a means for children to develop interpersonal relationships and understanding of cause-effect relations in social interaction. Mead's (1934) anthropological work showed that friendships and camaraderie provide children with invaluable contexts in which they can learn to take on the others' perspectives, and consider themselves in relation to others. Sullivan (1953) gave highest importance to the effect of friendship by suggesting that the foundations of mutual respect, cooperation and interpersonal sensitivity were based on these relationships. Thus in each theory peer interaction is an integral aspect of children's development (see Shantz, 1983). Further, peer relationships have also been connected empirically as having a positive influence on the socialization of aggressive impulses.
(e.g., Coie, Zakriski, & Lochman, 1995) and on cognitive (e.g., Hartup, 1996), social-cognitive (see Shantz, 1983), sex role (e.g., Archer, 1992), and moral (e.g., Killen & Nucci, 1995) development.

The question of whether shyness is seen by peers as contributing to various problems is pertinent to the larger literature on peer status and peer relationships. The following two sections present research related to the various difficulties shy children experience.

**Peer Relations and Shyness**

As previously discussed, shyness can be seen as providing one index of children's peer adjustment difficulties. It is important to study shyness because, in intense forms, it may be both an antecedent of peer rejection (see Rubin, 1985) and a consequence of peer rejection (Dodge, 1983).

Examination of withdrawn children's friendship quality has indicated that socially withdrawn children do have close friendships (Schneider, 1999). Further, when the shy child has a best friendship, the friendship ameliorates the risk for adjustment problems for shy children (Fordham et al., 1999). However, as a group, shy children and adolescents appear to be more likely than non-shy children to experience negative peer relations (Rubin, Hymel, LeMare, & Rowden, 1989; Rubin & Mills, 1988). A primary basis for this predicament is that the shy child's social withdrawal and inhibition may be considered atypical from age-appropriate social behaviour at different ages (Younger & Piccinin, 1989; Younger & Boyko, 1987) by the peer group and responded to by rejection, neglect, or even victimization (e.g., bullying) (Boulton, 1999). For instance, Olweus (1993) found that a disproportionally large number of children who are classified as victims by teachers are socially withdrawn, anxious, and inhibited. Gilmartin's (1987) interview
study of extremely shy adult men also provides support for an association between shyness and negative peer relations. Gilmartin's results showed that approximately 88% of the shy men recalled being bullied and harassed during both childhood and adolescence, whereas none of the non-shy men had any such experience.

Although beyond the scope of this study, it is important to take note that the large majority of our knowledge of shyness, children's peer relationships, and maladjustment is based on studies conducted in western cultures. Cross-cultural studies show that shyness is a universal experience yet there are important differences between cultures. For instance, Pilkonis (1977) found that Chinese participants reported more shyness than their American counterparts as do Thai children and adolescents (Weisz, Suwanlert, Chaiyasit, Weiss, Achenbach, & Eastman, 1993). Another important difference is that shy Chinese children are generally accepted by their peers (Chen & Rubin, 1992; Rubin, 1998; Schneider, Smith, Poisson, & Kwan, 1997). These findings are understood in terms of differences in cultural norms. For example, Weisz and colleagues (1993) suggest that in some eastern cultures self-control, emotional restraint, behavioural inhibition are accepted socialization practices and may explain the greater degree of acceptance of shyness among these children. Therefore, the following sections will review the current literature on the short-term and long-term consequences of shyness in western cultures only.

The Relationship Between Shyness, Poor Peer Relations, and Subsequent Difficulties

Although there is a good deal of consensus concerning the benefits of early peer relationships, controversy still exists concerning which types of social maladjustment are related to subsequent difficulties. Due to the fact that shyness impairs daily functioning, the majority of
researchers have concluded that shyness puts some children at risk for concurrent and long-term problems (Rubin et al., 1988, 1989, 1990).

The majority of researchers have formed opinions that shyness is problematic for children. However, children's perceptions and beliefs about shyness have been largely ignored in the risk literature. Recall the issues raised concerning the special qualities of children's perspectives. Once again it is predicted that children will have unique information and knowledge concerning whether shyness is problematic for their peers. Children experience their shy peers in a variety of “real life” situations that are not reproduced in research settings and therefore their opinions are likely to be closer to the actual consequences of shyness. In many ways children are more attuned to other children, than are adults, due their shared experiences in similar situations. Situations such as how it feels like to be left out of a game at recess time, the embarrassment involved in being called on by a teacher in class, and the difficulties related to meeting new people. Due to these shared experiences, children are keenly aware of how children react to such situations. In other words, they have some ideas or opinions about how their shy counterparts feel, and are able to name areas in children's lives that are most important, and the consequences of having these areas missing from the shy child's life (for example, not having a friend to play with makes a child feel really lonely). The following sub-sections will review the current research associating concurrent and long-term problems with shyness.

**Concurrent problems associated with shyness**

During middle childhood, children are concerned about getting along with their classmates and being included in activities; however, they also express concern about doing well academically, their family relationships, their health and safety, and their future (Buhrmester &
Furman, 1987). In light of these normal childhood concerns, concurrent problems associated with childhood shyness are presented.

It has been argued that probable maladaptive outcomes of shyness may be of an internalizing nature, such as social anxiety and depression (Rubin et al., 1988). Indeed, social withdrawal has been found to be significantly related to loneliness and nonclinical depression (Rubin et al., 1988), worries and fears (Stevenson-Hinde & Shouldice, 1995), and negative self-esteem (Crozier, 1995), and is related to unpopularity and rejection with increasing age (Rubin et al., 1988). Further, while 5-year-old children identified observationally as "socially withdrawn" were not rated by their teachers as problematic (Rubin & Asendorf, 1993), self-reported anxious symptoms of 6-year-olds were related to poorer functioning in a school setting (Ilananog, Edelsohn, Wertheramer-Larsson, Crockett, & Kellam, 1995). Friedman (1980) found that shy children avoid participating in classroom discussion, are less likely to ask for help from their teachers when they are experiencing trouble, and have a less positive attitude toward school than do non-shy students.

In one study, children who were observed as being shy and withdrawn and who were asked questions about their self-perceptions (Engfer, 1993). The boys in the sample were significantly less self-confident than other non-shy boys in terms of their perceived cognitive competence, athletic skills, and their perceived acceptance by peers. In the same study, girls' shyness at 6.3 years was significantly related to their more negative appraisal of their own cognitive competence and their acceptance by their mothers. Similarly, withdrawn children reported more negative self-appraisals of their physical attractiveness, more negative self-esteem, and feelings of incompetence in the athletic, but not the academic domain (Hymel, Woody, &
In a study by Cranach, Huffner, Marte, and Pelka (1976) (cited in Asendorpf, 1986), 1,115 preschool children were rated on a shyness scale by their teachers, and 16.8% of these children were identified as “shy-inhibited”. Further investigations led these researchers to conclude that of the children, 59% showed signs that they would benefit from therapy.

In another study designed to investigate the association between shyness and symptoms of illness, shy children complained of sickness more days than non-shy children (Chung & Evans, 2000). The shy children made more affective complaints than non-shy children as well as their parents reported more gastrointestinal upsets in their shy children.

Another concern is the possibility that shyness is also related to adolescent substance abuse. Zimbardo and Radl (1981) reported that twice as many shy adolescents had experienced pressure to use alcohol or drugs compared to those who were not shy. These researchers also noted that shy teenagers were more likely to indicate that using substances helped them feel less shy and helped them cope with social situations. Thus, it has been shown that shyness is concurrently related to several kinds of adjustment problems, including emotional and school difficulties and substance abuse.

**Long-term problems associated with shyness**

Studies on adult outcomes of shy children are few but what data do exist show some consistency. Studies indicate that shyness characteristics have a long-term impact as well. Although the present research is not longitudinal in design, the question posed to the participants, “is shyness a problem for someone in your grade?”, may include predictions of long term outcomes for their shy peers. Consequently, a brief review of the existing longitudinal research
showing that shyness affects shy individuals' adjustment in various domains of their lives will be presented.

One study found a modest but clinically significant prediction from childhood shyness to adolescent anxiety disorder (Prior et al., 2000). Another study by Phillips and Bruch (1988) found that shy participants differed significantly from their non-shy counterparts and in a direction that suggests less effective functioning in behaviours that are essential to career development. Not surprisingly, in a longitudinal sample shy boys made the transitions to marriage, parenthood, and career later than their non-shy peers (Caspi et al., 1988). After factoring ill-temperedness out, these results indicated that it is uniquely childhood shyness that affects the timing of these role transitions. In the same sample, female counterparts tended to achieve lower education than non-shy women and tended to drop out of the work force when they married to remain at home. In this study, childhood shyness did not present pathological outcomes, but it did have significant consequences for later adult development.

Since shyness involves lifelong distress, behavioural inhibition, and avoidance of novel social situations (Jones et al., 1986), some researchers have also studied the physiological mechanisms by which shyness as a personality trait may increase risks of specific diseases including autonomic, endocrine, and immunological pathways (Bell, 1992; Bell, Jasnoski, Kagan, & King, 1991).

In total, there are two published studies that have asked the question, "is shyness a problem?". In a study of shy fifth graders, Lazarus (1982) found that 46% of the children reported that their shyness was problematic and they were interested in receiving treatment. Similarly, Zimbardo and colleagues (1975) found that 63% of a group of shy college students felt
that their shyness was a "real problem". They reported that they suffered from feelings of loneliness and depression, lack of assertiveness, and self-preoccupation, resulting in difficulty in establishing friendships.

