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Social Withdrawal in Childhood

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Abstract

Socially withdrawn children frequently refrain from social activities in the presence of peers. The lack of social interaction in childhood may result from a variety of causes, including social fear and anxiety or a preference for solitude. From early childhood through to adolescence, socially withdrawn children are concurrently and predictively at risk for a wide range of negative adjustment outcomes, including socio-emotional difficulties (e.g., anxiety, low self-esteem, depressive symptoms, and internalizing problems), peer difficulties (e.g., rejection, victimization, poor friendship quality), and school difficulties (e.g., poor-quality teacher-child relationships, academic difficulties, school avoidance). The goals of the current review are to (*a*) provide some definitional, theoretical, and methodological clarity to the complex array of terms and constructs previously employed in the study of social withdrawal; (*b*) examine the predictors, correlates, and consequences of child and early-adolescent social withdrawal; and (*c*) present a developmental framework describing pathways to and from social withdrawal in childhood.

Keywords

shyness; behavioral inhibition; peer rejection; victimization; friendship; parenting

INTRODUCTION

Social withdrawal is not a clinically defined behavioral, social, or emotional disorder in childhood. Indeed, some individuals appear content to spend most of their hours and days removed from others. These individuals include those who spend significant time alone, working, playing, and otherwise acting on their computers. Others may design homes, automobiles, space modules, or may spend their time writing scripts, poems, lyrics, book chapters, and so forth. Often these individuals have a distinct need for solitude. Conversely, there are those individuals who, while in social company, avoid their confreres, or who actively choose lives of solitude to escape the initiation and maintenance of interpersonal relationships. And finally, there are individuals who have little choice in the matter of solitude because they are isolated or rejected by others in their social company, solitude could hardly be construed as psychologically or socially adaptive. It is not the display of

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DISCLOSURE STATEMENT

The authors are not aware of any biases that might be perceived as affecting the objectivity of this review.

solitude per se that may pose a problem; rather, the central issue is that social withdrawal may reflect underlying difficulties of a social or emotional nature.

To some researchers, the expression of social withdrawal represents the developmental outcome of particular temperamental dispositions (e.g., Fox et al. 2005). To others, withdrawal is viewed as a behavioral index of the child's isolation, exclusion, or rejection by the peer group (e.g., Boivin et al. 1995, Gazelle & Ladd 2003). Still others believe that social withdrawal in childhood, depending upon the age at which it is observed, reflects the lack of a social approach motive and a preference for object manipulation and construction over interpersonal exchange (e.g., Coplan et al. 2004). Finally, there are those who believe that social withdrawal is linked to psychological maladaptation as it represents a behavioral expression of internalized thoughts and feelings of social anxiety or depression (Vasa & Pine 2006). As the reader may deduce, social withdrawal is a somewhat fuzzy construct that has defied precise meaning and understanding. In this regard, it becomes immediately apparent why there has not been general agreement among traditionally trained clinical psychologists concerning the relevance and significance of social withdrawal vis-à-vis the development and expression of psychologically abnormal emotions, thoughts, and behaviors in childhood and adolescence.

Given the slippery nature of the phenomenon, one purpose of this review is to provide some definitional clarity for the construct of social withdrawal. Such clarity is particularly important because social withdrawal appears to have many "faces" (e.g., Rubin & Mills 1988), and the multiple forms of social solitude typically expressed in childhood carry with them different psychological functions and meanings (e.g., Asendorpf 1990, Coplan et al. 1994, Harrist et al. 1997). To make matters more confusing, the expression of different forms of solitude appears to have different meanings, not only at different points in childhood, but also within different social contexts (Rubin et al. 2002) and cultures (e.g., Chen et al. 2005). Before defining social withdrawal and associated constructs, we briefly describe the relatively recent history of the study of social withdrawal and relevant developmental and clinical theory. We also review the various ways in which social withdrawal, in its many forms, has been assessed.

A second purpose of this review is to examine factors that may predict social withdrawal during childhood. Third, we consider the correlates and consequences of child and early-adolescent social withdrawal. These latter two goals are accomplished by referring to a developmental framework within which pathways to and from social withdrawal are described (see Figure 1). We conclude this review with a discussion of future research directions.

The Significance of Peer Interaction and the Lack Thereof: Relevant History and Theory

Historically, social withdrawal has been considered by clinical psychologists to have limited developmental significance. For example, up until the late 1960s, it was argued that childhood social withdrawal was relatively unstable and not significantly predictive of maladjustment during the adolescent and adult periods (e.g., Kohlberg et al. 1972, Robins 1966). The studies from which these early conclusions were drawn, however, were methodologically and conceptually flawed (Rubin & Coplan 2004). For instance, the samples comprised the exclusive use of clinic or high-risk participants. There was an overreliance on teacher assessments of social withdrawal with unknown validity. And the central focus was on outcomes related to externalizing rather than internalizing disorders. Nevertheless, this view was prevalent until relatively recently despite the fact that developmental scientists have stressed the importance of peer interaction since the turn of the twentieth century.

Cooley (1902) was among the first to suggest that peer interaction made a significant contribution to children's socialization. And in his early writings, Piaget (e.g., 1932) argued that exposure to instances of peer conflict and opportunities for social negotiation aided children in the acquisition and development of perspective-taking skills, cause-and-effect social reasoning, and an understanding of morality.

Mead (1934) proposed that the ability to self-reflect, to consider the self in relation to others, and to understand the perspectives of others was largely a function of participation in organized, rule-governed activities with peers. He suggested that exchanges among peers, whether experienced in the arenas of cooperation or competition, conflict or friendly discussion, allowed the child to gain an understanding of the self as both a subject and an object. Sullivan (1953) proposed that the experience of peer relationships was essential for the child's development of the concepts of mutual respect, equality, and reciprocity. He emphasized the importance of "chumships," or special best-friendships, for the emergence of these concepts and also for psychological well-being. Theorists in the social learning camp have long suggested (and found) that children learn social behaviors and social norms directly through peer tutelage, reinforcement, and punishment, and indirectly by observing peers "in action" (Bandura & Walters 1963).

Current research on social withdrawal is also guided by the writings of Hinde (1987). From Hinde, social withdrawal can be considered an individual characteristic that influences the quality of a person's social relationships (e.g., friendship) and the individual's reputation and standing in the peer group (e.g., peer rejection). Hinde's conceptual model serves as a useful heuristic to present central lines of inquiry and major research findings regarding children who avoid and withdraw from the peer group.

Building upon the extant theoretical work, strong empirical support has developed for the notion that peer interactions (and the lack thereof) and the relationships that derive from children's interactions or solitude can serve to promote both adaptive and maladaptive social, emotional, and social-cognitive functioning (see Rubin et al. 2006a for a recent review).

Defining Social Withdrawal in Childhood

The study of children's and adolescents' solitary and withdrawn behavior has been associated with such constructs as shyness, behavioral inhibition, isolation and rejection, social reticence, passivity, and peer neglect. Oft-times, these referents have been used interchangeably, and inconsistencies in definitions and assessments have been pervasive. Recently, however, there has been an attempt to organize these varied constructs in a psychologically meaningful manner (e.g., Rubin & Asendorpf 1993, Rubin & Coplan 2004).

Rubin (1982) originally proposed a distinction between two causal processes that may underlie children's lack of social interaction. "Active isolation" denotes the process whereby some children spend time alone in social company because their peers actively reject and isolate them. Putative causes of active isolation are varied and include the display of such nonnormative, unacceptable behavior as aggression, undercontrolled impulsivity, and social immaturity, as well as such factors as minority group membership and interests and inclinations that vary from those of the majority of peer group members (e.g., Rubin & Mills 1988, Rubin et al. 2006a). In contrast, "social withdrawal" refers to the child's isolating himself/herself from the peer group. In this latter regard, social withdrawal is viewed as emanating from such internal factors as anxiety, negative self-esteem, and self-perceived difficulties in social skills and social relationships (Rubin & Asendorpf 1993). The roots of this conceptualization are founded in some of the earliest relevant research, with socially withdrawn children described as "those who are bothering themselves rather than others"

(Morris et al. 1954, p. 743). Of course, it may be the case that although some socially withdrawn children initially remove themselves from social interaction, they may also come to be excluded by peers. Thus, over time, it may become increasingly difficult to distinguish between withdrawal and active isolation. Indeed, social withdrawal in childhood may be a catalyst in a transactional model that describes the development of such negative outcomes as negative self-regard, loneliness, peer rejection, victimization, anxiety, and depression (see Figure 1).

In the end, social withdrawal may be best construed as an umbrella term describing a given behavioral prototype (solitude in one form or another) derived from a variety of underlying causes (Rubin & Coplan 2004). Thus, for example, many researchers have focused on fear, wariness, and anxiety as underlying affective contributors to children's withdrawal from their peers. In this regard, several related constructs have emerged.

