Chapter 18

Social Withdrawal and Anxiety

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During the past two decades, the study of social withdrawal in childhood has taken on a research trajectory that can best be described as voluminous. Yet, the construct itself remains something of a mystery; it appears to carry with it a variety of definitions and a number of very different perspectives concerning its psychological significance. Further, social withdrawal represents a construct that has different psychological meanings as one moves from culture to culture.

From the outset, it is important to note that social withdrawal, in and of itself, is not a clinical disorder. After all, most people would agree that there are some individuals who appear perfectly content to spend most of their time alone. In fact, writing a chapter such as this one requires a good deal of solitary confabulation. Yet, there are those who typically avoid others when in social company; there are those who choose solitude to escape the initiation and maintenance of interpersonal relationships; and there are those who are isolated or rejected in social groups. In these latter cases, social solitude could hardly be construed as normal or as socially or psychologically adaptive. But it is not the display of solitude that is the problem; rather, the central issue is that social withdrawal may reflect underlying difficulties of a social or emotional nature.

To some researchers, a fearful temperament underpins the behavioral expression of social withdrawal (e.g., Kagan, 1989). Yet others believe that children demonstrate solitude not because they are strongly motivated to avoid
others, but because they prefer object manipulation and construction (Asendorpf, 1993). Lastly, some researchers believe that socially withdrawn behavior reflects underlying thoughts and feelings of social anxiety, loneliness, insecurity, and depression (e.g., Rubin, Chen, & Hymel, 1993; Rubin, Chen, McDougall, Bowker, & McKinnon, 1995). With such diverse etiological viewpoints, clinical psychologists have been unable to agree about the significance of social withdrawal for the development of psychopathology.

Because there appear to be several different forms of solitary behavior, each of which may not carry the same psychological meaning (Coplan, Rubin, Fox, Calkins, & Stewart, 1994; Rubin, 1982a; Rubin & Mills, 1988), the first goal of this chapter is to define social withdrawal. To understand the psychological implications of not interacting and relating to peers in “normal” ways, the second section addresses the developmental and psychological benefits of children’s peer interaction and relationships. The third purpose of this chapter is to reflect on those factors that may undergird the stable, continuous display of social withdrawal during childhood. Fourth, we review the literature on the correlates and predictive consequences of social withdrawal, and make reference to a transactional developmental pathway that has guided our writings on social withdrawal for almost 20 years (e.g., Rubin, 1982b; Rubin, LeMare, & Lollis, 1990). Lastly, we discuss the role of parenting in social withdrawal, as well as epidemiological factors associated with social withdrawal.
Social Withdrawal Defined

It is not uncommon to find psychologists using the following terms interchangeably: "social withdrawal", "social isolation", "inhibition", and "shyness". As a point of departure, we argue that psychological nomenclature is important and that any confusion be quelled. With this in mind, we refer the reader to Rubin and Asendorpf (1993) who have attempted to bring some order into the confusion caused by slippery terms of reference. In their paper, inhibition referred to the disposition to be wary and fearful when encountering novel (that is, unfamiliar), nonsocial situations. Shyness referred to inhibition in response to novel social situations. Social isolation had little to do with the behavioral expression of wariness; rather the term reflected the expression of solitary behavior that results from peer rejection. Finally, social withdrawal referred to the consistent (across situations and over time) display of solitary behavior when encountering familiar and/or unfamiliar peers. Simply put, social withdrawal was construed as isolating oneself from the peer group; social isolation indicated isolation by the peer group.

According to Rubin and Asendorpf (1993), the underlying motives for withdrawing from the social milieu are multipli-determined. Asendorpf (1990; 1991) has reported that some children have a low social approach motive without a high avoidance motive. These children demonstrate more object- than person-oriented activity and prefer quiescent, exploratory or constructive solitude to
social activity (referred to as "solitary-passive play"; Rubin, 1982b). Other children may be motivated to interact with peers but are compelled to avoid it. When these socially anxious and wary children play alone, they are observed to frequently engage in unoccupied or onlooker behavior (labeled "reticence", e.g., Coplan et al., 1994). Motivation and terms of reference aside, the following section lays the groundwork for understanding the implications for a lack of social interchange.