In summary, research has indicated a strong concurrent association with various difficulties for children in North America such as psychological, academic (including choices in career), relational, and physical affecting the affective, cognitive, and physical or health domains of the shy individual. There is a paucity of research that has examined children’s perspectives of whether shyness is problematic at different developmental stages. Importantly, this study will contribute to our knowledge about children’s perceptions of the problems shy children face at different ages and reveal the relative importance of these problems. (Table 3 represents the categories of various consequences of shyness as adapted from the literature review).
### Table 3

Categories of Reasons and Consequences Children give for Shyness as a Problem

<table>
<thead>
<tr>
<th>Problem</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peer-related</td>
<td>Social disappointment; less socially competent; poor peer relationships; lacking in prosocial behaviours (Rubin et al., 1988).</td>
</tr>
<tr>
<td>Emotional</td>
<td>Feelings of loneliness; negative self-esteem, depressed; suicide attempts (Crozier, 1995)</td>
</tr>
<tr>
<td>Academic</td>
<td>Learning difficulties; nonparticipation in classroom; drop out; does not ask for help with work when needed; less positive attitude toward school (Ilanogo, Edlesohn, Wertheramer-Larsson, Crockett, &amp; Kellam, 1995).</td>
</tr>
<tr>
<td>Family</td>
<td>Parental disappointment (Engfer, 1993)</td>
</tr>
<tr>
<td>Health</td>
<td>Insomnia; headaches; stomachaches; athletic skills (Chung &amp; Evans, 2000)</td>
</tr>
<tr>
<td>Delinquency</td>
<td>Substance abuse; crime-related behaviour (Zimbardo &amp; Radl, 1981)</td>
</tr>
<tr>
<td>Future</td>
<td>Career; marriage (Caspi, Elder, &amp; Bern, 1988; Phillips &amp; Bruch, 1988)</td>
</tr>
<tr>
<td>Victimization</td>
<td>Victim of bullying; taunting or teasing; being beaten up (Olweus, 1993)</td>
</tr>
</tbody>
</table>

**Note.** Adapted from the peer status and shyness literatures
THE PRESENT STUDY

The general purpose of the present study is to probe children’s awareness of the manifestations of shyness at various ages and investigate their views on shyness as a problem for their peers. This study addressed a number of objectives in order to advance the current state of knowledge and improve upon our understanding of children’s perceptions of shyness.

More specifically, 220 children from grades 1, 3, 5, and 7 were asked to describe their perspectives of the behaviours, thoughts and feelings of their shy peers and the situations that elicit them. This study was designed to investigate which factors are the most salient in children’s descriptions of shyness and which are attributable to the age and gender of the participants. At the end of the interview, participants were asked “Is shyness a problem in your grade?” This question is important because there is growing empirical support indicating a relationship between shy children and the likelihood of developing life difficulties. Children’s understanding of whether shyness is a problem and the reasons they give were categorized and compared to the emotional, academic, and relationship difficulties that have been cited in the literature review to determine which problems are most salient to children.

Little research has yet examined the action, emotional/physiological and cognitive components, as well as the origins and causes of shyness described by Buss (1984, 1986). In addition to examining these factors of shyness, new information was gleaned to examine a possible developmental trend in the components and causes of shyness that are mentioned by children at various ages.

At the end of the interview, participants were asked “Is shyness a problem in your grade?” This question is important because there is growing empirical support indicating a
relationship between being shy as a child and the likelihood of developing life difficulties.

Children's understanding of whether shyness is a problem and the reasons they give were
categorized and compared to the emotional, academic, and relationship difficulties that have been
cited in the literature to determine which problems are most salient to children. The present study
contributes to this research by examining children's impressions of whether shyness is a problem
for children their age and the reasons they give.

The following hypotheses make the assumption that the type of shyness, and the problems
associated with shyness, are representative of individual children at each grade level. The age
range for the sample, from 6 to 13 years old, included the youngest children accessible in school
and included the hypothesized period of the shift from fearful shyness to when self-conscious
shyness should peak.

**Hypotheses of the Present Study**

**Hypothesis 1: Age- and gender-related trends in the components of shyness**

A number of hypotheses were formulated and tested regarding children’s perceptions of
shyness. If fearful shyness is more common in younger children then they would be expected to
show evidence of fearful shyness action, emotional and cognitive components in their descriptions
of their peers. Predictions were about these two aspects of shyness were as follows:

**Shyness Types**

1. Younger children, in grades one and three, will mention more fearful shyness components
   in their descriptions of their shy peers than children in grades five and seven.

2. If shyness is more likely to be manifested as the self-conscious type as children become
   older, then, children in grades five and seven will report more self-conscious action,
emotion, and cognitive components of shyness than children in grades one and three.

(3) The increase in self-conscious shyness will be more pronounced in female adolescents.

Hypothesis 2: Causes and origins of shyness

This study also examined whether in their descriptions children notice any of the immediate causes, individual differences in inherited tendencies, and personal histories that Buss believes are related to shyness. The following predictions were made:

(4) Fearful shyness immediate causes would be the most salient in children’s perceptions at the lower grade levels (grades 1 and 3). These peers would be seen to be particularly sensitive to social novelty, intrusion (spatial and psychological), and fear of social evaluation.

(5) The self-conscious shyness immediate causes, such as conspicuousness, being different, breaches of privacy and formality would be most often reported in children’s perceptions at grade 5 and grade 7.

Inherited tendencies.

Buss hypothesized that there are inherited tendencies associated with shyness, including low sociability, fearfulness, and low physical attractiveness. Therefore the following predictions were made:

(6) Children’s perceptions of inheritance of fearfulness and low sociability would appear in younger children’s descriptions of their shy peers. It was unknown if physical attractiveness would be associated with either particular type of shyness.

Personal history factors.

(7) The lack of practice with social novelty would be associated with younger children’s perspectives, and excessive socialization training, and lower self esteem would be related
to older children’s descriptions.

**Hypothesis #3: Shyness as a Problem:**

There is an extensive literature on the importance of peer relations and how these relationships affect childhood development. In the introduction, a case was made to illustrate that childhood shyness is related to poor peer relations and other consequences. It was hypothesized that:

(8) The reasons girls believe shyness is a problem will be related to the perceived problems that the shy person experiences with negative self-perceptions, and interpersonal difficulties and would fall in the peer-related, family and emotional difficulties categories.

(9) The reasons that boys give would be related to behavioural problems experienced, such as problems associated with behaviours in academics, peers, and family relationships.

(10) As children get older it is expected that the number of problems they associate with shyness will increase.
METHOD

Participants

The present study involves analyses of data gathered in a previous study in which children's perceptions of shy behaviours in their peers were collected (Younger, Schneider, Wadeson, Guirguis, & Bergeron, 2000). Participants in this sample included first-, third-, fifth-, and seventh-grade children in three middle-class elementary separate schools from a suburb of a large city in eastern Ontario. In this cross-sectional study there were 220 children from grades 1 (25 boys and 25 girls), 3 (29 boys and 31 girls), 5 (28 boys and 29 girls), and 7 (28 boys and 30 girls). All children were from regular classes and from largely middle class socioeconomic backgrounds.

Initially, a research assistant introduced the study to all of the grade 1, 3, 5, and 7 classes within the participating schools and asked each child to bring information and permission forms home in order to participate in the study. The permission forms were collected after twice returning to the schools over a two week period. In accordance with the Canadian Psychological Association ethical guidelines, only children for whom there was informed, written parental consent participated in the study. In addition children were also asked to sign a consent form for themselves.

Procedure

The interview.

Each child met with the research assistant individually for the interview. These interviews were audio-taped and took approximately 15-25 minutes each to complete. The interview began with a short "warm up" period in order to help the child and the interviewer develop rapport.
Typically during this time the interviewer would ask about the child’s interests, she would briefly talk about herself and then let the child know what to expect during the interview. The interviewer also reminded the child of the voluntary nature of the study and that the interview could end whenever the child wished.

In order to tap children’s perceptions of shyness, a semi-structured interview was employed. This interview technique procedure relied on two interview techniques: the use of standard questions and the use of probe questions the interviewer created in the course of the interview.

The interview used in the present study tapped three sources of information and reasoning: (1) the childrens’ perceptions of the shy child’s behaviours, thoughts, and feelings, and, 2) the situations in which shyness occurs and 3) whether shyness is considered problematic in their peers. The first question was asked in order to elicit the child’s perceptions of behavioural manifestations of shyness in their peers. The child was first asked: 1) “Do you know someone who is shy? Once a shy individual was identified the following questions were asked. “How can you tell they are shy?” Once a behavioural manifestation of shyness was identified, it was followed by standard questions that elicited the child’s perceptions of the emotional manifestations of shyness in his or her peers, 2) “How do you think they feel?”, 3) “Why do you think they feel the way they do?”, 4) “When do they feel that way?” The interview continued in order to elicit perceptions of the cognitive manifestations of shyness, causes and origins of shyness, and whether shyness is problematic. The remaining questions were as follows: 5) “What do you think they are thinking?”, 6) “When do you think they think that way?”, 7) “Why do you think they think that way?”, and 8) “Do you think it is a problem to be shy in your grade?”, and 9) “Why do you think that way?”
It is important to note that there were a few different possibilities in the number of responses to the questions asked. Each child was asked the question, "How can you tell they are shy?", which would then elicit a behavioural manifestation of shyness. However, children had the opportunity to answer that question several times, and by doing so, the whole line of questioning would be repeated until no further behaviours were mentioned. The interviews for each grade were examined in order to give an idea of the average number of behaviours elicited. It was found that on average grade 1 children mentioned 3.87 (SD = 2.11) behaviours, grade 3 children mentioned 4.6 behaviours (SD = 2.24), grade 5 children gave 3.63 behaviours (SD = 2.31), and grade 7 children gave 3.0 (SD = 1.56) behaviours. Another important note is that although all questions were asked (questions 2 through 9 as previously described) for each instance of behavioural manifestation of shyness given during the interview, there were not necessarily answers for provided for each question.