Kagan, Fox, and colleagues (e.g., Fox et al. 2005, Kagan et al. 2007) have used the term "behavioral inhibition" (BI) to describe biologically based wariness during exposure to novel people, things, and places. Similarly, "shyness" has been conceptualized as wariness in the face of social novelty and/or self-conscious behavior in situations of perceived social evaluation (Asendorpf 1991, Cheek & Buss 1981, Crozier 1995, Zimbardo 1977). "Social reticence" represents a behavioral construct comprising the watching of others from afar, remaining unoccupied in social company, and hovering near but not engaging others in interaction (Coplan et al. 1994). This behavioral construct putatively reflects internalized feelings of social anxiety as well as conflicted motivations of approach and avoidance. "Anxious-solitude" has been used to denote wariness in familiar peer contexts (e.g., Gazelle & Ladd 2003, Gazelle & Rudolph 2004). These terms share the implication that solitude may result from conflicting emotions and motivations. That is, some children may be motivated to approach others to engage in social interaction; however, their social approach motivation is attenuated by social fear and anxiety, resulting in the simultaneous motivation to avoid others (e.g., Asendorpf 1990, Coplan et al. 2004).

Clearly, there is a conceptual similarity here with social phobia, an internalizing disorder characterized by "a marked and persistent fear of social or performance situations in which embarrassment may occur" (Am. Psychiatr. Assoc. 1994, p. 411). There has been some debate in the literature as to the conceptual nature of the relation between shyness and social phobia (i.e., Does social phobia refer to extreme shyness; Chavira et al. 2002). Indeed, Rapee and colleagues (2005) reported that 90% of "extremely shy" preschool-age children met criteria for an anxiety disorder. Results from a growing number of both retrospective and longitudinal studies have demonstrated empirical links between inhibition in early childhood and the development of anxiety disorders (particularly social phobia) in later childhood, adolescence, and adulthood (e.g., Schwartz et al. 1999, Van Ameringen et al. 1998).

Our review is centered on the broader construct of social withdrawal, with a particular focus on inhibition, shyness, and solitude. However, it is also the case that some children may engage in less social interaction because they are socially disinterested (or unsociable) and may simply prefer to play alone (Asendorpf 1990, Coplan et al. 2004). We review the extant literature on this understudied topic in a later section.

Clinical Perspectives

The construct of social withdrawal is found in almost every textbook or review chapter on abnormal or clinical child psychology (e.g., McClure & Pine 2006, Parker et al. 2006). It is also found on most standardized assessments of abnormal socio-emotional functioning (e.g., Achenbach & Edelbrock 1981). The phenomenon is consistently cited as evidence for an

"overcontrolled disorder" (e.g., Lewis & Miller 1990) or an internalizing problem (Achenbach & Edelbrock 1981). In source after source, social withdrawal is contrasted with aggression as one of the two most frequently identified major dimensions of dysfunctional behavior in childhood.

Social withdrawal is subsumed under several categories of disturbance in the *Diagnostic and Statistical Manual of Mental Disorders* (DSM IV, American Psychiatric Association 1994) and the *Classification of Mental and Behavioral Disorders* (ICD-10; World Health Org. 1993). In these systems, social withdrawal is viewed as a symptom rather than as a syndrome with its own etiology and prognoses; as such, it has been associated with such clinical disorders of childhood and adolescence as autism, anxiety and phobic disorders, major depression, personality disorders, and schizophrenia. In this review, we provide links between social withdrawal and anxiety and depression. A more detailed description of links between social withdrawal and diagnostic classifications may be found in Rubin et al. (2003).

Anxiety disorders represent one of the most common disorders of childhood (Achenbach 1982, Rapee & Sweeney 2001). Whatever it is that causes children's social fears and anxieties, their social interactions and relationships with peers are inevitably impaired. Clearly, the avoidance of social interaction may serve to reduce visceral arousal. If avoidant behavior does decrease anxiety, then social withdrawal or avoidance will be reinforced, and the probability of recurrence increased (see Crozier & Alden 2005 for relevant reviews). Not surprisingly, therefore, anxiety-disordered children often withdraw from social company. However, the relation between withdrawal and anxiety is likely transactional and cyclical in nature. Social withdrawal and avoidance interfere with the normal development of social skills. Such deficiencies in social skills will then serve to reinforce social anxiety and to foster negative self-appraisals and negative self-esteem (e.g., Nelson et al. 2005).

In contrast, social withdrawal accompanying depression may have different social consequences. Whereas social withdrawal induced by social anxiety may yield sympathy, interest, and social overtures from others, depressed-withdrawn individuals may attempt to elicit support in a way that actually causes others to withdraw from them or even ignore or reject them (e.g., Mullins et al. 1986). In support, Harrist and colleagues found that sad/ depressed young withdrawn children were rejected by their peers at the start of elementary school, whereas anxious-withdrawn children were not (Harrist et al. 1997). A partial understanding of why such interpersonal consequences ensue derives from the DSM-IV and ICD-10 descriptions of children who have major depression or dysthymia. These children experience depressed mood, social withdrawal, feelings of hopelessness, low self-esteem, and poor concentration, as well as appetite and sleep disturbances; hence, they are not particularly pleasant confreres. Moreover, others may view depressive behaviors as being within a person's realm of control, in contrast to being a victim of a nervous or anxious disposition.

Social withdrawal appears to be not only a concomitant but also a predictor of depression (Bell-Dolan et al. 1993, Rubin et al. 1995). Recently, Gullone et al. (2006) found that social withdrawal predicted depressive symptoms for those children who had insecure attachment relationships with their parents.

In summary, social withdrawal surfaces in numerous diagnostic categories of the two major classification systems, DSM-IV and ICD-10. Specifically, social withdrawal is listed as a symptom, or marker, of anxiety and phobic disorders and major depression. It may be that the forms of solitude and the motivations underlying these behavioral expressions vary from one disturbance to another.

THE ASSESSMENT OF SOCIAL WITHDRAWAL

A wide variety of measures has been used to assess childhood social withdrawal and its associated constructs, including behavioral observations, parent and teacher ratings, and peer and self-reports. The extant battery of measures captures the various forms and meanings of social withdrawal.

Some measures assess the broader construct of social withdrawal. For example, the Revised Class Play (RCP; Masten et al. 1985) is a widely used peer-rating procedure wherein classmates (or grade-mates) nominate peers who fit various behavioral descriptors. Rubin & Mills (1988) suggested separating the items that loaded on the original RCP Sensitivity/ Isolation factor (Masten et al. 1985) to create two conceptually distinct constructs-shyness/ social wariness (e.g., items such as "someone who is shy," "someone whose feelings get hurt easily") and social isolation/exclusion (e.g., "a person who is often left out"; "a person who can't get others to listen"). These two constructs have been found to be differentially correlated with such constructs as aggression and disruptive behavior (e.g., Zeller et al. 2003), results which nicely demonstrate that children can distinguish between their shy/ withdrawn and rejected/isolated peers, at least during late childhood and early adolescence when peer nomination measures are most commonly used. More recently, Rubin and colleagues have added items to this measure to create an Extended Class Play; this measure further distinguishes between peer rejection/isolation/victimization (e.g., "someone who is hit or kicked by others") and shyness/social withdrawal (e.g., "someone who gets nervous about participating in class discussions"; see Rubin et al. 2006d).

Researchers have also used items from the Child Behavior Checklist and Teacher Report Form (Achenbach & Rescorla 2006) to obtain parents' and teachers' perceptions of social withdrawal. The items from these measures provide a broader-based assessment of several aspects of children's socially withdrawn behaviors. As well, behavioral observations have been employed (e.g., the Play Observation Scale; Rubin 2001) to assess different forms of solitude in the presence of both unfamiliar peers and classmates at school. A more detailed discussion of the different types of children's nonsocial behaviors is presented below.

Several additional taxonomies have been developed to assess such constructs as behavioral inhibition, shyness, and anxious-solitude. For example, BI is typically assessed in an observational paradigm developed by Kagan and colleagues (e.g., Kagan et al. 1988). Young children are presented with a series of novel events involving adult strangers. Inhibition is indicated by such measures as latency to approach the adult stranger, latency to offer the first spontaneous utterance, and proximity to mother. In a move away from assessing inhibition in the company of unfamiliar adults who behave in unfamiliar ways (e.g., dressed in a clown costume; not referencing the child when entering the room), Rubin and colleagues (e.g., Rubin et al. 1997) developed a procedure to assess BI in the company of unfamiliar toddler peers. Measures included the toddler's maintenance of contact with his/ her mother and the frequency of anxious behaviors. Interestingly, there was little overlap between inhibition as assessed by the adult and peer paradigms (Rubin et al. 1997). Bishop and colleagues (2003) recently developed a parent and teacher rating scale (Behavioral Inhibition Questionnaire) designed to assess behavioral inhibition in peer situations and in response to behavioral challenges, separation, performance situations, unfamiliar adults, and other novel situations. They reported that both maternal and teacher reports of BI were strongly associated with observed BI in the Kagan paradigm.