**The Significance of Peer Interaction for Normal Development.**

An early source of information pertaining to the significance of peer interaction for normal social, emotional, and cognitive growth came from the writings and research of Jean Piaget. According to Piaget, young children are egocentric and not particularly adept at understanding the perspectives, intentions, and feelings of others (Piaget, 1926). Drawing from this early work, contemporary researchers began to use children’s lack of social-cognitive maturity (specifically the immaturity of perspective-taking skills) to explain the behavioral expression of maladaptive social behaviors (e.g., Rubin & Rose-Krasnor, 1992; Selman, 1980). For example, it was proposed that the probability of behaving in an aggressive manner would increase if a person is unable to understand the victim’s thoughts and feelings, or realize the consequences of his/her actions.
Given the possibility that social-cognitive immaturity might help explain the expression of incompetent social behavior, the ensuing developmental question becomes: “What accounts for the developmental decline in egocentrism?”. From the Piagetian perspective, peer interaction allows children the opportunities to examine conflicting ideas and explanations; to negotiate and discuss multiple perspectives; and to decide to compromise with, or reject, the notions held by peers (Piaget, 1926). In short, social cognitive maturity was largely a function of children’s peer interactions; in turn, their ability to think maturely about their social worlds influenced children's social behaviors.

Support for these Piagetian notions derived from research demonstrating that peer exchange, conversations, and interactions produced intrapersonal cognitive conflict and a subsequent decline in egocentered thinking (e.g., Damon & Killen, 1982). Evidence was also offered for the associations between the inability to perspective-take and the demonstration of maladaptive social behavior (e.g., Crick & Dodge, 1994). Finally, researchers found that perspective-taking skills could be improved through peer interactive experiences, particularly those experiences that involved role-play. In turn, such improvement led to increases in prosocial behavior and to decreases in aggressive behavior (e.g., Selman & Schultz, 1990).

The extant literature allows the conclusion that peer interaction influences the development of social cognition and, ultimately, the expression of competent
social behavior. Peer interaction also influences children’s understanding of the rules and norms of their peer subcultures. It is this understanding of normative performance levels that engenders in the child an ability to evaluate her/his own competency against the perceived standards of the peer group.

According to Mead (1934), the ability to self-reflect, to consider the self in relation to others, and to understand the perspectives of others is largely a function of participation in organized, rule-governed activities with peers. He suggested that peer exchanges, whether in the arenas of cooperation, competition, conflict, or friendly discussion, allow the child to gain an understanding of the self as both a subject and an object. Understanding that the self could be an object of others' perspectives gradually evolves into the conceptualization of a 'generalized other' or an organized and coordinated perspective of the 'social' group. In turn, recognition of the 'generalized other' leads to the emergence of an organized sense of self.

Finally, the personality theorist Sullivan (1953) suggested that the foundations of mutual respect, cooperation, and interpersonal sensitivity derive initially from children's friendship and peer relationships. Sullivan specifically emphasized the importance of chumships, or special relationships, for the emergence of these concepts. Once the concepts of equality, mutuality, and reciprocity were learned via chumships, these concepts then could be applied more generally to other, less special, peer relationships.
From both theoretical and empirical perspectives, therefore, peer interaction is essential for normal social-cognitive development and emotional growth (see Rubin, Bukowski, & Parker, 1998 for an extensive review). Naturally, if peer interaction is important for the development of social competence, peer relationships, and positive self-regard, one wonders about the impact of little social interchange. Refraining from peer interchange may bring with it a number of developmental costs. Therein lies the developmental “place” for the study of social withdrawal. In the next section, we describe the possible developmental “costs” of social withdrawal by reviewing the relevant clinical literature, especially insofar as anxiety is concerned.
Social Withdrawal, Anxiety, and Clinical Diagnosis

In recent years social withdrawal has been viewed as a marker of social and/or emotional maladjustment (Quay & Werry, 1986). Yet, the phenomenon does not occupy a place of its own in the major diagnostic manuals; instead, in the Diagnostic and Statistical Manual of Mental Disorders (DSM IV, American Psychiatric Association, 1994) and the ICD-10 Classification of Mental and Behavioral Disorders (ICD-10; World Health Organization, 1993) social withdrawal is subsumed under other categories of disturbance. The current systems, therefore, represent social withdrawal as a symptom rather than as a syndrome with its own etiology and prognoses. Despite the fact that social withdrawal has not been a primary focus of psychiatric inquiry, it has nevertheless been associated with several clinical disorders of childhood and adolescence. These disorders range from autism to anxiety and phobic disorders, major depression, personality disorders, and schizophrenia. In keeping with the focus of this volume, we provide links between social withdrawal and anxiety, depression, and avoidant personality disorder.