The open-ended phase of questioning was based directly on the child's responses to the structured interview question and was used for clarification of ambiguous responses and to elucidate both the child's opinion and his or her underlying reason for this opinion. The probes used in the open-ended phase of the interview were to help clarify the children's statements. These probes consisted of questions aimed at "why" a particular quality in a child was important or necessary for shyness and most commonly took the form, "Why do you think that?".

Further, if the child's response involved descriptions of shyness that were nonverbal such as overt behaviour, body posture, or facial expressions, the interviewer described the action verbally in order to record the response on the audio-recording and further to verify with the child that the verbal characterisation of the behaviour was a correct one before continuing with the
Transcription of the Interviews

After the interviews were completed, the audio-tapes were transcribed. In order for the rating to be blind, all distinguishing information such as the child's name, gender, grade and school was removed and a participant number was substituted.

Transcript Coding for Hypothesis 1: Age and gender-related trends for the components of shyness

The questions asking children for their perceptions of the manifestations of shyness in their age-mates were coded by two raters into the following categories: action, emotional/physiological and cognitive components proposed by Buss (see Table 1, p.8, for definitions of Fearful and Self-Conscious Shyness).

Each answer to each question was divided into statements, a statement being defined as a single idea about the person being discussed. Each statement was categorized into one of the action, emotional/physiological, or cognitive components. For example, if a child answered the question, “how do you know someone is shy?” by mentioning that a shy child hides, the response was coded as a fearful action component. If a statement had more than one component represented in it, the components were categorized into their respective categories.

Coding for Hypothesis 2: Immediate Causes and Origins of Shyness

Next, each of the causes and origins of shyness mentioned by the participants were coded using Buss' notion of the causes and origins of shyness. The causes of fearful shyness (social novelty, intrusiveness, and social evaluation) and self-conscious shyness (conspicuousness, being different, breaches of privacy, and formality), and the origins of shyness (inherited tendencies and personal history factors) were coded (see Table 2, p. 16, for a description of Immediate Causes
and Origins). Each of the causes and origins were coded in a manner similar to that used in the coding of the components. Each single idea was divided into a statement and then categorized into one of the above categories. For example, if a child mentioned that a peer becomes shy if approached too quickly, the response was coded fearful shyness: spatial intrusiveness.

In order to differentiate this category from other similar categories, only references made clearly linking the idea that the particular trait (i.e. low sociability, fearfulness and low physical attractiveness) is one that is inherited from the target child's family was considered for this category. References to personal history scenarios, such as lack of practice in new social situations, the target child's high degree of concern about being a social object, and the target child's self-esteem, were recorded.

**Coding for Hypothesis 3: Shyness as a Problem**

Little research has examined what children at various ages think about shyness in their peers. Children's reasons for stating shyness is or is not a problem were categorized into the following problems the shy child may experience, adapted from the literature review: academic, peer-related, health, family, emotional difficulties, future, and other. These problems were identified in two separate ways. First, the problems that were mentioned as responses to the last question in the interview, "is shyness a problem for someone in your grade?" were identified. The second set of responses were gleaned from problems cited during the series of questions asking about the behaviours, feelings and thoughts of the shy child, as well as, the situations that elicit shyness. This was done in order to categorize the children's impressions of the problematicity of shyness that was not otherwise mentioned in their responses to the question, "Is shyness a problem for someone in your grade?"
Two raters categorized the 40 children's answers into one of 5 categories to the question asked, "Is shyness a problem in your grade": 1 = shyness is not a problem, 2 = shyness might not be a problem, 3 = shyness might be a problem, and 4 = shyness is a problem, (see Appendix 1, for coding form).

**Coding Reasons for shyness seen as problematic:**

Next, the reasons and consequences that children gave for the view that shyness is or is not a problem was examined. For each interview, two raters coded the child’s responses into the following categories (see Table 3, p. 35, for description of each category): Peer related, emotional, academic, family, health, delinquency, future, and other problems. Based on the literature review, these categories are areas of life that have been found to be problematic for shy children. They were divided into two further groups: 1) problems associated with shyness mentioned in questions 1 to 7 and, 2) questions 8 and 9. This process was completed regardless of the rating (1 = shyness is not a problem to 5 = shyness is a problem).
RESULTS

Reliability of Measures

For the purpose of determining interrater reliabilities for the variables of the study, the complete interviews of 40 randomly selected children were coded independently by two data raters, the principal researcher and a graduate student (these interviews were not included in the final reliability analyses) during four two-hour sessions. The two coders were unaware of child gender or grade status. The judgements of the coder who was unaware of the study's hypotheses was compared with the judgements of the principal investigator. During these sessions, the two coders also met to discuss the categories in which the responses were to be classified before coding begun. Any discrepancies in the coding between the two raters were discussed and an appropriate code assigned to the discrepant response.

Interrater reliability was established on the basis of 20% of the cases (N = 40), a criterion employed in the extant normal development research (Koenig, Cicchetti, & Rogosch, 2000). I used Kappa to establish reliability to control for chance agreement (Cohen, 1960), with the .05 level of confidence applied to all Kappa tests. The following Ks were found for the shyness component coding systems: fearful action component, K = .91, fearful emotion component, K = .89, fearful cognition component, K = .80, self-conscious action component, K = .89, self-conscious emotion component, K = .85, and for self-conscious cognitive component, K = .82. The following Ks were found for the coding system of the causes and origins of shyness: social novelty, K = .92, intrusiveness, K = .79, social evaluation, K = .82, conspicuousness, K = .84, being different, K = .85, breaches of privacy, K = .79, formality, K = .77, inherited tendencies, K = .89, and personal history factors, K = .88. The following Ks were found for the coding system
of the degree of affirmation that shyness is a problem: no, $K = .90$; sometimes no, $K = .76$; don’t know, $K = .81$; sometimes yes, $K = .74$; and yes, $K = .92$. Finally, the following $K$s were found for the coding systems of reasons that shyness is a problem: peer-related, $K = .81$; emotional, $K = .77$; academic, $K = .78$; family; $K = .89$; health; $K = .91$; delinquency; $K = .78$; and future, $K = .78$. All Kappas are considered substantial (Cohen, 1960).

**Preliminary Analyses and Data Preparation**

Three preliminary analyses were conducted on the total number of responses each child gave throughout the interview for shyness components, shyness situations and reasons for shyness being a problem to determine if age would have an effect on the quantity of each interview. An analysis of variance (ANOVA) for grade was performed on the sum of all shyness components (i.e., action, emotion, and cognitive components), the sum of all situations leading to shyness (i.e., immediate causes, inherited tendencies, and personal history factors) and the sum of all reasons for shyness seen as a problem (peer related, emotional, academic, health, future, family, delinquency, and victimization). The results indicated a significant main effect of grade on shyness components, $F(18, 582) = 7.18$, $p < .001$, and a significant main effect of grade on situations leading to shyness, $F(21, 579) = 1.72$, $p < .05$ indicating that age had an effect on the number of responses given. There was no effect for grade and reasons for shyness, $F(18, 582) = 1.44$, $p = .11$.

Because there were significant differences across grade level in total number of responses, for each child, the dependent variables were converted to proportions of the total number of components and situations leading to shyness, in order to standardize scores for every child at every grade. This conversion was not performed on the reasons for shyness.
Hypothesis 1: Age-related and Gender-related Differences in Children’s Reports of Shyness

Components:

In order to test the hypothesis that there are age- and gender-related differences in the shyness components children report in their peers, a 4 (grade) x 2 (gender) x 2 (shyness type: fearful or self-conscious) multivariate analysis of variance (MANOVA) was conducted using SPSS 10.0 for Windows (SPSS, 1999) with repeated measures on the last factor to test between- and within-subject differences on three dependent variables: action components, emotion components, and cognitive components. Post-hoc comparisons were made using Tukey HSD tests. Specific questions were addressed by way of simple effects analyses. An experiment-wise error rate of .05 level of confidence was applied to all statistical tests.

The hypotheses that younger children would tend to report components of fearful shyness and older children would tend to cite components of self-conscious shyness were mainly supported. There were no significant gender effects found.

Using the Box’s M test for homogeneity of dispersion matrices produced $F(21, 65) = 89.32$, $p > .05$, therefore Wilk’s Lambda criterion was the criterion of choice (Tabachnik & Fidell, 1996). With the use of Wilk’s Lambda, there was a significant multivariate main effect of grade $F_{\text{mult}}(9, 463) = 5.3$, $p < .001$, and a significant multivariate main effect of shyness type $F_{\text{mult}}(3, 190) = 75.43$, $p < .001$. There was a significant interaction between shyness type and grade $F_{\text{mult}}(9, 463) = 27.6$, $p < .001$. The results reflected a strong association between shyness type (fearful and self-conscious) and action components $\eta^2 = .52$ and a stronger association between the interaction of shyness and grade and action components, $\eta^2 = .60$. For emotion components, there was a moderate association between the interaction of shyness type and grade,
\( \eta^2 = .25 \). Finally, there was a moderate association between the interaction of shyness type (fearful and self-conscious), gender and grade and cognition component, \( \eta^2 = .22 \). Since the effect of gender was not statistically significant, \( F_{\text{main}}(3, 190) = 1.75, p = .16 \), and did not interact with any other variable, no further analyses were performed for this variable. All other associations were negligible. (See Appendix 2 for Sums of Squares, Mean Squares, and Eta Squared for Within Subjects)

To investigate the impact of the multivariate main effect of shyness type on the individual independent variables, univariate Fs were used to test the importance of the dependent variables. However, because of inflated Type 1 error rate due to multiple testing, a conservative approach was utilized by Bonferroni adjustments.