Several parent-rating measures exist to assess shyness in childhood, including the Colorado Child Temperament Inventory (Rowe & Plomin 1977) and the Child Social Preference Scale (Coplan et al. 2004). The latter also indexes social disinterest. For older children and

adolescents, self-report measures of shyness include the Revised Cheek and Buss Shyness Scale (Cheek & Buss 1981) and the Children's Shyness Questionnaire (CSQ; Crozier 1995).

Finally, a number of different teacher rating scales have been employed to assess children's shy and socially anxious behaviors at daycare, preschool, and elementary school. For example, the "anxious with peers" subscale of the Child Behavior Scale (Ladd & Profilet 1996) and items from the previously noted Teacher Report Form (Achenbach 1991) measure the construct of anxious-solitude (Gazelle & Ladd 2003). The anxiety and withdrawal items from the Social Behavior Questionnaire (Tremblay et al. 1991) have been used to assess childhood anxiety-social withdrawal (Pedersen et al. 2007).

There is moderate to high agreement between sources of assessment with regard to measures of BI, shyness, and social withdrawal (Bishop et al. 2003, Coplan et al. 2008, Ladd & Profilet 1996). However, some researchers have suggested that discrepancies between such ratings may be meaningful. For example, Spooner et al. (2005) reported that a group of self-reported shy children whose shyness was "undetected" at school (i.e., they were not rated as shy by teachers) had low self-esteem.

THE DEVELOPMENTAL COURSE OF CHILDHOOD SOCIAL WITHDRAWAL

Biological Foundations

Many researchers and theorists contend that the expression of solitary behavior that reflects internalized feelings of social anxiety is rooted in differences in the excitability of the amygdala and its projections to the cortex, hypothalamus, sympathetic nervous system, corpus striatum, and central gray (Kagan et al. 1993). Thus, it is argued that that enhanced amygdala activation to novelty and activation of "fear" circuitry may underlie not only infant negative reactivity to novelty, but also BI and preschool social reticence (Degnan & Fox 2007, Fox et al. 2001, Kagan et al. 1988). In support of these conjectures, McManis and colleagues (2002) have reported that children who were emotionally reactive at 4 months and who displayed high levels of BI at ages 14 and 21 months were likely to demonstrate right frontal electroencephalogram (EEG) asymmetries in late childhood. Similar concurrent and predictive associations have been revealed between right frontal EEG asymmetry and BI in infancy and reticence in early childhood (see Fox et al. 2005 for an extensive review). And recently, Henderson and colleagues (2004) found that two types of solitude (social reticence and solitary-constructive and exploratory behavior) were associated with a pattern of greater relative right frontal EEG asymmetry. However, reticent children were rated by their mothers to be more socially fearful and displayed lower cardiac vagal tone than those children who were observed to spend time exploring and constructing on their own while in social company.

Further support of an underlying biological constitution of socially inhibited and reticent behavior is drawn from studies indicating that lower cardiac vagal tone is concurrently and predictively associated with BI, a precursor of socially reticent behavior (Fox et al. 2001, Rubin et al. 2002) and social reticence itself during early childhood (Rubin et al. 1997). Furthermore, Hastings et al. (2005) reported that observed BI, maternal reports of social fearfulness, and cardiac vagal tone loaded on a single factor (with cardiac vagal tone loading negatively) at two years of age. And finally, the hypothalamic-pituitary-adrenocortical axis is thought to be activated during stressful or novel situations. Finally, researchers have demonstrated that elevated cortisol (a stress hormone) is associated with the demonstration of behavioral inhibition (Spangler & Schieche 1998) and social reticence (Schmidt et al. 1997) in early childhood. Additional work on the associations between event-related potentials, functional magnetic resonance imaging, and the demonstration of BI and social solitude has been recently thoroughly reviewed in Fox et al. (2005).

Taken together, the relations between biology and behavior in the study of social withdrawal may be best thought of as transactional in nature. We contend that biological factors may underlie the display of BI and reticence. In turn, behavioral indicators of underlying biologically based fearfulness and anxiety may evoke social responses from parents and peers (see Figure 1 and discussion below). These responses may affect inhibited and fearful children in such a way that physiologically based dispositions and those behaviors reflective of them are maintained or modified (see also Degnan & Fox 2007).

The Stability of Social Withdrawal

Given that biological factors may provide a constitutional basis for the expression of inhibited, shy, and withdrawn behavior, one might expect that the behavioral tendency to withdraw from and avoid peers would be relatively stable. Beginning in early childhood, observations of BI at two years are significant predictors of social wariness and reticence at four years and beyond (e.g., Kagan et al. 1988, Rubin et al. 2002). Moreover, BI, shyness, social reticence, and social withdrawal appear to be moderately stable from the preschool period through adolescence and early adulthood (Caspi et al. 2003, Degnan et al. 2008, Denissen et al. 2008, Hart et al. 1997, Sanson et al. 1996). Typically, across all developmental periods, children at the extremes of social withdrawal show the greatest stability in their behavior over time (e.g., Asendorpf & van Aken 1994, Schneider et al. 1988, Schwartz et al. 1999). Rubin et al. (1995), for example, found that approximately two-thirds of children identified as extreme in social withdrawal maintained their status across any two-year period from five to eleven years.

In addition to temporal stability, several investigators have examined the cross-contextual consistency of social withdrawal (e.g., Coplan & Rubin 1998; Rubin 1993; Schneider et al. 1998, 2000). For example, Schneider and colleagues have shown that socially withdrawn children and young adolescents avoid their peers consistently across a variety of different social settings, including in the school, home, and the larger community (Schneider et al. 1998, 2000).

In summary, these findings nicely illustrate that many children who withdraw from their peers do so consistently across time and context. And it may be that biological factors play a contributing role in this stability. However, human physiology is hardly immutable. Thankfully, not all behaviorally inhibited infants and toddlers go on to become withdrawn and socially anxious children (Degnan & Fox 2007). In recent years, researchers have implicated such factors as parenting style, the quality of the parent-child relationship, and the quality of children's and adolescents' peer relationships in the development, maintenance, and moderation of socially withdrawn behavioral patterns. We review this work below.

Parenting

Attachment relationships—Attachment theorists have long maintained that the primary attachment relationship develops during the first year of life, usually between the mother and the infant. Maternal sensitivity and responsiveness influence whether the relationship will be secure or insecure (Ainsworth et al. 1978). Researchers have shown that secure attachment predicts social competence, whereas insecurity predicts both externalizing (aggression) and internalizing (withdrawal) forms of behavior (Shamir-Essakow et al. 2005, van Brakel et al. 2006). In the case of the latter, it is suggested that insecure "ambivalent" infants ("C" babies) are guided by a fear of rejection; consequently, in their extrafamilial peer relationships they are postulated to attempt to avoid rejection through passive, adult-dependent behavior and withdrawal. This posited connection between C status (ambivalent attachment) and inhibited, dependent, withdrawn behaviors has been supported in several

studies (e.g., Calkins & Fox 1992, Erickson et al. 1985, Renken et al. 1989, Shulman et al. 1994).

Parenting and parenting beliefs—It bears noting, however, that insecure attachment relationships are also predicted by maternal behavior. For example, mothers of insecurely attached C babies are overinvolved and overcontrolling when compared with mothers of securely attached babies (Erickson et al. 1985). It is this overcontrolling, intrusive, and overly protective parenting style that is strongly associated, contemporaneously and predictively, with BI and socially withdrawn and reticent behavior. The association between overcontrolling, intrusive, and overly protective parenting and socially withdrawn and anxious behavior may be best expressed as follows. Parents who are overly protective and directive tend to overmanage situations for their children, restrict their children's behaviors, discourage independence, and control their children's activities. As a result, it has been posited that dispositionally inhibited children who are raised by overly restrictive, protective, and controlling parents may not develop necessary coping and problem-solving strategies in their interpersonal milieus.

Contemporaneous and predictive links between parental overprotectiveness, overcontrol, and intrusion and children's socially wary and withdrawn behavior have been reported in several studies (e.g., Barber et al. 1994; Coplan et al. 2004; Lieb et al. 2000; Mills & Rubin 1998; Rubin et al. 1997, 2001). Taken together, these findings support earlier, classic writings pertaining to the role of parental overprotectiveness in the development of anxiety and social withdrawal (Levy 1943, Winder & Rau 1962). Moreover, the data also support the growing clinical literature linking overprotective, intrusive parenting to the development of social anxiety, of which social withdrawal is a behavioral indicator (Hudson & Rapee 2001, Manassis & Bradley 1994).