Behavioral Inhibition, Anxiety and Phobic Disorders

Behavioral inhibition, a presumed precursor to the frequent demonstration of social withdrawal, is a temperamental construct reflecting the tendency to be fearful and anxious during the toddler years, and socially wary and withdrawn in unfamiliar situations during the early school-age years (Calkins & Fox, 1992;
Several researchers have suggested that behavioral inhibition represents a marker of anxiety and anxiety proneness. For example, a positive relation exists between cortisol production in saliva and the demonstration of extremely inhibited behavior not only in the toddler period (Kagan, Reznick, & Snidman, 1987; Nachmias, Gunnar, Mangelsdorf, Parritz, & Buss, 1996), but also during early and middle childhood (Schmidt et al., 1997). The high cortisol levels of inhibited children may increase corticotrophin-releasing hormones in the central nucleus of the amygdala, exacerbating the social fearfulness response. Further, high cortisol levels may predispose inhibited children to develop a cognitive working model to expect fear and anxiety when facing novelty. It is relevant to note that exaggerated autonomic responses to novelty are associated with internalizing problems such as anxiety (e.g., McBurnett et al., 1991).

Longitudinal data also suggest a link between behavioral inhibition in infancy and early childhood and phobic and anxiety disorders in mid-childhood (Hirshfeld et al., 1992). Behaviorally inhibited children evidence higher rates of phobic disorders (Biederman et al., 1993) and multiple anxiety disorders (avoidant disorder, separation anxiety disorder, and agoraphobia; e.g., Rosenbaum et al., 1988) than uninhibited children. Thus, behavioral inhibition is associated contemporaneously and predictively with indices of anxiety and phobic disorders.

*Social Withdrawal and Anxiety Disorders*
Anxiety disorders represent one of the most common disorders of childhood (Achenbach, 1982). 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 anxiety does decrease following avoidant behavior, then social withdrawal or avoidance will be reinforced, and the probability of recurrence increased (Barrios & O'Dell, 1989). Not surprisingly, therefore, anxiety disordered children often exhibit social withdrawal.

The relation between withdrawal and anxiety may be described as dialectic and cyclical in nature. Anxiety may be “marked” by frequent withdrawal from, and avoidance of, peer interaction. But social withdrawal and avoidance interfere with the normal development of social skills. Deficiencies in social skills will then serve to reinforce social anxiety and to foster negative self-appraisals and negative self-esteem (Boivin, Hymel & Bukowski, 1995; Hymel, Bowker, & Woody, 1993; Messer & Beidel, 1994).

Social Withdrawal and Depression

Similar to anxiety, depression is an internalizing disorder. However, social withdrawal accompanying depression may have different social consequences than does social withdrawal exhibited by anxious individuals. Social withdrawal induced by social anxiety may yield sympathy, interest, and social overtures from others; whereas depressed individuals may elicit support in a way that actually
causes others to withdraw from them, even ignore or reject them (e.g., Mullins, Peterson, Wonderlich & Reaven, 1986).

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 fun to be around. 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.

As well as being a concomitant of childhood depression, social withdrawal appears to be a predictor of depression. Rubin and colleagues (1993; Rubin et al., 1995) have recently found a predictive link between the early display of social withdrawal and later depression in adolescence. Further, Bell-Dolan, Reaven, and Peterson (1993) examined the relation between childhood depression and social functioning in fourth and sixth graders. Results showed that social withdrawal predicted depression as reported by both peers and teachers, and that low social activity predicted self-reported depression.