With the Bonferroni correction for alpha level resulting in a critical alpha of \(.05/3 = .017\), the significant univariate main effect of shyness type for all three dependent variables: action components \( F(1, 192) = 204.67, p < .001 \), emotion components \( F(1, 192) = 29.92, p < .001 \), and cognitive components \( F(1, 192) = 4.83, p = .03 \), indicated that children’s perceptions of the two shyness types are significant for action and emotion components only.

To investigate the impact of the interaction effects on the individual independent variables, univariate Fs were used to test the importance of the dependent variables. However, because of inflated Type 1 error rate due to multiple testing, a conservative approach was utilized by Bonferroni adjustments.

With the Bonferroni correction for alpha level resulting in a critical alpha of \(.05/3 = .017\), the significant univariate shyness by grade interaction for all three dependent variables: action components \( F(3, 192) = 94.12, p < .001 \), emotion components \( F(3, 192) = 20.82, p < .001 \), and
cognitive components $F(3, 192) = 18.75$, $p < .001$, indicated that children's perceptions of the components of shyness change with age. The results indicated a less substantial association between grade and action components, eta squared = .17 and between grade and cognition components, eta squared = .11. All other associations were negligible. (See Appendix 2 for Sums of Squares, Mean Squares, and Eta Squared for Between Subjects)

**Simple Effects of Shyness Type by Grade for Shyness Components**

**Action Components**

The following section reports simple main effects for action components on the following dependent variables: action components, emotion components, and cognitive components. For the action components, there was a significant simple main effect of shyness type at Grade 1 $F(1, 44) = 463.80$, $p < .001$, at Grade 3, $F(1, 51) = 434.10$, $p < .001$, at Grade 5, $F(1, 53) = 8.79$, $p < .001$, and at Grade 7, $F(1, 48) = 28.12$, $p < .001$. Children in grade 1 reported more fearful shyness action components than self-conscious action components. Children in grade 3 reported more fearful shyness action components than self-conscious shyness components. Children in grade 5 reported more fearful shyness action components than self-conscious components.

Children in grade 7 reported more self-conscious shyness components than fearful shyness components.

Simple main effects of grade were significant for fearful shyness action components $F(3, 196) = 70.09$, $p < .001$. Post-hoc analyses (Tukey HSD, two-tailed) showed that the mean of grade 1 children ($M = .67$, $SD = .21$) was significantly higher than the mean of grade 3 children ($M = .54$, $SD = .18$), which was significantly higher than the mean of grade 5 children ($M = .32$, $SD = .25$), which was significantly higher than the mean of grade 7 children ($M = .12$, $SD = .17$).
Simple main effects of grade were significant for self-conscious shyness action components $F(3, 197) = 64.29, p < .001$. Post-hoc analyses (Tukey HSD, two-tailed) showed that there were no significant differences between the mean of grade 7 children ($M = .32, SD = .17$) and the mean of grade 5 children ($M = .16, SD = .18$) but that the grade 5 children and grade 7 children reported significantly more self-conscious action components than grade 3 children ($M = .01, SD = .05$). There were no significant differences between the means of grade 1 ($M = .02, SD = .04$) and grade 3 children.

**Emotion Components**

The following section reports simple main effects for emotion components for the following dependent variables: fearful shyness and self-conscious shyness. For the emotion components, there was a significant simple effect of shyness type at Grade 1 $F(1, 44) = 60.32, p < .001$, and at Grade 3, $F(1, 51) = 57.70, p < .001$, but no significant simple effect at Grade 5, $F(1, 53) = .15, p = .70$, nor at Grade 7, $F(1, 48) = 6.41, p = .05$. Children in grade 1 reported more fearful emotion components than self-conscious components. In both grades 1 and 3 children reported more fearful shyness emotion components than self-conscious components.

Simple main effects of grade were significant for fearful shyness emotion components $F(3, 197) = 5.4, p < .001$. Post-hoc Tukey HSD (two-tailed) tests showed that there were no significant differences between the mean of grade 1 children ($M = .21, SD = .16$), the mean of grade 3 children ($M = .19, SD = .12$), and the mean of grade 5 children ($M = .17, SD = .15$). The means of grade 1 and grade 3 children were significantly higher than the mean of grade 7 children ($M = .10, SD = .11$), which was not significantly higher than the mean of grade 5 children.

Simple main effects of grade were significant for self-conscious emotion components $F(3,$
Post-hoc Tukey HSD (two-tailed) tests showed that there were no significant differences between the mean of grade 7 children ($M = .18$, $SD = .14$) and the mean of grade 5 children ($M = .15$, $SD = .15$). The means of grade 5 and grade 7 children were significantly higher than the means of grade 1 children ($M = .07$, $SD = .04$), and grade 3 children ($M = .04$, $SD = .08$). The means of grade 1 children and grade 3 children were not significantly different.

**Cognition Components**

The following section reports the simple main effects for cognitive components for the following dependent variables: fearful shyness and self-conscious shyness. For the cognitive components, there was a significant simple main effect of shyness type at Grade 1 $F(1, 44) = 15.61$, $p < .001$, at Grade 3, $F(1,51) = 60.90$, $p < .001$, and at grade 7 $F(1, 48) = 7.67$, $p < .01$, but no significant simple effect at Grade 5, $F(1, 53) = 1.79$, $p = .19$. Children in grade 1 reported more fearful shyness cognitive components than self-conscious cognitive components. Children in grade 3 reported more fearful shyness cognitive components than self-conscious cognitive components. Children in grade 7 reported more self-conscious cognitive components than fearful self-conscious components.

Simple main effects of grade were significant for fearful shyness cognitive components $F(3, 197) = 6.84$, $p < .001$. Post-hoc Tukey HSD (two-tailed) tests showed that the mean of grade 3 children ($M = .17$, $SD = .13$) was significantly different from the means of grade 1 children ($M = .10$, $SD = .12$), grade 5 children ($M = .08$, $SD = .12$), and grade 7 children ($M = .08$, $SD = .11$). There were no significant differences between the means of grade 1, grade 5 and grade 7 children.
Simple main effects of grade were significant for self-conscious cognitive component $F(3, 197) = 25.51, p < .001$. Post-hoc Tukey HSD (two-tailed) tests showed that there were no differences between the mean of grade 7 children ($M = .17, SD = .14$) and the mean of grade 5 children ($M = .12, SD = .12$) but they were significantly higher than the mean of grade 1 children ($M = .02, SD = .07$) and the mean of grade 3 children ($M = .02, SD = .05$). There were no significant differences between the means of grade 1 and grade 3 children. (See Table 4 for summary of proportion of total sums of the means, standard deviation and N for Action, Emotion and Cognitive components).
Table 4

Summary of Proportions of Total Sums of the Means, Standard Deviations and N for Action, Emotion and Cognitive Components

<table>
<thead>
<tr>
<th>Shyness Type</th>
<th>Grade 1 (N=45)</th>
<th>Grade 3 (N=52)</th>
<th>Grade 5 (N=54)</th>
<th>Grade 7 (N=49)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fearful Action</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>.67</td>
<td>.54</td>
<td>.32</td>
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</tr>
<tr>
<td>Std.dev.</td>
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<td>.25</td>
<td>.17</td>
</tr>
<tr>
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<td></td>
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</tr>
<tr>
<td>Mean</td>
<td>.02</td>
<td>.01</td>
<td>.16</td>
<td>.32</td>
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<tr>
<td>Std.dev.</td>
<td>.04</td>
<td>.01</td>
<td>.18</td>
<td>.17</td>
</tr>
<tr>
<td>Fearful Emotion</td>
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<td></td>
<td></td>
<td></td>
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<tr>
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<td>.19</td>
<td>.17</td>
<td>.10</td>
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<tr>
<td>Std.dev.</td>
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<td>.12</td>
<td>.15</td>
<td>.11</td>
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<tr>
<td>Self-Conscious Emotion</td>
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<tr>
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<td>.04</td>
<td>.15</td>
<td>.18</td>
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<tr>
<td>Std.dev.</td>
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<td>.15</td>
<td>.14</td>
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<tr>
<td>Fearful Cognitive</td>
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<td></td>
<td></td>
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<tr>
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<td>.10</td>
<td>.17</td>
<td>.08</td>
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<tr>
<td>Std.dev.</td>
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<tr>
<td>Self-Conscious Cognitive</td>
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<td></td>
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<tr>
<td>Mean</td>
<td>.02</td>
<td>.02</td>
<td>.12</td>
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<tr>
<td>Std.dev.</td>
<td>.07</td>
<td>.05</td>
<td>.12</td>
<td>.14</td>
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</table>
Hypothesis 2: Age-related and Gender-related Differences in Children’s Perceptions of Shyness Situations:

In order to test the hypothesis that there are age- and gender-related differences in the shyness situations children report in their peers, a 4 (grade) x 2 (shyness type) MANOVA was conducted using SPSS 10.0 for Windows (SPSS, 1999) with repeated measures on the last factor was performed to test between- and within-subject differences on two dependent variables: immediate causes and personal history factors. A preliminary evaluation of the variable “Inherited Tendencies” indicated that it was not an important aspect in children’s perceptions of the causes of shyness and was therefore eliminated from the analyses. Post-hoc comparisons were made using the Tukey HSD procedure. Specific questions were addressed by way of simple effects analyses. An experiment-wise error rate of .05 level of confidence was applied to all statistical tests.