Of course, children's social reticence and withdrawal may also cause parental overprotection and overcontrol. Indeed, Rubin and colleagues have consistently reported that toddler BI and preschool reticence predict subsequent parental directiveness and overcontrol (e.g., Hastings & Rubin 1999, Rubin et al. 1999). In this sense, it has been suggested that when some parents perceive their children to be socially anxious and vulnerable, they attempt to be supportive by manipulating their children's social behaviors in a power-assertive, highly directive fashion (that is, they direct their children's behavior). Thus, for parents of socially withdrawn children, simply anticipating or viewing their children's withdrawal in the company of peers may evoke parental feelings of concern and sympathy (Mills & Rubin 1990, Rubin & Mills 1992). These anticipations or experiences may be triggered by parental beliefs that their child's withdrawal from social company is dispositionally based (Mills & Rubin 1990), that it is associated with strong and debilitating child feelings of social anxiety (e.g., Fox et al. 1996, Hastings et al. 2005), and that it is accompanied by child behaviors that evoke, in peers, attempts to be socially dominant. In turn, these beliefs may evoke parental behavior of a quick fix variety. That is, to release the child from social discomfort, the parent may simply take over by telling the child what to do and how to do it (Rubin et al. 1999). In transactional models of the development of social withdrawal and anxiety (see Figure 1), these parenting behaviors are thought to reinforce the child's feelings of insecurity, resulting in the maintenance of a cycle of child hopelessness/helplessness and parent overcontrol/overprotection (Barrett et al. 1996, Rapee 1997, Wood et al. 2003). Moreover, allowing the child to avoid feared social behaviors, over time, may prevent the child from attaining developmentally appropriate social competencies.

These findings suggest that the developmental course of social withdrawal may emanate from parental reactions to their young children's biologically based characteristics. For example, Rubin and colleagues (2002) found that for toddlers whose mothers were overly

solicitous and controlling, BI among peers predicted subsequent reticent behavior in the preschool peer group; however, for toddlers whose mothers were not intrusively controlling, the relation between toddler BI and preschool reticence was nonsignificant.

Coplan et al. (2008) recently reported a moderating role of parental characteristics in the relations between temperamental shyness and socio-emotional adjustment in kindergarten. Results indicated that relations between shyness (as assessed at the start of the school year) and indices of maladjustment (at the end of the school year) were significantly stronger among children with mothers characterized by higher neuroticism, threat sensitivity, and an overprotective parenting style, and the relations were significantly weaker for children with mothers characterized by high agreeableness and an authoritative parenting style.

Researchers have also examined the role of parenting in the stability of socially inhibited and withdrawn behaviors beyond early childhood. For example, Hane and colleagues (2008) reported that 4-year shyness predicted 7-year observed social withdrawal among peers when mothers engaged them with low degrees of positivity. The relation between 4-year shyness and 7-year withdrawal was nonsignificant when mothers engaged in high degrees of positivity. Relatedly, observed preschool reticence among peers predicted observed 7-year social withdrawal only when mothers were observed to be highly negative during observed interactions at 7 years of age. Similarly, Degnan et al. (2008) found that when mothers were highly negative (high control and intrusiveness), their negatively reactive infants exhibited greater social wariness at 7 years than was the case for positively reactive infants. Also, maternal solicitous behavior, as assessed during mothers' free play with their preschoolers, moderated the continuity between preschool reticence and 7-year social wariness and withdrawal. Thus, for children with mothers observed to be low on solicitousness, 4-year reticence was not significantly related to 7-year social wariness and withdrawal; however, for children with mothers observed to be highly solicitous, 4-year reticence was positively related to 7-year social wariness and withdrawal.

In summary, we have painted a portrait of mothers (and in one study, fathers; Rubin et al. 1999) of socially reticent and anxiously withdrawn children as endorsing and practicing intrusive, controlling, and overprotective parenting strategies that are likely detrimental to the child's developing senses of autonomy and social efficacy (see also Wood et al. 2003). Significantly, almost identical results have derived from retrospective studies of socially anxious and shy adults. In these latter cases, it has been found that among the parenting characteristics described by this group of adults, overprotection, control, and insensitivity stand out (e.g., Schlette et al. 1998). Such parenting beliefs and behaviors are not conducive to the development of social competence or positive self-regard. Indeed, research has shown that an overprotective, overly concerned parenting style is associated with submissiveness, dependency, and timidity in early childhood. These characteristics are typical of socially withdrawn children and may increase the likelihood of problematic peer relations (Olweus 1993). We expand on this point in the sections below wherein we focus on the peer relationships of socially withdrawn children.

CORRELATES AND CONSEQUENCES OF CHILDHOOD SOCIAL WITHDRAWAL

Peer Interactions

In social milieus, shy-withdrawn children rarely initiate contact with peers, take longer than typical children to initiate conversation, and speak less frequently than their nonwithdrawn counterparts (e.g., Asendorpf & Meier 1993, Coplan et al. 2008, Crozier & Perkins 2002, Evans 2001). This description not only describes the social initiations and interactions of socially withdrawn children, it partially defines the construct of withdrawal.

When socially withdrawn children do interact with peers, they appear to be less socially competent than typical children (e.g., Bohlin et al. 2005, Chen et al. 2006, Nelson et al. 2005, Rubin & Krasnor 1986). For example, in an observational study, Stewart & Rubin (1995) found that socially withdrawn children pursued more lower-cost social goals (e.g., "Could you look at this?") and fewer high-cost social goals ("Can I play with you?"), and that their attempts to meet their social goals were less likely to succeed than those of their nonwithdrawn age-mates.

In recent years, researchers have also begun to explore the underlying meanings and consequences of different subtypes of observed socially withdrawn (i.e., solitary) behaviors. As noted above, reticent behavior is considered a behavioral expression of a social approach-avoidance conflict (Asendorpf 1990) and includes the prolonged watching of other children without accompanying play (onlooking) and being unoccupied (Coplan et al. 1994). Strong empirical support links right frontal EEG asymmetries, low vagal tone, adult-rated shyness, and observed BI with observed reticence with both unfamiliar and familiar peers in the laboratory and at school (Degnan et al. 2008, Fox et al. 2005). Importantly, however, much of this work has been limited to samples of 4- to 7-year-olds.

Early studies of solitary-passive play, which includes quiet exploration and solitary, constructive activities (Rubin 1982), indicated that it was a relatively benign form of nonsocial play, at least in early childhood (Coplan et al. 1994, Rubin 1982). In this regard, it was speculated that solitary-passive play may be a behavioral marker of social disinterest (e.g., Rubin & Asendorpf 1993). Intuitively, this assumption makes sense; children who are socially disinterested would be expected to spend more time alone than engaging in social interaction.

However, recent results have called this assumption into question. To begin with, Coplan and colleagues (2004) reported that parent-rated social disinterest was not associated with observed solitude of any form. Henderson et al. (2004) speculated that for some shy children, solitary-passive behavior may serve as a strategy for coping with feelings of social unease. That is, having learned early that the expression of socially reticent behavior elicits peer rejection and victimization (see below), some socially anxious children may mask their social qualms by expressing quiet constructive and exploratory activity among peers. Furthermore, results from several recent studies have suggested that solitary-passive behavior in early childhood may, like reticence, be a liability (Spinrad et al. 2004), especially for boys (Coplan et al. 2001, Nelson et al. 2005). At this time, it would be prudent to assume that children may display solitary-passive play for different reasons. But again, it is important to note that there does not exist a literature on solitary-passive behavior beyond the mid-elementary school years.

Peer Relationships

Rejection, victimization, and submissiveness—As noted above, when socially withdrawn children attempt to meet their social goals in the company of their peers, they are more likely to directly experience peer neglect and rejection than their more sociable agemates (e.g., Chen et al. 2006, Nelson et al. 2005, Rubin & Krasnor 1986, Stewart & Rubin 1995). Relatedly, it is also well known that socially withdrawn children are actively disliked by their peers (Boivin et al. 1995, Gazelle & Ladd 2003, Hart et al. 2000, Ladd 2006, Oh et al. 2008, Ollendick et al. 1990, Rubin et al. 1993). In fact, social withdrawal is one of the strongest correlates and consequences of peer rejection during middle childhood and adolescence (e.g., Deater-Deckard 2001, Newcomb et al. 1993). It is argued that peers reject socially withdrawn children because their demeanor runs contrary to age-specific norms and expectations for social interaction and relationship- and group-involvement (Rubin et al. 2006d). Furthermore, researchers have argued that atypical behavior becomes more salient

to the peer group with increased age; this may explain why the association between social withdrawal and peer rejection steadily increases with age (Ladd 2006).