**Social Withdrawal and Avoidant Personality Disorder**

Whereas depressive behaviors are viewed as ephemeral and within an individual’s control, personality disorders are viewed as longstanding,
temperamentally- or dispositionally-based. Avoidant personality disorder is marked by excessive preoccupation and fear of criticism, disapproval, or rejection which lead to avoidance of interpersonal contact (e.g., Millan, 1981). Individuals with this diagnosis express a desire for affection, acceptance, and friendship; but they often have few friends and share little intimacy with anyone. Fear of rejection plays a key role in distancing themselves from personal attachments. These avoidant individuals are typically described as timid and withdrawn (Turkal, 1990). They fail to enter into relationships unless the prospective partner provides unusually strong guarantees of uncritical acceptance (Millan & Everly, 1985). In addition, their nervousness often makes companions uncomfortable, and thereby leads to rejection or damages the quality of ongoing relationships (Millan, 1981; Millan & Everly, 1985; Turkal, 1990). Avoidant individuals also cope by hypervigilance and by restricting the range of environmental stimuli; hence, they retreat from novel social experiences. This retreat inhibits the development of social self-efficacy for dealing with interpersonal situations (Costa & McCrae, 1985).

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, major depression, and avoidant personality disorder. It may be that the forms of
solitude and the motivations underlying these behavioral expressions vary from one disturbance to another. Clearly, the time is ripe for researchers to examine the etiology and developmental course of social withdrawal in childhood. To set the stage for such inquiry, we have described a developmental model (e.g., Rubin, Stewart, & Coplan, 1995), which has been revised in light of recent research findings. Nevertheless, it is the conceptual framework that has provided the basis for our own research on the causes, concomitants, and consequences of childhood social withdrawal.

**Developmental Pathways To and From Social Withdrawal in Childhood**

*Behavioral Inhibition, Physiology, and Affect*

Several researchers have argued that the pathway to social withdrawal begins with a dispositional or temperamental trait now widely recognized as behavioral inhibition. This phenomenon has been thought to emanate from a physiological “hard wiring” that evokes caution, wariness, and timidity in unfamiliar social and nonsocial situations (e.g., Kagan, 1997; Kagan, Reznick, & Snidman, 1987). Inhibited infants and toddlers differ from their uninhibited counterparts in ways that imply variability in the threshold of excitability of the amygdala and its projections to the cortex, hypothalamus, sympathetic nervous system, corpus striatum, and central gray (Calkins, Fox & Marshall, 1996). Two dimensions of infant behavior are particularly predictive of toddlers’ fearful and
anxious behaviors: (1) frequency of motor activity; and (2) display of negative affect (Calkins et al., 1996; Kagan & Snidman, 1991). The combination of consistently expressed motor arousal and negative affect is thought to be a function of elevated excitability in areas of the limbic system involved in fear responses. Infants who are easily and negatively aroused motorically and emotionally have displayed behavioral inhibition as toddlers (Calkins et al., 1996; Kagan & Snidman, 1991).

That there is a physiological basis underpinning social wariness, anxiety, and other problems of an internalizing nature is supported by adult studies. For example, elevated cortisol levels have been linked to fear, distress, and depression in adults (e.g., Bell-Dolan et al., 1993). Abnormalities in ventilatory physiology (e.g., asthma) have been associated with panic and anxiety disorders, not only in adults but also in children (e.g., Pine et al., 1994). Also, adults diagnosed with unipolar depression, even in remission, are more likely to display right frontal EEG asymmetry compared to controls (Henriques & Davidson, 1990). Further, adults exhibiting right frontal EEG asymmetries are more likely to express negative affect and to rate emotional stimuli as negative (Jones & Fox, 1992).

This literature has proved evocative for those researchers interested in the origins of social wariness and inhibition. It is now known that infants with right frontal EEG asymmetries are more likely to cry to maternal separation, and display signs of negative affect and fear of novelty (Davidson & Fox, 1989).
Further, stable patterns of right frontal EEG asymmetries in infancy predict temperamental fearfulness and behavioral inhibition in early childhood. Fox and Calkins (1993) recorded brain electrical activity of children at ages 9, 14, and 24 months and found that infants who displayed a pattern of stable right frontal EEG asymmetry across this 15-month period were more fearful, anxious, compliant, and behaviorally inhibited as toddlers than other infants. Also, Fox, Calkins and Bell (1994) noted that negative reactivity and right frontal EEG asymmetry in response to mild stress was associated with the display of toddler inhibition.