The hypotheses that younger children would tend to report situations related to fearful shyness and older children would tend to cite situations related to self-conscious shyness was supported.

With the use of Wilk’s lambda, there was a significant multivariate main effect of shyness type, $F_{\text{mult}}(2,181) = 133.83, p < .001$, and a significant interaction effect between shyness situation and grade, $F_{\text{mult}}(6, 364) = 2.98, p < .05$. The results indicated a strong association between shyness type (fearful and self-conscious) and the immediate causes, eta squared = .60. The association was less substantial between the interaction between shyness type and grade and personal history, eta squared = .07. There was no main effect of grade $F_{\text{mult}}(6,364) = 1.95, p = .07$. (See Appendix 4 for the Summary of Sum of Squares, Mean Square and Eta Squared for
Within Subject Contrasts).

With the Bonferroni correction for alpha level resulting in a critical alpha of $0.05/2 = 0.025$, the significant univariate main effect of shyness type for the following dependent variables: immediate causes $F(1, 192) = 98.66, p < .01$ and personal history factors $F(1, 192) = 2.04, p = 0.03$, indicated that children's perceptions of the immediate causes of shyness change depending on shyness type.

With the Bonferroni correction for alpha level resulting in a critical alpha of $0.05/2 = 0.025$, the significant univariate shyness situation by grade interaction for the following dependent variables: immediate causes $F(3, 182) = 4.25, p < .01$ and personal history factors $F(3, 182) = 1.29, p = .28$, indicated that children's perceptions of the immediate causes of shyness change with age. No further analyses were performed for personal history factors.

**Simple Effects of Shyness Type by Grade for Shyness Situations**

**Immediate Causes**

The following section reports simple main effects for immediate causes for the following dependent variables: fearful shyness immediate causes and self-conscious shyness immediate causes. For the immediate causes, there was a significant simple effect of shyness type at grade 1 $F(1, 40) = 143.73, p < .001$, at grade 3, $F(1,48) = 55.35, p < .001$, at grade 5, $F(1, 50) = 144.16, p < .001$ and at grade 7 $F(1,44) = 19.25, p < .001$. Children in grade 1 reported more fearful shyness immediate causes than self-conscious immediate causes. Children in grade 3 reported more fearful shyness immediate causes than self-conscious immediate causes. Children in grade 5 reported more fearful shyness immediate causes than self-conscious immediate causes. Children in grade 7 reported more self-conscious shyness immediate causes than fearful immediate causes.
Simple main effects of grade were significant for fearful shyness immediate causes $F(3, 182) = 4.87, p < .003$. Post-hoc analyses (Tukey HSD, two-tailed) showed that there were no significant differences between the mean of grade 1 children ($M = .91, SD = .26$), the mean of grade 3 children ($M = .82, SD = .31$), and the mean of grade 5 children ($M = .87, SD = .23$). Grade 1 children and grade 5 children report significantly more fearful shyness immediate causes than grade 7 children ($M = .70, SD = .31$). There were no significant differences between the means of grade 3 and grade 7 children.

Simple main effects of grade were significant for self-conscious shyness immediate causes $F(3, 182) = 4.59, p < .01$. Post-hoc analyses (Tukey HSD, two-tailed) indicated there were no significant differences between the mean of grade 7 children ($M = .30, SD = .31$) and the mean of grade 3 children ($M = .18, SD = .31$). Grade 7 children reported more self-conscious immediate causes than grade 5 children ($M = .13, SD = .23$) and grade 1 children ($M = .11, SD = .19$). The means of grade 1 children, grade 3 children and grade 5 children were not significantly different from each other. (Table 5 shows Summary of Means and Standard Deviations for Immediate Causes).
Table 5

Summary of Proportions for the Total Sums of Means, Standard Deviations and N for Immediate Causes

<table>
<thead>
<tr>
<th>Shyness Type</th>
<th>Mean (N)</th>
<th>Grade 1 (45)</th>
<th>Grade 3 (52)</th>
<th>Grade 5 (54)</th>
<th>Grade 7 (49)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fearful</td>
<td></td>
<td>.91</td>
<td>.82</td>
<td>.87</td>
<td>.70</td>
</tr>
<tr>
<td></td>
<td>Std.dev.</td>
<td>.26</td>
<td>.31</td>
<td>.23</td>
<td>.31</td>
</tr>
<tr>
<td>Self-Conscious</td>
<td>Mean</td>
<td>.11</td>
<td>.18</td>
<td>.13</td>
<td>.30</td>
</tr>
<tr>
<td></td>
<td>Std.dev.</td>
<td>.19</td>
<td>.31</td>
<td>.23</td>
<td>.31</td>
</tr>
</tbody>
</table>
Hypothesis 3: Age-related and Gender-related Differences in Children’s Perceptions of Shyness viewed as a Problem

In order to test the whether there were gender or age differences among the “yes”, “sometimes yes”, “don’t know”, “sometimes no”, and “no” answers children give to the question “Is shyness a problem for someone in your grade?”, two nonparametric tests were conducted.

A Mann-Whitney U test was conducted using SPSS 10.00 for Windows (SPSS, 1999) in order to compare the degree of affirmation to the question “Is shyness a problem for someone in your grade?” between genders. A Kruskal-Wallis test was conducted using SPSS 10.0 for Windows (SPSS, 1999) in order to compare degree of affirmation to the question “Is shyness a problem for someone in your grade?” across grade.

The “yes”, “sometimes yes”, “sometimes no”, “no”, and “don’t know” answers will be referred to as the “choice” variable, referring to the degree of affirmation, in the Mann-Whitney U, and in the Kruskal Wallis test. This choice variable will also be used in MANOVA analyses, presented following the nonparametric tests. Levels of the “choice” variable were assigned the following values: “yes” (coded as 1), “sometimes yes” (coded as 2), “sometimes no” (coded as 3), and “no” (coded as 4). The response “don’t know” was present in 3 interviews only, and therefore was excluded from further analyses. It was also found during the coding phase that there were 8 interviews that had concluded without ascertaining each child’s level of affirmation, consequently they were also eliminated from further analyses.

Using the Kruskal-Wallis χ² (3, N = 189) = 10.36, p < .05, there was a significant grade effect found for degree of affirmation with respect to the question, “Is shyness a problem for someone in your grade?” Grade 7 children (Median = 2, N = 48) indicated that they most often
view shyness as "sometimes" a problem, children in grade 5 (Median = 4, N = 49), children in grade 3 (Median = 4, N = 48), and children in grade 1 (Median = 4, N = 44), most often do not view shyness as a problem.

Using the Mann-Whitney \( U = 4698.50 (z = -.91, p = .36) \), there were no gender differences found in the degree of affirmation with respect to the question "Is shyness a problem for someone in your grade?".

In order to test the hypothesis that there would be age- and gender-related differences in the reasons children give that shyness is a problem to the question "Is shyness a problem for someone in your grade?", a 2 (gender) x 4 (grade) x 4 (choice) MANOVA was conducted using SPSS 10.0 for Windows (SPSS, 1999) on five dependent variables: peer related, emotional, academic, future and victimization. Recall that these are just 5 out of the hypothesized 8 dependent variables related to children's reasons for believing that shyness is a problem. The remaining three: Health-related (N = 3), family related (N = 0) and delinquency (N = 1) variables were considered unimportant aspects of children's perceptions and consequently excluded from further analyses. Post-hoc comparisons were made using the Tukey HSD procedure. Specific questions were addressed by way of simple effects analyses. An experiment-wise error rate of .05 level of confidence was applied to all statistical tests.

With the use of Wilk's Lambda, there was a significant multivariate main effect of gender \( F_{\text{mult}}(5, 156) = 2.94, p < .05 \), a significant multivariate main effect of grade \( F_{\text{mult}}(15, 474) = 3.77, p < .01 \), and a significant multivariate main effect of choice \( F_{\text{mult}}(15, 474) = 3.23, p < .001 \). There were two significant interactions, the first between gender and choice \( F_{\text{mult}}(10, 326) = 2.25, p < .05 \), and the second between grade and choice \( F_{\text{mult}}(40, 800) = 1.44, p < .05 \). There were no other main
interaction effects.

To investigate the impact of the significant multivariate interactions and main effects on the individual DVs, univariate Fs were used to test the importance of the DVs. However, because of inflated Type I error rate due to multiple testing, a conservative approach was utilized by Bonferroni adjustments. With the Bonferroni correction for alpha level resulting in a critical alpha of .05/5 = .01, all univariate interactions were found to be nonsignificant. There was a significant univariate main effect of gender for future problems F(1, 324) = 6.4, p < .01, indicating that boys (M = .19, SD = .29) reported more future related problems than girls (M = .03, SD = .17). Gender was not significant for any of the other dependent variables: peer-related F(1,160) = 4.22, p = .05, emotion-related F(1, 160) = .02, p = .89, academic-related F(1, 160) = 2.63, p = .11, and victimization F(1, 160) = .21, p = .65. (Table 6 shows Summary for Means and Standard Deviations for Future Related Problems).