Approximately 10% of the school population experiences victimization by peers (Natl. Inst. Child Health Human Dev. 2001, Olweus 1984). Children who are victimized experience repeated and consistent physical and verbal abuse from their peers and classmates. Given the reserved and quiescent demeanor of many socially withdrawn children and given that they often attempt to avoid social company to begin with, one might expect that they would be protected from a bullying experience. After all, why would bullies bother to victimize those who are socially restrained and unremarkable? And yet, researchers have consistently reported that this group of children and young adolescents is at high risk for peer victimization (e.g., Hanish & Guerra 2004, Kochenderfer-Ladd 2003). Significant associations have also been revealed between social anxiety and victimization during later childhood and early adolescence (e.g., Grills & Ollendick 2002).

Aggressive children may "invite" or encourage peer victimization through peer provocation (e.g., upsetting other children, initiating fights). In contrast, the shy, timid nature of socially withdrawn children may elicit the social perception of being easy targets. They may evoke victimization precisely because they present themselves as physically and emotionally weak and unlikely to retaliate (e.g., Rubin et al. 2006d). This view is consistent with Olweus's (1993) characterization of socially withdrawn boys as "whipping boys" and with Perry and colleagues' research on "passive victims" (e.g., Perry et al. 1988). Because social withdrawal and avoidance are strategies often used to cope with peer victimization (Eisenberg et al. 1998, Gazelle & Rudolph 2004), a transactional cycle may exist whereby the initially withdrawn child is victimized, which in turn increases his/her withdrawal from social company and subsequent victimization.

Friendships—Although socially withdrawn children may have difficulties forming large numbers of friendships (Pedersen et al. 2007), it is nevertheless the case that withdrawn children and young adolescents are as likely as their typical age-mates to have at least one mutual and stable best friend (e.g., Ladd & Burgess 1999, Rubin et al. 2006d, Schneider 1999). Rubin and colleagues (2006d), for example, found that approximately 65% of socially withdrawn 10-year-olds had a mutual best friendship, and approximately 70% of these best friendships were maintained across the academic year; these friendship-involvement and -stability percentages were nearly identical to those of nonwithdrawn 10-year-olds. Thus, despite their difficulties in the larger peer group, withdrawn children do appear able to form and maintain close dyadic relationships within the school milieu.

Prevalence aside, it is nevertheless the case that socially withdrawn children do differ from their peers on other dimensions of friendship. To begin with, investigators have found greater similarities between friends than between non-friends in terms of shared internalized distress (Hogue & Steinberg 1995) and social withdrawal and shyness (Haselager et al. 1998). Moreover, the best friends of extremely withdrawn children and young adolescents are more likely to be socially withdrawn and victimized than are the mutual best friends of nonwithdrawn children (Rubin et al. 2006d). Thus, many socially withdrawn children and young adolescents appear to be involved in friendships with other children who are experiencing similar psychosocial difficulties.

The friendships of socially withdrawn children and young adolescents also tend to be relatively poor in relationship quality. Schneider (1999) reported that eight- and nine-year-old friendship dyads comprising one or two socially withdrawn children were rated by observers as relatively restricted in their verbal communication. And Rubin et al. (2006d) found that withdrawn young adolescents rated their best friendships as lacking in

helpfulness, guidance, and intimate disclosure; the best friends of these withdrawn young adolescents rated their friendships as involving less fun and help and guidance than did the best friends of nonwithdrawn young adolescents.

Importantly, the extent to which group and dyadic relationship factors conspire to maintain or alter the developmental trajectories of social withdrawal in early adolescence has been examined by Oh et al. (2008). These researchers found three distinct growth trajectory classes for social withdrawal from the final year of elementary school (fifth grade), across the transition to middle school (sixth grade), and then to the final year of middle school (eighth grade): a low stable, an increasing, and a decreasing class. Friendlessness, friendship instability, and exclusion and victimization by peers were significant predictors of the trajectory of increased social withdrawal over the four-year period. Decreases in social withdrawal were evident for those young adolescents who experienced decreases in rejection and victimization as they made the transition from elementary to middle school. In many ways, this finding is consistent with those of Gazelle & Rudolph (2004), who reported that when anxious-solitary youth experienced less peer exclusion they displayed an increase in social approach. Taken together, these findings may suggest that withdrawn children and young adolescents experience increased motivation to engage others in social interaction when the social landscape becomes "kinder" and "gentler."

Self and Social Cognitions

Given that socially withdrawn children and young adolescents often experience peer rejection and victimization, it should not be surprising that they feel and think poorly of themselves. Moreover, as noted above, the social initiations of socially withdrawn children often result in peer noncompliance despite the fact that these initiations and requests are less likely than are those of nonwithdrawn children to require carrying out action that involves both effort and mobility (Rubin & Krasnor 1986, Stewart & Rubin 1995). This in vivo failure to obtain peer compliance and collegiality with peers has been found to predict negative self-perceptions of social skills and peer relationships (e.g., Nelson et al. 2005). That is, real-life peer rejection (e.g., noncompliance) predicts negative thoughts and feelings about the self. Importantly, socially withdrawn children's self-perceptions are quite accurate; that is, they are well aware of their social difficulties (e.g., Asendorpf 1994).

Thus, it should not be surprising that social withdrawal is also associated with loneliness and depressed affect from the earliest years of childhood through early adolescence (e.g., Coplan et al. 2007, Eisenberg et al. 1998, Hymel et al. 1990, Prior et al. 2000). Moreover, the combination of withdrawal and peer rejection, exclusion, and/or victimization appears to be the strongest predictor of these negative outcomes (e.g., Bell-Dolan et al. 1995, Boivin & Hymel 1997, Gazelle & Ladd 2003, Gazelle & Rudolph 2004), supporting the premise that it is the negative response of the peer group that results in withdrawn children's internalized negative thoughts and feelings.

Rubin and colleagues (e.g., Rubin et al. 2003, 2008) have further posited that the consistent and stable experience of rejection and victimization experienced by withdrawn children may lead to the development of an attributional schema in which social failures are blamed on internal rather than external or situational causes. Consistent with this supposition is the earlier finding that extremely withdrawn children blamed their social failures on personal, dispositional characteristics rather than on external events or circumstances (Rubin & Krasnor 1986). Indeed, these findings were expanded upon by Wichmann et al. (2004), who reported that when 9- to-13-year-old withdrawn children were presented with hypothetical social situations in which they experienced ambiguously caused negative events, they attributed the causes of these events to internal and stable "self-defeating" causes. Moreover, when asked how they go about resolving the experienced dilemma, withdrawn children

indicated a preferred strategy of withdrawal and escape (see also Burgess et al. 2006). Taken together, these results are reminiscent of Graham & Juvonen's (2001) findings that youngsters who identified themselves as victimized by peers blamed themselves for their peer relationship problems. Given that self-blame and avoidant coping can lead to a variety of negative outcomes of an internalizing nature, such as depression, low self-esteem, and increased withdrawal (e.g., Garnefski et al. 2005, Reijntjes et al. 2006), the aforementioned findings suggest a self-reinforcing cycle of negative socioemotional and social-cognitive functioning for socially withdrawn children.

LONG-TERM CONSEQUENCES OF SOCIAL WITHDRAWAL AND RELATED CONSTRUCTS

Over the past two decades, it has become increasingly clear that there are long-term costs associated with childhood inhibition, shyness, and withdrawal. It is known that internalizing problems (e.g., loneliness, anxiety, and depression) are contemporaneous correlates of childhood and early adolescent social withdrawal (e.g., Boivin et al. 1995, Morison & Masten 1991, Ollendick et al. 1990). In the Waterloo Longitudinal Project, Rubin and colleagues reported that observed and peer-rated social withdrawal at seven years of age predicted self-reported negative self-regard and loneliness at nine and ten years of age (Hymel et al. 1990, Rubin et al. 1989). Moreover, social withdrawal at seven years predicted loneliness, depression, and negative self-regard at 14 years (e.g., Rubin et al. 1995). Other researchers have reported similar longitudinal relations between social withdrawal and later problems of the internalizing ilk (e.g., Boivin et al. 1995, Ollendick et al. 1990).

Similarly, in reports deriving from the Australian Temperament Project, it has been found that children rated as consistently shy from early childhood onward were at high risk for the development of anxiety; indeed, 42% of children rated as highly shy in early childhood had anxiety problems in adolescence; those never rated as shy had an 11% incidence of anxiety difficulties (Prior et al. 2000). Relatedly, there exists evidence that extremely inhibited children are at increased risk for developing anxiety disorders (particularly social phobia) in later childhood and adolescence (e.g., Hayward et al. 1998, Schwartz et al. 1999).