The findings just described suggest that unique patterns of brain electrical activity may be involved in the expression of fear and anxiety (LeDoux, 1989) and appear to reflect a particular underlying temperamental type. The functional role of hemispheric asymmetries in the regulation of emotion may be understood in terms of an underlying motivational basis for emotional behavior, specifically along the approach-withdrawal continuum. Infants exhibiting greater relative right frontal asymmetry are more likely to withdraw from mild stress, whereas infants exhibiting the opposite pattern of activation are more likely to approach (Calkins et al., 1996).

Another physiological entity that distinguishes wary from non-wary infants/ toddlers is vagal tone, an index of the functional status or efficiency of the nervous system (Porges & Byrne, 1992), marking both general reactivity and the ability to regulate one's level of arousal. Reliable associations have been found
between vagal tone and inhibition in infants and toddlers (Fox, 1989; Garcia Coll, Kagan, & Reznick, 1984): children with lower vagal tone (consistently high heart rate due to less parasympathetic influence) tend to be more behaviorally inhibited.

It is important to note that human physiology is hardly immutable. Thus, we suggest that behavioral inhibition in infancy and toddlerhood, and its physiological markers, may be altered or exacerbated through environmental means. For instance, we have suggested that a temperamentally inhibited infant may prove a challenge or stressor to his/her parents. Thus, an interplay of endogenous, socialization, and early relationship factors might lead to a sense of felt insecurity, and ultimately to the chronic expression of social withdrawal.

**Attachment Relationships and Behavioral Inhibition**

Attachment theorists have posited that the parent-infant attachment relationship results in the child developing an internal working model of the self in relation to others (Bowlby, 1973). This internal working model allows the child to feel secure, confident, and self-assured when introduced to novel settings. A sense of "felt security" fosters the child's active exploration of the social environment (Sroufe, 1983). In turn, exploration of the social milieu allows the child to address a number of significant "other-directed" questions such as "What are the properties of this other person?"; "What is she/he like?"; "What can and does she/he do?" (Rubin, 1993). Once these exploratory questions are answered, the child can begin to address "self-directed" questions such as "What can I do
with this person?". Thus, felt security is viewed as a central construct in socioemotional development: it enhances social exploration, which results in interactive peer play. Peer play, in turn, plays a significant role in the development of social competence (Rubin & Rose-Krasnor, 1992).

Children who develop insecure internal working models of social relationships, on the other hand, come to view the world as unpredictable, comfortless, and unresponsive (Sroufe, 1983). This insecure internal representation may lead some children to "shrink from their social worlds..." whilst others "do battle" with theirs (Bowlby, 1973, p. 208). That subgroup of insecurely attached young children who refrain from exploring their social environments have typically been classified as "anxious-resistant" or "C" babies. It has been suggested that the "C" baby's lack of exploration eventually impedes social-peer play and, thus, interferes with the development of social competence. In novel settings these infants maintain close proximity to the attachment figure; and when the attachment figure (usually the mother) leaves the paradigmatic "Strange Situation" for a short period of time, "C" babies become disturbingly unsettled. Upon reunion with the attachment figure, these infants show ambivalence-- angry, resistant behaviors interspersed with proximity, contact-seeking behaviors (e.g., Greenspan & Lieberman, 1988).

An association between inhibited temperament and attachment relationships has been shown by a number of empirical studies. For example,
meta-analyses have indicated that the temperamental characteristic of "proneness to distress" predicts the resistant behavior that partly defines insecure attachment status of the "C" variety (Goldsmith & Alansky, 1987). It is possible that irritability or proneness to distress presents as a significant stressor to parents, and therefore influences the quality of mother-infant interactions and the quality of attachment (Izard, Haynes, Chisholm, & Baak, 1991). The temperament construct of emotionality, which comprises irritability and proneness to distress, may lay the basis for the development of insecure attachment relationships. Support for this contention comes from the research of Izard and colleagues (Izard et al., 1991) who found that infant emotionality, as well as infant resting-state cardiac activity (a physiological index of emotionality and emotion regulation) independently predicted insecure attachment status.

Direct evidence for a predictive relation between infant temperament and insecure “C” attachment status derives from several sources. Thompson, Connell, and Bridges (1988) have reported that infant proneness to fear predicts distress to maternal separation. Such distress is usually allied with a "C" classification in the traditional attachment paradigm (Belsky & Rovine, 1987). Further, infants who are dispositionally reactive to mildly stressful, novel social events are more likely to be classified as insecurely attached "C" (anxious-resistant) babies than their less reactive counterparts (Calkins & Fox, 1992).