There was a significant univariate main effect of grade only for emotion-related problems F(3, 160) = 3.90, p < .01. Grade was not significant for the other dependent variables: peer-related F(3, 160) = 3.38, p = .02, academic-related F(3, 160) = .42, p = .74, future-related F(3,160) = 1.05, p = .37, and victimization F(3, 160) = .60, p = .07, indicated that children's perceptions of the reasons for shyness seen as a problem differ with grade for emotional related problem reasons only. Post-hoc analyses (Tukey HSD, two-tailed) showed no difference between the mean of grade 1 children (M = .43, SD = .97) and grade 7 children (M = .73, SD = .87). Grade 1 children reported a significantly lower number of emotional problem reasons than children in grade 5 (M = 1.0, SD = 1.0), and children in grade 3 (M = .96, SD = 1.07). (See Table 7 for Summary of Means, Standard Deviations and N for Emotional Problems). There were
no significant differences between the means of grade 7, grade 5, and grade 3 children.

There was a significant univariate main effect of choice for peer-related problems \(F(3, 160) = 8.35, p < .001\). Choice was not significant for any other dependent variables: emotion-related \(F(3, 160) = 1.83, p = .14\), academic-related \(F(3, 160) = .37, p = .23\), future-related \(F(3, 160) = 3.32, p = .02\), and victimization \(F(3, 160) = 1.4, p = .23\). Post-hoc analyses (Tukey HSD, two-tailed) for the peer-related effect indicated that children who reported that shyness is not a problem had a significantly lower mean (\(M = .38, SD = .68\)) than children who reported "yes" (\(M = .78, SD = .73\)), "sometimes yes" (\(M = .92, SD = .86\)) or "sometimes no" (\(M = .90, SD = 1.1\)). (Table 8 shows Summary Table for Means and Standard Deviations for Peer-Related Problems).

Finally, a simple analysis of the percentage of children who reported at least one of the five dependent variables was calculated. (See Table 9 for the Summary of the Percentage of Children Reporting Problem Variables)
Table 6

Summary of Means, Standard Deviations and N for Future Related and Gender

<table>
<thead>
<tr>
<th></th>
<th>Boys (N) 90</th>
<th>Girls 99</th>
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<tr>
<td>Future Mean</td>
<td>.19</td>
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<tr>
<td>Problems Std.dev.</td>
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<td>.17</td>
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Table 7

Summary of Means, Standard Deviations and N for Emotional Problems and Grade

<table>
<thead>
<tr>
<th></th>
<th>Grade 1 (N) 44</th>
<th>Grade 3 48</th>
<th>Grade 5 49</th>
<th>Grade 7 48</th>
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<tbody>
<tr>
<td>Emotional Mean</td>
<td>.43</td>
<td>.95</td>
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<td>.73</td>
</tr>
<tr>
<td>Problems Std.dev.</td>
<td>.97</td>
<td>1.07</td>
<td>1.0</td>
<td>.87</td>
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Table 8

Summary of Means, Standard Deviations and N for Peer Related Problems and Choice

<table>
<thead>
<tr>
<th></th>
<th>Yes (N) 72</th>
<th>Sometimes Yes 13</th>
<th>Sometimes No 10</th>
<th>No 96</th>
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<tbody>
<tr>
<td>Peer related Mean</td>
<td>.78</td>
<td>.92</td>
<td>.90</td>
<td>.38</td>
</tr>
<tr>
<td>Problems Std.dev.</td>
<td>.73</td>
<td>.86</td>
<td>1.1</td>
<td>.68</td>
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</table>
Table 9

Percentage of Children Reporting Problem Variables

<table>
<thead>
<tr>
<th>Name of Variable</th>
<th>Percentage of Total number of children (N)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peer-related problems</td>
<td>45% (90)</td>
</tr>
<tr>
<td>Emotional problems</td>
<td>49% (98)</td>
</tr>
<tr>
<td>Academic problems</td>
<td>18% (36)</td>
</tr>
<tr>
<td>Future problems</td>
<td>11% (22)</td>
</tr>
<tr>
<td>Victimization</td>
<td>5% (10)</td>
</tr>
</tbody>
</table>

Note. The percentage of totals are greater than 100% due to the fact that some children reported more than one kind of problem.
DISCUSSION

The present study endeavoured to determine whether children's perceptions and descriptions of shy peers differed with respect to their age and gender. The following discussion provides an overview and synthesis of the findings. This discussion includes possible explanations and implications of the results. Then limitations of the present study are outlined followed by a discussion of the practical implications of the current findings.

*Age-related differences for fearful shyness and self-conscious shyness*

It is interesting to first note that the results of the present study generally support the proposed age-related differences among the perceptions of children. As predicted, young children's concepts of shyness were predominated by descriptions of fearful behaviours, feelings and thoughts. Additionally, fearful shyness descriptors gradually decreased with age with a gradual increase in self-conscious shyness in older children's characterizations of shyness.

This pattern was observed at each component level; action, emotion, and cognitive. For action components, the younger children reported more fearful shyness components than self-conscious components. As grade increased, there was a decline in the number of fearful shyness components reported with an increase in reported self-conscious behaviours as age increased. At grade seven, children reported significantly more self-conscious components than fearful action components.

More complex patterns emerged for the components that were not overtly observable. For example, while the number of responses for self-conscious emotions increased with age, grade five and grade seven children reported the same number of fearful and self-conscious emotions. These results suggest that, during grade five and grade seven, children are becoming aware of the
self-conscious form of shyness emotions, however the fearful shyness emotions continue to play a part in shyness at these age groups.

Finally, the hypothesized pattern deviated for fearful shyness cognitive components. Again the younger grades reported more fearful shyness cognitions as compared to children in grades five and seven. However, it was the children in grade three who reported the most fearful thoughts. Given Buss’s theory, it was expected that grade one children would report fearful shyness cognitions most often. This may be due to the possibility that grade three children have developed a better ability to infer abstract concepts to others. Children in grade one, may not have the understanding of internal processes that are necessary in order to infer the less observable, leaving room for children in grade three to report more fearful shyness cognitive components.

Generally children in the older grades reported significantly more self-conscious shyness components than children in grades one and three. Again there were some deviations to this pattern. The results indicated that grade five children reported the same number of fearful and self-conscious thoughts while at the grade seven level there was a shift to self-conscious components. These results suggest that between the years of grade five and grade seven the self-conscious form of shyness become more salient. However it is also apparent that grade seven children continue to refer to fearful shyness cognitive components when describing their peers.

These results are congruent with the body of research discussed earlier. In retrospective studies, adults remember being fearfully shy as young as six years of age, however, adults who became self-consciously shy identified the peak self-conscious shyness experience occurring during their early adolescence (Cheek et al., 1986). Similar to the present study, Crozier and
Burnham (1990) found that children from ages five to 11 reported fearful shyness most often, with self-conscious shyness appearing in the latency age period and increasing in frequency with the older children.

However, it was thought that by extending the age group of Crozier and Burnham's (1990) study to early adolescence, the development of self-conscious shyness could be further explored. Certainly, the results indicated a significant decline in children's fearful shyness component scores, and an increase in self-conscious shyness components as grade increased. However, fearful shyness was favoured over self-conscious shyness with the younger children and fearful shyness emotions and cognitions continued to play a dominant role in children's descriptions at the grades five and seven.

One way of explaining these results is to examine the change that occurred at the action component level. First of all, the results indicated that of the three dependent variables the strongest associations occurred at the action level. The results of this study indicate the overt self-conscious behaviours do appear somewhere between grade five and seven. If self-conscious shyness does peak in early adolescence, then the body language and behaviours associated with self-consciousness would be most salient to the grade seven observers. The equal number of emotional and cognitive components at the grades 5 and 7 level may reflect the onset of this self-conscious stage. It is possible that with an addition of grade 8 or grade 9 children the results would show a stronger effect of age on self-conscious shyness descriptors where hypothetically all components would be dominated by self-conscious type shyness.

As stated previously, Crozier and colleagues (1990, 1995) found that shyness toward strangers and fears of novel situations are common among adolescent and adult populations.
(Crozier, 2000). In fact, Russell and his colleagues (1986) estimate that as many as 25 to 75 percent of these older groups experience such fears. Crozier (1999) found that even in a group of adults (ages 24-59 years of age) there was a large number of fearful shyness reactions mentioned in adults accounts of shyness eliciting situations. It would appear, therefore, that the tendency of the fifth and seventh graders in the present study to mention this form of shyness is reasonable. With the indication that a large number of adults and older children continue to experience fearful shyness, it is understandable that the older children in the present sample also described their shy peers in fearful terms.

*Gender differences.*

A further analysis of the shyness literature has lent some support to the notion that there are gender differences with respect to the manifestations and experiences of shyness in children.

The results of this study have clearly not supported the concept that there is a gender difference in children’s perceptions of shyness in their peers. Recall that it was hypothesized that a breakdown of the components of shyness would reveal gender differences.

There may be various reasons for this outcome. First, we know that there is no support for gender differences in fearful shyness (Zimbardo, 1977). We know that in self-descriptions, elementary school (when fearful shyness is the more common form of the two) boys are as equally likely to describe themselves as shy as are girls (Zimbardo, 1977). The present study largely draws from the elementary school age population, with the extension to include grade 7 students. As already discussed, the fearful shyness components played a dominant role in children’s descriptions, and consequently there were no effects of gender. In other words, it is plausible that this study has simply not reached a sample old enough to pick up on these differences.
A second possibility is that gender differences have not been found because the format of this study, based on children’s perceptions of others, simply does not tap into the real question which may only be answered by shy children. Despite girls superior empathy and interest in close relationships, perhaps it is the personal experience of shyness that is required to truly “know” the shy person’s actions, feelings and thoughts.