Asendorpf and colleagues (e.g., Asendorpf & van Aken 1999, Denissen et al. 2008) have reported that shy-inhibited children are viewed by both teachers and parents as having an overcontrolled personality. These are children who are simultaneously high in ego-control and low in ego-resiliency (Block & Block 1980). In their longitudinal follow-ups of such children, Asendorpf and colleagues have found that, over a 19-year period, overcontrolled children remained consistently shyer as young adults than resilient-competent children (Asendorpf & Denissen 2006). For children who viewed themselves as shy, Asendorpf found an association with perceived lack of support from peers. Moreover, over the long run, shy males (but not females) entered romantic relationships later than nonshy males, a finding in keeping with that of Caspi and colleagues (Caspi et al. 1988).

ACADEMICS AND SCHOOL ADJUSTMENT

Going to school appears to be particularly stressful for shy-withdrawn children. Coplan & Arbeau (2008) cite the presence of a large group of (initially unfamiliar) peers, increased demands for verbal participation, and a high child-to-staff ratio as factors that may exacerbate shy-withdrawn feelings of social fear and self-consciousness. Indeed, there is increasing empirical support for the notion that the transition to school is particularly problematic for shy-withdrawn children (Coplan et al. 2008, Evans 2001, Rimm-Kaufman & Kagan 2005).

Language skills

Along with refraining from interaction with peers, speech restraint is central to most operational definitions of shyness and social withdrawal (e.g., Rezendes et al. 1993). It has been well documented that shy-withdrawn children speak less frequently than do their peers to both children and adults in the classroom environment (Asendorpf & Meier 1993, Evans 2001, Evans & Bienert 1992, Rimm-Kaufman et al. 2002, Rimm-Kaufman & Kagan 2005).

Shy-withdrawn children tend to perform more poorly than nonshy-withdrawn children on standardized tests of expressive language (e.g., Crozier & Perkins 2002, Evans 1996, Spere et al. 2004). And yet, findings regarding indices of receptive language skills have been less consistent, with some researchers reporting poorer performance by shy-withdrawn children (e.g., Crozier & Perkins 2002, Spere et al. 2004), and others failing to find such associations (e.g., Evans 1996). This has led to some debate as to whether shy children might suffer from a performance deficit (as a result of the social stresses of the testing environment) as opposed to a competence deficit (e.g., Crozier & Hostettler 2003).

Notwithstanding the "actual" language abilities of shy-withdrawn children, it has been suggested that individual differences in language abilities may serve as an important moderator of the relations between withdrawal and adjustment (Asendorpf 1994). Coplan & Armer (2005) found that the relation between shyness and indices of school maladjustment were significantly reduced at higher levels of expressive language. Similar results were also recently reported in terms of pragmatic language skills (Coplan & Weeks 2008). Perhaps then, the inability or reticence to be verbally expressive in the classroom may be considered atypical and unacceptable to classmates. This may result in rejection by peers, and peer rejection is known to predict poor school performance even in the earliest school years (Buhs & Ladd 2001, Ladd et al. 1999). Consequently, if expressive language skills facilitate the social and school adjustment of shy-withdrawn children, then these findings should be incorporated into the design of intervention programs.

Academic achievement

There is preliminary evidence linking shyness-withdrawal with a lack of displayed academic competence both in early (e.g., Coplan et al. 2001, Lloyd & Howe 2003) and later childhood (Masten et al. 1985). Student participation and social interaction are viewed as important contributors to the attainment of learning objectives (Daly & Korinek 1980). In this regard, teachers may perceive withdrawn children's quietness as a lack of interest or understanding of a topic (Crozier & Perkins 2002). Indeed, teachers and peers perceive "quiet" children as being less intelligent (e.g., McCroskey & Daly 1976, Richmond et al. 1985). In addition, anxiety, self-consciousness, and worries about being called upon may interfere with shywithdrawn children's classroom earning (Evans 2001). This may contribute to a lack of academic confidence, which is evidenced in withdrawn children's tendency to rate themselves more poorly on self-report measures of scholastic and academic competence (e.g., Crozier 1995).

Finally, when given the opportunity to demonstrate their academic competence, shy children may evidence performance deficits because of stress associated with test performance. Crozier & Hostettler (2003) recently explored the academic achievement (vocabulary and math) of shy children in three different testing environments: (*a*) individually administered oral assessments; (*b*) individually administered written assessments; and (*c*) group-administered written assessment. Results indicated that shy children scored significantly lower than nonshy children in both individually administered conditions, but there were no significant differences between groups in the group-administered condition. These researchers suggested that in a group setting, shy children did not feel the same performance

pressure that is experienced in individual administration settings. These findings have potentially important implications for assessing the academic performance of shy-withdrawn children.

Teacher-child relationships and classroom climate

Some researchers have suggested that withdrawn children may either go unnoticed by teachers or that teachers may encourage shy behaviors because reserved, quiescent, compliant behavior helps to maintain classroom order (e.g., Keogh 2003, Rimm-Kaufman et al. 2002). However, recent findings suggest that shy-withdrawn children do not go unnoticed by teachers. For example, researchers have reported that that socially withdrawn children require more attention from teachers (e.g., Coplan & Prakash 2003) and develop less close and more highly dependent relationships with them (e.g., Ladd & Burgess 1999, Rudasill et al. 2006). Moreover, children whose relationships with teachers are characterized by less closeness and greater dependency are at increased concurrent and predictive risk for a number of school adjustment difficulties (e.g., Hamre & Pianta 2006).

Importantly, moderating effects may derive from classroom climate. Gazelle (2006) found that anxiously withdrawn first graders were more rejected (boys) and victimized (girls) by peers and demonstrated more depressive symptoms (girls) in classrooms with negative emotional climates (i.e., frequent disruptive child behaviors, conflictual relationships between students and teacher, infrequent prosocial peer interactions).

Sex Differences

There is little evidence to suggest that sex differences exist in the prevalence or frequency of inhibition, shyness, and social withdrawal in childhood and early adolescence. This lack of sex differences has been reported for observed behavioral inhibition (e.g., Mullen et al. 1993); parent-reported child shyness (e.g., Coplan et al. 2004, Rowe & Plomin 1977); observed social withdrawal in the peer group (e.g., Coplan et al. 2001); peer-nominated social withdrawal (e.g., Lemerise 1997, Rubin et al. 1993); and teacher-rated social anxiety and withdrawal (e.g., Ladd & Profilet 1996, Thijs et al. 2004). The one exception derives from self-reports; young adolescent girls tend to self-report greater shyness than boys (e.g., Crozier 1995).

Notwithstanding, strong evidence suggests that shyness-withdrawal carries a greater cost for boys than girls. Henderson et al. (2001) found that negative reactivity at 9 months predicted displays of social wariness at age 4 years for boys but not for girls. And Dettling et al. (1999) noted that shyness in preschool-aged boys but not girls was associated with increased cortisol levels over the day at childcare. Put another way, shy boys appear to experience greater stress as the day progresses in a social setting. As well, beginning in early childhood, shy-withdrawn boys are more likely to be excluded and rejected by peers than are shy-withdrawn girls (e.g., Coplan et al. 2004, Coplan & Arbeau 2008, Gazelle & Ladd 2003).

Across the lifespan, shyness-withdrawal appears to be more strongly associated with socioemotional difficulties for boys than for girls. Thus, socially withdrawn boys but not girls describe themselves as more lonely, as having poorer social skills, and as having lower selfesteem than their typical peers (Morison & Masten 1991, Nelson et al. 2005, Rubin et al. 1993). Caspi and colleagues (1988) found that males who were shy in childhood married, became fathers, and established careers at a later age than their nonshy peers. In contrast, females who were shy in childhood did not marry or start families later than other women in the same cohort. The different outcomes associated with social withdrawal for boys may be partly attributable to societal or cultural expectations; in Western societies, shyness-withdrawal appears to be less acceptable for boys than for girls (Sadker & Sadker 1994). Findings can also be explained, in part, by the ways in which parents think about shyness and social withdrawal and how they respond to or interact with their shy or socially withdrawn sons and daughters. For example, the mothers of inhibited-withdrawn toddler and preschool age girls are reported to be warm, responsive, and sensitive; mothers of young withdrawn boys are reportedly more power assertive, less affectionate, and less responsive than parents of typical children (e.g., Stevenson-Hinde 1989). Although it is difficult to ascertain whether dispositional factors lead to different parental responses or whether different parenting behavior leads to different social behavioral profiles for boys versus girls, the bottom line is that passive, inhibited, withdrawn boys experience socialization and social relationship histories that differ from their female counterparts.