*Shyness Situations.*

Research into shyness has shown that it is a complex experience that is elicited by different situations. The purpose of the second hypothesis was to identify all kinds of shyness situations mentioned throughout the children’s interviews and to categorize them in terms of the causes associated with the two different forms of shyness. These categories were identified on the basis of the Buss’s (1986) account of immediate causes, inherited tendencies, and personal history factors.

To begin the analyses, it was established that there were too few children who reported situations that were related to Buss’ conception of inherited tendencies. It was decided that these tendencies are not salient to children from grades one to seven and therefore they were removed from the rest of the analyses.

Recall that Buss proposed that fearful shyness is most often elicited in immediate causes involving social novelty, spatial or psychological intrusion, fear of evaluation. Self-conscious shyness is elicited by immediate causes involving feeling conspicuous in some form, such as being different from others, breaches of privacy, and participating in formal social situations. Due to the fact that these different situations are linked to either fearful or self-conscious shyness types, there is an implicit link to age. Following Buss’s theory, it was hypothesized that children who mention
situations associated with fearful shyness will be a younger cohort than those who mention situations related to self-conscious shyness.

Interestingly, the results from this study partially supported the proposed age-related differences among the perceptions of children with respect to their descriptions of the situations that elicit shyness. The results indicated that only immediate causes had a significant interaction between grade and shyness type at the univariate level.

The youngest children reported significantly more fearful shyness immediate causes than any other grade. A few examples of social novelty from grade one interviews are as follows:

“`At the first day of school they stay with their mommies because they are shy of people. Because they don’t know the people, the other kids.”’
(Grade 1 child)

“When a shy kid walks into a new house then he might be shy. Someone’s house they don’t really know.” (Grade 3 child)

As grade increased, fearful shyness immediate causes decreased and self-conscious shyness immediate causes increased in children’s perceptions of shyness eliciting situations. A few examples of self-conscious situations:

“Well when they go on stage, they talk lower or something. They are embarrassed and don’t know what to do.” (Grade 5 child)

“Like if the teacher asks them a question? Well they might give an answer. I have a friend who’s really shy, but when she wants to say something she makes sure she can say it first.” (Grade 7 child)

The predominance of fearful shyness immediate causes in the perceptions of children in the younger grades and the decrease in the mention of fearful shyness components coincides with the former results that these children also reported more fearful shyness components. In the same
way, the predominance of self-conscious immediate causes in the perceptions of the older children correspond with the former results that these children also reported more self-conscious shyness components.

These results are congruent with the body of research that was described earlier. In the study conducted by Crozier and Burnham (1990) children aged five to 11 were asked to describe their conceptions of shyness. Results indicated that the younger children described shyness eliciting situations in terms of novelty, fearful reactions and stranger-related interactions. As age increased there was also an increase in children’s shyness situation descriptions that included being observed or feeling conspicuous.

There were no age differences found in children’s perceptions of the personal history origins. One explanation may be that children observe and interact with their shy peers in normally one situation, that being at school, and that it is the immediate causes that are most readily available to children when asked to describe a situation. In order to elicit personal history origins of shyness, it may be necessary for a more direct question to be asked, such as, “Are there any more situations or experiences a shy child may have experienced that may play a role in the fact that they are shy?” If such a question was asked, then it may indicate that older children would be able to hypothesize about other possible situations that are out of the school domain.

In the future, a study might explore children’s perceptions of shyness situations in another way such as providing the children with various shyness eliciting situations and asking them to provide various possible different patterns of responses. This way the goal would be to establish whether the two kinds of immediate situations (fearful and self-conscious) elicit different patterns of responses. For example, what type of shyness component would children at different ages
associate with novel situations?

As I had indicated in the introduction, children have unique perspectives about their peers. They are good resources to tap in order to understand more about shyness eliciting situations.

One grade 7 child’s opinion highlights this notion very well:

“And another thing. I don’t really know about this but they might not be shy in their family, like eating supper at the table? They might not be shy then because they’ve known the people all their life. So that’s another thing that I was thinking about before I came here. Like just say they really knew their friend, I don’t think they would be as shy with that person. I just came to Frank Ryan and I didn’t know the people, I think I would be more shy on my first day of school then. If I knew my friend for so many years, I wouldn’t be shy.”

One final note, though there are age differences found in children’s perceptions of types of shyness situations, it would be an exaggeration to claim that these two types are distinct from each other. Based on the research presented in this study it is obvious that fearful reactions can be elicited from self-conscious immediate causes and self-conscious reactions are also elicited by fearful situations. For example:

“Well they don’t really like being around people and they turn red (self-conscious physiological component). Well I know somebody that turns red every time he’s asked a question for math (self-conscious situation). He’s shy around people because I think he’s afraid (fearful emotion) to be around people.”.

Reasons for shyness as a problem

Do children believe that shyness is a problem for their age mates? Bussiere (1996) found that approximately 50% grade one children answered affirmatively while only one-fifth of grade three and five children, and one-third of seventh graders stated shyness was a problem for children
their age. In the present study it was proposed that with the inclusion of two separate categories “sometimes yes” and “sometimes no” (instead of Bussiere’s one category for both) there would be age differences found. Also an analysis of the reasons children give for shyness being problematic for their peers would provide detailed information that is otherwise lost when considering only the “yes” or “no” answers to the question, “Is shyness a problem for someone in your grade”.

Several important results emerged from this part of the study. First, answers to the problem question did not indicate gender differences with respect to the degree of affirmation to the problem question. Boys are equally as likely to respond in the affirmative or negative as girls. However, when considering grade differences, the analyses showed that while there were no differences between age groups with regard to “yes” and “no” answers, there was a difference for the “sometimes yes” category. Grade seven children identified that shyness is “sometimes” a problem for their peers more often than any other age group.

This age difference is not surprising given the age differences in children’s perceptions of social withdrawal. Non-social play has been found to be normative in young children’s perceptions of others, and shyness behaviours, such as social avoidance and withdrawal commonly do not stand out as non-normative. However, as children age, the development of interactive and social play becomes the norm, and children begin to identify solitary play as problematic.

Consequently, shy children who play by themselves or remain at the periphery of the peer group do not stand out as oddly different from their peers, whereas children in grade seven notice the shy child who is not involved with his or her peers.

One might question why grade seven children did not simply respond more often to the “yes” category, rather than the “sometimes yes” category? Perhaps it is at this age that young
adolescents are starting to see exceptions to rules and are therefore more likely to respond in this manner. This would be consistent with Piaget's theory of cognitive development (Piaget, 1950). Grade seven children are entering the formal-operations period in which they begin to hypothesize and draw deductions from these hypotheses. Their thinking is moving away from "black and white" thinking and they are beginning to entertain relative ideas. In this way, I suggest that young adolescents are able to recognize situations where shyness is not problematic and others that are problematic.

A further analysis was conducted in order to assess children's perceptions of the various lifestyle categories that shyness may be problematic in their peers. These reasons were coded into the following categories of dependent variables: peer-related, emotional, academic, future problems and victimization.

Analyses indicated that there were three significant results. The first indicated that there were gender differences in children's perceptions of future-related problems. Boys perceived future problems related to shyness more than girls. For example:

"Because as they get older they're gonna have real troubles at school. They're not gonna get a job. They're gonna probably end up quitting school. Failing. They're gonna mess up their whole life" (Dramatic examples of future-related and academic problems by a grade 5 boy.)

The differences seen among boys and girls perceptions of shyness being problematic for the future can be understood in light of societal norms. Research has indicated that although girls may report more self-conscious shyness (Cheek et al., 1986), shyness in boys is considered more problematic. In particular, boys are expected to be more forthright and excel in their careers (Stevenson-Hinde et al., 1996). It has been previously mentioned that the meaning of shyness
may have more devastating effects for boys than girls. Boy perspective takers may know that social norms allow girls to be shy whereas, being a shy boy may spell disaster.

The second significant result indicated that there were age-related differences in children's perceptions of emotional problems related to shyness. Interestingly, children in the middle grades (grades 3 and 5) reported more emotional problems related to shyness than either grade 7 or grade 1 children.

The grade-related difference among children who reported that their shy peers suffer more emotional related problems is more difficult to understand. Given the age differences in the person perception literature, it was expected that older children would cite more emotional problems. Instead, it was found that not only did grade one children report the least problems (as would be expected) but so did the grade seven children. In fact, it was the grade three and grade five children who reported more emotional problems than the group of grade one and grade seven children. The following is an example from an interview with a child in grade 1:

"Because nobody likes that person and if nobody is with them or helping them, they might never make friends and then they'll be lonely and they won't have anybody to play with and to talk too ..... they will be sad and alone."

The body of research previously presented provided some evidence that shy girls have been found to experience more self-conscious and self-confidence issues (Crozier et al., 1990; Elkind et al., 1976) as well as social anxiety and social avoidance (Hymel & Franke, 1985). One would expect that girls would report more emotional reasons if nothing else.

Based on the research showing that girls have been found to be better social perspective takers and empathisers than boys (Freshback, 1978, Zahn-Waxler et al., 1977) the logical guess
was to expect that girls would be more attuned to others’ problems which plainly did not stand up to the test.

The third significant result indicated that there were choice differences in children’s perceptions of peer-related problems related to shyness. Children who reported that shyness was not a problem were less likely to talk about peer-related problems. Here are four examples from each of the grades:

“Because if you don’t meet that person that you don’t know, you don’t play with the person, and that person might be a good friend.” (Grade 1)

“Because there is nobody to play with or nothing to do” (Grade 3)

“Well they usually don’t make very many friends in the class because they’re scared about making friends and how the friends with act around them.” (Grade 5)

“Well it depends what kind of person or what kind of person you are. If you want a lot of friends then it is a problem.” (Grade 7)

The idea that peer-related concerns are most salient to children from grades one through seven is not at all surprising. The literature review has provided many examples of research that supports the notion that friendships are “necessities not luxuries” (Parker et al., 1987) in children’s development and general well-being.

One way to test the relationship of gender to shyness in the future may be to provide children with categories of possible difficulties shy children experience. A broad range of these categories may provide the necessary structure they require in order to help them identify problematic areas.

A further study is required to ascertain whether the differences among these groups are reliable. If they are, perhaps a study that targets perceptions of emotional problems of shy children will give light to these differences.
Although there were no significant choice, gender- or age-related differences found among the other three dependent variables, this should not preclude the notion that children are unaware of the other challenges that shy children may experience. In fact, although the results were not statistically significant, it is important to observe that many children noted problems related to shyness. For instance, 45% of the sample cited at least one peer related problem, 49% of the children mentioned an emotional problem, 18% mentioned an academic problem, 11% reported victimization and 5% of the sample cited future-related problems.

A simple review of each variable provided the following information; of the peer related problems, children spoke most often of not having a friend to play or talk with. Emotional problems cited were most often feelings of sadness and loneliness. Of the academic related problems, children reported that shy children would not ask the teacher for help when they needed it and would not contribute to class discussion. Children were most likely to cite getting beaten up or made fun of for victimization. Finally, future related problems were generally defined as possible problems finding a job or career.

Unfortunately, the results do not provide us with information about what children at different ages find most problematic about shyness or if there are any differences between boys and girls’ opinions in such matters.

It has been noted that the development of shyness research has been confused by the difficulties in the operationalization of these two forms of shyness. The results from this study supports the notion that children have opinions of their shy peers. I would also add that they have a plethora of experience and knowledge, if tapped, can provide insight into shyness in childhood. More work needs to be done on providing a clearer definition of shyness in order to address some
of these issues.

Conclusions and Implications for Future Research

Research has begun to investigate age changes in the nature of shyness. The present study of children’s perceptions of shyness does provide some support for the earlier emergence of fearful shyness. The present study also suggests that there is some displacement of the fearful form of shyness at grade seven with an increase in self-conscious components reported, but that this form does not fade from children’s descriptions altogether. This study also provides some information concerning the situations that elicit shyness in children. Specifically, social novelty, intrusion, and fear of evaluation are situations that are linked to younger children’s experiences of shyness. Feeling conspicuous in a variety of settings are associated with older children’s experiences of shyness.

The third purpose of this study was to provide some knowledge to the literature concerning reasons children think shyness is a problem. From children’s perspectives it was found that peer problems were most often associated with shyness being seen as a problem, boys reported more future-related problems than girls, and children in grades three and five reported more emotional problems than younger children.

The present study was based on open-ended interviews which provided an opportunity to glean children’s perspectives of shyness without presenting information by way of a structured interview that may bias their free descriptions. Despite the strengths of this technique, this style of interview may have confined some children’s responses to their first or immediate impressions of shyness rather than delve into all they “know” about shyness during the interview.

Due to the open-ended nature of the interviews, it is largely unknown whether the limits of
each child's understanding had been completely reached. The open-ended interview methodology employed by Crozier and Burnham (1990) was bolstered by several theory driven questions concerning the various shyness types. Children were given the chance to provide answers to a set of questions that had identified points of interest, for example, does meeting strangers make you shy? Therefore, another study that incorporates both open-ended interviewing and structured questioning concerning the components, situations and problems related to shyness would be recommended in order to test limits of children’s understanding of shyness.

Most people have some experience with shyness and have interesting opinions of the phenomenon in others. However, those who have personal experiences with continuous shyness do indeed have a unique insight into the problems associated with being shy. Another area for research to pursue might possibly target shy children's opinions of these constructs that have been analysed in this study would provide important information with regard to the development of shyness as well as the situations that are linked to the experience according the shy child. It would also be interesting to study what shy children themselves would have say about shyness being a problem in their own lives.

The methodology in this study assumed that children from all age groups understood the concept of “problem” and how shyness could be considered “problematic” in their peers. It seems plausible that “problem” means different things to various age groups. Considering the children's ages ranged from 5 years to 13 years in this study it is impossible to be sure that the idea of what a “problem” constituted was particularly constant across ages. The other important limitation to this study is that it is possible that the younger participants truly understood the meaning of “problem”. A thorough literature review was conducted in order to illuminate this issue, no study
has been found to confirm children's understanding of the word “problem”. In the future a pilot study could be employed in order to explore children's understanding of “problem”.

A similar limitation involves the extent to which verbal abilities play a role in this kind of study. Again, due to the fact that there was no pilot study conducted it is difficult to know the differences in verbal abilities between younger and older children and between boys and girls. Besides the pilot study that could have been conducted there are other venues to available to assess children's ability to understand a task without relying solely on their verbal abilities. For example, one such task could include a story (about a shy child) that is read to each participant and ask each child to point to pictures representing different emotions in order to relay how they think the child in the story is feeling.

Further Buss' distinction between fearful and self-conscious shyness would profit from a more parsimonious definition. Many of the emotions and thoughts that he suggests indicate differences between fearful and self-conscious shyness types are somewhat interrelated and dependent of each other. In fact it is the behaviour of both types of shyness that infer the feelings and thoughts of a shy individual. Therefore, a description of the behaviours associated with both types of shyness, that does not include interrelated descriptors, would facilitate a more precise definition of shyness.

The important distinction between fearful and self-conscious shyness is also relevant to debates about the relationship between self-awareness and social anxiety. For example, how do shy children account for the different forms of fearful and self-conscious reactions to certain situations? Is it self-awareness along with low self-esteem that produces social anxiety, or is it that frightening or worrisome thinking are forms that general anxiety takes in social situations.
There are many social skills intervention programs for children that focus on irrational thoughts, and teaching socially appropriate behaviours. Research distinguishing between situations that elicit fearful and self-conscious shyness behaviours, feelings and thoughts would provide a better understanding of where efforts should be focussed in order to help shy children overcome their social difficulties.

Further research could also include shy children's perspectives of what ameliorates their shy experience. For example, it has been found that close friendships buffer the negative effects of shyness (Fordham et al., 1999). A small number of researchers have begun looking at the positive sides of shyness. One group believes that shyness is not a risk factor (Gough et al., 1986), arguing that the long list of undesirable qualities usually attributed to shyness may stem from a negative bias in the assessment of shyness. Using an adult sample, Gough and Thorne (1986) found that if the assessment is based on self-reported fears, anxieties, and doubts concerning personal worth, then raters will tend to attribute qualities of weakness and timidity to shy persons. If the self-description stresses more positive qualities, such as patience, forbearance, and self-control, shy adults will be characterized positively with terms such as modesty, and self-restraint. Finally if the assessment taps into both positive and negative features, then the reactions from others will reflect that fact. Thus the results from this one study indicate that the view that shyness may be linked with potential difficulties may be more indicative of biased methodology.

Shyness researchers Schmidt and Tasker (2000) have also begun to explore the positive aspects of shyness. They believe that medical and pharmaceutical groups are motivated to communicate to the public that shyness needs to be "cured". They are currently working on a project that they hope will "depathologize" shyness. So far they have reported a qualitative
analysis that examined parents' perceptions of both shy and non-shy children and their agreement that there are some positive characteristics of shyness. Among these attributes are descriptions that shy children are always well-behaved, diligent, dress conservatively, are non-impulsive and compliant children.

Another group of researchers (Asendorpf & van Aken, 1994) have argued that the fearful type of shyness may not be related to maladjustment. They found that although shyness within the context of familiar peers was associated with low perceived social competence and loneliness during middle childhood, overall shy behaviour during interactions with unfamiliar people is not associated with problematic consequences.

Summary

Within this discussion, several important questions were raised, and some remain unanswered by researchers to date: How do fearful and self-conscious shyness develop across the lifespan for boys and girls? Are there individual differences in these two forms of shyness, and if so what are the elements that predispose an individual to one kind of shyness over another? How are shyness eliciting situations linked to the two types of shyness?

Research should continue to look at the impact of childhood shyness on future development. Little is known about the psychological, social and economic effects of shyness over the life course. Many questions remain unanswered such as what is the long-term impact of shyness on emotional well-being? Are adults who were once shy satisfied with their relationships? A second reason to continue to look at whether shyness is a problem is that little is known about the course of fearful and self-conscious shyness. Are specific problems related to these two types of shyness.
REFERENCES


Routledge.


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social behaviour. *Journal of Personality, 45, 585-595.*


APPENDIX I

**Manifestations of Shyness**

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**Immediate Causes of Shyness**

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**Origins of Shyness**

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**Reasons (during manifestations)**

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**Reasons (End question)**

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**Is it a problem?**

Yes | 1 2 3 4 | No
APPENDIX II

Summary of Sum of Squares, Mean Square, and Eta Squared for Within Subject Contrasts of Shyness, and its Interactions with Gender and Grade

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Summary of Sum of Squares, Mean Square and Eta Squared for Between Subjects Effects of Gender, Grade and Gender by Grade

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APPENDIX III

Summary of Sum of Squares, Mean Square and Eta Squared for Within Subject Contrasts of Shyness Type and its Interaction with Grade

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### APPENDIX IV

Summary of Sum of Squares, and Mean Square for Between Subjects Effects of Gender, Grade and Choice

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