Culture

A thorough review of cultural differences in the prevalence, correlates, and consequences of BI, reticence, shyness, and social withdrawal appeared in the *Annual Review of Psychology* in 2008 (Chen & French 2008). Consequently, the review presented here is rather abbreviated. The psychological meaning attributed to any given social behavior is, in large part, a function of the ecological niche within which it is produced. If a given behavior is viewed as acceptable, then parents (and significant others) will attempt to encourage its development; if the behavior is perceived as maladaptive or abnormal, then parents (and significant others) will attempt to discourage its growth and development. Of course, the very means by which people go about encouraging or discouraging the given behavior may be culturally determined and defined.

Initial work on the prevalence, correlates, and consequences of BI, shyness, and social withdrawal began with the suggestion that within collectivistic cultures a strong emphasis was placed on group cohesion; consequently, shy-reserved behavior may be more greatly appreciated than in Western cultures that espouse individualistic beliefs and norms. In an extensive series of studies, Chen and colleagues demonstrated that shy, reticent, reserved behavior in the People's Republic of China is encouraged and accepted by mothers, teachers, and peers, and is positively associated with social competence, peer acceptance, and academic success (e.g., Chen et al. 1995). In contrast, in cultural contexts within which such individual characteristics as assertiveness, expressiveness, and competitiveness are valued and encouraged, social withdrawal has been linked to peer rejection. Thus, in such countries as Argentina, Canada, Greece, Italy, the Netherlands, and the United States (Casiglia et al. 1998, Cillessen et al. 1992, Rubin et al. 1993, Schaughency et al. 1992), socially wary and withdrawn children are largely rejected by their peers.

And yet, these findings do not represent the last word. Hart and colleagues (2000) have found that social reticence is associated with a lack of peer acceptance not only in young American children, but also among Russian and Chinese youngsters. Relatedly, Chen et al. (2005) found that over the years, since the early 1990s, shy, reserved behavior among urban Chinese elementary school children has increasingly become associated with negative peer reputations. Chen has argued that the changing economic and political climate in China is being accompanied by preferences for more assertive, yet competent, social behavior.

Interestingly, beginning as early as 2 years of age, the prevalence of behavioral inhibition varies across culture (Rubin et al. 2006b,c). Chinese and South Korean toddlers are observed and rated by parents to be more inhibited than their Australian, Italian, and Canadian agemates. Importantly, the association between toddler shy/inhibited behavior and parental

acceptance is significantly negative among Canadian and Italian parents (Rubin et al. 2006b,c) but positive among Chinese parents (Chen et al. 1998). It would appear as if the expression of inhibited behavior may be interpreted as reservedness and respectfulness (and compliant) among Chinese parents and as expressions of fearfulness among Western parents.

And yet, cross-cultural research on BI and social withdrawal may well be fraught with methodological and conceptual difficulty. To begin with, one shortcoming in all of this work is that investigators have taken measures originally developed for use specifically within a Western cultural context and have employed them within other cultural milieus. When conducting cross-cultural research, the emic-etic problem represents a major methodological challenge. Cross-cultural studies are especially susceptible to measurement artifacts and bias (van de Vijver & Leung 1997). The emic perspective refers to conceptual schemes and categories that are viewed as meaningful by members of the culture under study. In contrast, the etic perspective refers to extrinsic concepts and categories that have meaning for scientific observers. That is, etic constructs are consistent across different cultures and are therefore universal or pan-cultural truths or principles (Bornstein 1991). Importantly, researchers can sometimes inappropriately impose etics on other cultures when, in fact, the construct in question is emic in nature. The etic approach has dominated in the cross-cultural study of phenomena having to do with social withdrawal.

Another shortcoming derives from the interchanging of different social withdrawal-related constructs in the extant cross-cultural work (with the implicit assumption being that all forms of solitude may carry with them the same meaning). The danger of so doing may best be summarized in the findings of a recent study on maternal beliefs about socially withdrawn behavior. Cheah & Rubin (2004) presented mothers with a series of vignettes in which they were asked how they would react if they consistently viewed their preschoolers playing alone when in a preschool setting. Chinese mothers responded with greater anger than American mothers; they also suggested that they would teach their children how to play with others, whereas American mothers indicated a tendency toward overprotectiveness. Taking these findings together with those noted above on BI and shyness, it would appear as if shyness and social withdrawal are viewed as rather different constructs by Chinese parents. Thus, reserved, shy behavior (as studied by Chen and colleagues) may eventually be conducive to harmonious group interactions, whereas socially withdrawn behavior (e.g., Cheah & Rubin 2004) that removes the child from familiar others could undermine such goals. In this regard, socially withdrawn behavior could be perceived by Chinese mothers as "nonsocial" behavior that undermines the predominant collectivistic teachings of preschool caregivers, as well as the societal goals of group harmony and close interaction.

All of which is to suggest that cross-cultural research on the topic of social withdrawal, in its many forms, has a long way to go. Researchers have interpreted their data as suggesting cultural differences in the meanings of inhibition, shyness, reticence, and so on. It thus follows that the next step is to examine whether the displays of these behaviors are linked cross-culturally in similar or different ways, not only with such social factors as parenting and peer relationships, but also with biological assessments including EEG, electrocardiogram, and the production of cortisol.

DEVELOPMENTAL PATHWAYS TO AND FROM SOCIAL WITHDRAWAL

In this review, we have referred to a developmental model concerning the etiology, correlates, and outcomes of social withdrawal during childhood and adolescence (see Figure 1). Our suggested pathway derives from the data reviewed above as well as extant theoretical perspectives linking conceptually related dispositional, interactional, and

relationship constructs. From our perspective, the ontogeny of a socially withdrawn profile begins with newborns who are biologically predisposed to have a low threshold for arousal when confronted with social (or nonsocial) stimulation and novelty. This hyperarousal may make these babies extremely difficult for their parents to soothe and comfort. We propose that some parents may find these dispositional characteristics aversive and difficult to handle. Parents may react to easily aroused and wary babies with the belief that the child is vulnerable and requires protection. Such overprotective and oversolicitous parenting, in concert with the child's disposition of a low threshold for arousal and an inability to be easily soothed, are posited to predict the development of an insecure parent-infant attachment relationship. Thus, it is suggested that the interplay of endogenous, socialization, and early relationship factors leads to a sense of felt insecurity.

We also propose that the infant's temperament along with feelings of insecurity may guide him or her onto a trajectory toward behavioral inhibition. The consistent expression of inhibition precludes these children from experiencing the positive outcomes associated with social exploration and peer play. Thus, we predict a developmental sequence in which an inhibited, fearful, insecure child withdraws from her/his social world of peers, fails to develop those skills derived from peer interaction, and consequently, becomes increasingly anxious and isolated from the peer group.

Social withdrawal becomes increasingly salient to the peer group with age. This deviation from age-appropriate social norms is associated with the establishment of peer rejection; for example, as noted above, even by the early years of childhood, social withdrawal and anxiety are associated with peer rejection and unpopularity.

Reticence to explore and play cooperatively in the peer environment is associated with, and predictive of, the development of an impoverished style of interpersonal negotiation skills. We have indicated that socially wary and withdrawn children make relatively few attempts to direct the behaviors of their peers and that when they do, their efforts are likely to be met by peer rebuff. And we have reviewed literature suggesting that an outcome of social interactive failure and peer rejection is the development of negative self-esteem and negative self-perceptions of social skills and peer relations. Sensing the child's difficulties and perceived helplessness, his/her parents might attempt to direct their child's social behaviors in a power-assertive fashion by telling the child how to act or what to do, or by actually solving the child's interpersonal dilemmas for him/her. As we have described above, an overcontrolled or overinvolved parenting style maintains and exacerbates the socially withdrawn child's inter- and intrapersonal difficulties.

Drawing from the extant literature, we believe that when socially withdrawn children present themselves as wary and anxious in the peer group, not only might they become increasingly rejected, but they also may be victimized by the peer group at large. This does not mean to suggest that they will be friendless; however, given the literature reviewed above, it may be that their friendships will be with children or adolescents much like themselves.

In summary, we propose that social incompetence of an overcontrolled, withdrawn nature may be the product of an inhibited temperament, an insecure parent-child relationship, shared genetic vulnerabilities or traits with the parents, overly directive and protective parenting, and peer rejection and victimization, and the interactions among "all of the above." The posited consequences of this constellation of factors are the development of (*a*) negative thoughts and feelings about the self, (*b*) social anxiety, and (*c*) loneliness. If the establishment and maintenance of close interpersonal relationships is considered a significant objective that has not been met, another outcome may be depression.

It is very important to note that we do not consider infant dispositional characteristics to necessarily lead to the pathway described above. A wary, fearful/inhibited temperament may be deflected toward the development of social competence by responsive and sensitive caregiving (Degnan & Fox 2007). An inhibited, emotionally dysregulated temperament does not necessarily produce an incompetent, internalized, or overcontrolled behavioral style. On the other hand, it may well be that parental overcontrol and overinvolvement may deflect the temperamentally easy-going infant toward a pathway of internalizing difficulties.

Additionally, the ability to cope with one's fearful and shy dispositions by displaying socially and emotionally competent behaviors may move the child off the pathway to peer rejection and victimization. And having close friendships with others who are socially and emotionally competent may be protective. These latter suggestions are merely testable suggestions. Data remain to be gathered to address these positions.

The developmental pathway we have offered above represents a useful heuristic for studying the etiology of social withdrawal. We speculate that there are direct and indirect ways in which dispositional characteristics, parent-child relationships, parenting styles, and peer relationships may influence the development and maintenance of social withdrawal, its concomitants, and its outcomes.

FUTURE DIRECTIONS

Other Forms of Social Withdrawal

Most research on social withdrawal has focused on children who are, or who become, socially fearful and anxious (i.e., inhibited/shy). As noted above, however, some children may refrain from social interaction because although not strongly averse to peer interaction (i.e., low social-avoidance motivation), they also lack a strong motivation to engage others in interaction (i.e., low social-approach motivation). This nonfearful preference for solitude has been labeled unsociability (Asendorpf 1990) or social disinterest (Coplan et al. 2004) in children, and solitropic orientation in adults (Leary et al. 2003).

Results from recent research indicate that parents (Coplan et al. 2004), teachers (Arbeau & Coplan 2007, Thijs et al. 2004), and even young children (Coplan et al. 2007) distinguish between social disinterest and other forms of social withdrawal (e.g., shyness). In early childhood, there is evidence to suggest that social disinterest is comparably benign (e.g., Asendorpf & Meier 1993, Coplan et al. 2004, Harrist et al. 1997). However, the longer-term outcomes of unsociability remain largely unexplored. Some researchers have suggested that unsociability may become increasingly maladaptive in middle childhood, as those who rarely interact socially (for whatever reason) may lag behind in important social and social-cognitive skills (Rubin & Asendorpf 1993).

In contrast, others have stressed the potential positive benefits of solitude in adolescence and adulthood (e.g., Larson 1997). For example, it has been argued that adults' ability to enjoy solitary activities is a positive indication of well-being (e.g., Burke 1991, Maslow 1970). Solitude may also offer practical benefits if unsociable adolescents or adults spend their solitary time constructively, developing independent thinking, reading, writing, or other skills. Indeed, adults who express a nonfearful preference for solitude can be as happy as their more extroverted counterparts (Hills & Argyle 2000). To address these questions, longitudinal studies are needed to assess the distinctiveness, stability, and outcomes of social disinterest beyond early childhood.

Asendorpf (1990) has also proposed that some socially withdrawn children may be characterized by the combination of low social-approach and high social-avoidance

motivations. These avoidant children would not only desire solitude and but also would avoid social interaction. In the only empirical study of social avoidance to date, Coplan et al. (2006) used a more general assessment of approach to reward (the behavioral activation system) and high avoidance of punishment (the behavioral inhibition system) to identify a group of children who had both a low behavioral activation system and a high behavioral inhibition system (conceptually similar to avoidance). Compared with their age-mates, avoidant children reported the highest levels of negative affect and depressive symptoms and the lowest levels of positive affect and overall well-being. The development of new methodologies for identifying social avoidance (and to distinguish it from shyness and social disinterest) will be necessary in order to allow future researchers to explore this phenomenon further.

Protective Factors

Although being excluded and having a withdrawn friend appear to represent significant risk factors in the lives of socially withdrawn children (e.g., Gazelle & Ladd 2003, Oh et al. 2008), it is important for future researchers to explore the significance of protective factors in studies of social withdrawal and associated adjustment outcomes. Drawing from recent theory and research on risk and resilience (e.g., Luthar 2006), such characteristics as emotional regulation and expressiveness may alter withdrawn children's risk and adjustment difficulties (Pope & Bierman 1999). Indeed, Bowker et al. (2008) recently reported that withdrawn children and young adolescents who expressed little negative internalizing emotion in the peer group (sadness, anxiety, fearfulness) did not experience increased peer rejection and victimization throughout the school year (both in elementary school and middle school). In contrast, withdrawn children and young adolescents who were highly emotionally expressive became significantly more victimized and excluded by the end of the school year. These data suggest the significance of coping actively with felt anxiety or fearfulness in the peer group. Regulating emotional expressiveness appeared to be a protective factor for withdrawn children and young adolescents.

Talents or special skills that are valued by the child and the community have also been offered as possible protective factors for high-risk children (Werner 1995). In this regard, researchers would do well to consider whether scholastic achievement or participation in extracurricular activities and clubs improve the ways in which socially withdrawn children think and feel about themselves and their social worlds. For example, Findlay & Coplan (2008) recently reported evidence suggesting that participation in organized sports appears to play a unique protective role for shy-withdrawn children.

Little is known about school-based risk and protective factors for socially withdrawn children, particularly beyond the early childhood years. Such school-based factors as the warm-supportive classroom environment have been shown to be beneficial for shy and wary children (Gazelle 2006). It would appear important for researchers to consider the significance of additional features of schooling, such as the experience of transitions. In the United States, for example, many students make multiple transitions—from elementary school to middle school, from middle school to high school, and from high school to college. These transitions may be particularly difficult for socially withdrawn youngsters because of the stress associated with meeting unfamiliar peers (Barber & Olsen 2004); at the same time, such transitions may prove to be a protective turning point, in that it may provide an opportunity to break free of previously negative peer reputations (Seidman & French 2004).

Finally, researchers have shown that parents who are sensitive to their behaviorally inhibited children's characteristics and needs, who encourage independence, and who provide opportunities for peer interaction (e.g., by arranging play dates) help their children to

become less inhibited and more socially skilled during early childhood (e.g., Rubin 2002; Rubin et al. 2001, 2002). Certainly, parent-child relationships continue to be important and influential relationships for older children and young adolescents, and yet there have been no studies examining the possible protective "power" of parents for withdrawn children in these older developmental periods.

Early Intervention and Prevention

Despite the extant empirical research demonstrating the concurrent and predictive "risk" associated with social withdrawal in childhood, comparatively little research has been devoted to intervention and prevention. Early attempts employed a range of intervention strategies and demonstrated rather mixed results (see Greco & Morris 2001 for a detailed review). Perhaps the most popular intervention strategy has been social skills training (SST), which involves training in verbal and nonverbal communication skills and incorporates components of coaching, modeling, and training for solving social problems. Some SST programs have demonstrated moderate short-term success in enhancing the social skills of withdrawn children and adolescents (e.g., Bienert & Schneider 1995, Jupp & Griffiths 1990, Sheridan et al. 1990). However, other SST programs have produced inconsistent findings and treatment effects that fail to generalize from one setting to the next (see Schneider 1992). Moreover, the children identified as socially withdrawn in many of these previous studies may have represented a fairly heterogeneous treatment group.

Early-intervention research clearly has a lot of catching up to do. Larger-scale studies with longer follow-up periods and careful designs are clearly needed. Social skills programs must be developed that are specifically designed for the particular needs of shy and withdrawn children. Moreover, other forms of peer-mediated interactions, such as peer-pairing and facilitated play (e.g., Furman et al. 1979), should be incorporated. As well, given what is known of the parents of socially withdrawn children, interventions would do well to involve parents. Recent evidence suggests that education and training programs for parents can reduce social anxiety in shy-withdrawn young children (e.g., Rapee et al. 2005) and improve treatment outcomes for school-aged anxious children (e.g., Spence et al. 2000). Beyond reductions in symptoms and improvements in treatment outcomes, it would be important to determine whether such interventions can modify socially withdrawn children's biology (e.g., EEG; Fox et al. 2001). Finally, it may also be possible to increase the effectiveness and generalizability of early intervention by employing a school-based approach. School-based programs reduce barriers to treatment (e.g., transportation), reach a broader range of children, and tend to reduce participant attrition (Barrett et al. 2005).

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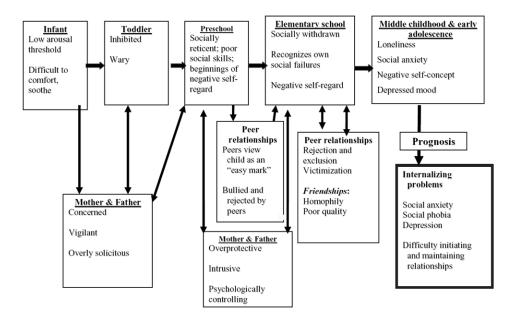


Figure 1. Social withdrawal: a transactional model.