*Attachment, Inhibition, and Social Withdrawal*
The social behaviors of toddlers and preschoolers who have an insecure "C"-type attachment history are thought to be guided largely by fear of rejection. Conceptually, psychologists have predicted that when these insecurely attached children are placed in peer group settings, they should attempt to avoid rejection by demonstrating passive, adult-dependent behavior and withdrawal from social interaction (Renken, Egeland, Marvinney, Mangelsdorf, & Sroufe, 1989). Empirical support for these conjectures derives from data indicating that anxious-resistant ('C') infants are more whiny, easily frustrated, and socially inhibited at age two than their secure ('B') counterparts (Fox & Calkins, 1993; Matas, Arend, & Sroufe, 1978). Anxious-resistant 'C' babies also tend to be less socially skilled as toddlers and to be rated by their teachers as more dependent, helpless, tense, and fearful than their secure counterparts (Pastor, 1981). Finally, "C" babies lack confidence and assertiveness at age four years (Erickson, Sroufe, & Egeland, 1985); then, at age seven years they are observed to be socially withdrawn (Renken et al., 1989). Booth, Rose-Krasnor, McKinnon, and Rubin (1994) provide additional support for both predictive and contemporaneous connections between insecure attachment and social withdrawal.

**Parenting and Behavioral Inhibition**

Thus far, we have described factors that may be responsible for the development of behavioral inhibition, and ultimately the demonstration of social withdrawal in childhood -- factors such as the child's dispositional characteristics
and the quality of the parent-child attachment relationship. But insecure attachment relationships are also predicted by maternal behavior. For example, mothers of insecurely attached "C" babies are more overinvolved and overcontrolling than mothers of securely attached babies (Erickson et al., 1985). Indeed, in our developmental model we have posited that this particular parenting style is especially salient; and the developmental process may be as follows.

Given reticence to explore their environments, socially inhibited children may develop difficulties in solving intra- and interpersonal problems on their own. Parents of socially wary children may sense their child's difficulties and perceived helplessness; and then might try to support their children directly by either manipulating their child's behaviors in a power assertive, highly directive fashion (e.g., telling the child how to act or what to do) or by actually intervening and taking over for the child (e.g., intervening during peer disputes; inviting a potential playmate to the home). For socially fearful children, the experience of parental overcontrol is likely to maintain or exacerbate, rather than ameliorate, their difficulties. Parental overdirectiveness will not allow the child to solve impersonal or interpersonal problems on her/his own. In controlling what their children are exposed to and how such situations are handled, these parents may prevent their children from engaging in necessary, self-initiated coping techniques. Lacking practice in behavioral self-regulation, children who are poor physiological self-regulators may not learn to overcome their dispositional
vulnerabilities. Further, such parenting experiences may prevent the development of a belief system of self-efficacy; and likely will perpetuate feelings of insecurity within and outside the family.

Recent research has demonstrated that parental influence and control does appear to maintain and exacerbate children’s inhibition and social withdrawal. Rubin, Hastings, Stewart, Henderson, and Chen (1997) found that mothers of inhibited toddlers were “oversolicitous”; that is, they were observed to be highly affectionate and shielding of their toddlers when it was neither appropriate nor sensitive to do so. In a recent examination of reported (rather than observed) parenting styles, Chen and colleagues found that the parents of inhibited toddlers were more likely to endorse statements pertaining to protection, punishment orientation, and a lack of emphasis on independence training (Chen et al., 1998).

**From Inhibition to Reticence and Withdrawal**

Inhibition during the toddler period has been linked conceptually and empirically to shyness and social reticence in early and mid-childhood. For example, investigators have consistently demonstrated that inhibited toddlers are likely to remain inhibited in the early and mid years of childhood (e.g., Broberg, Lamb, & Hwang, 1990; Reznick et al., 1986; Sanson, Pedlow, Cann, Prior, & Oberklaid, 1996). Notably, Kochanska and Radke-Yarrow (1992) reported that social, but not nonsocial inhibition in toddlerhood predicted shy, inhibited behavior at 5 years when children played with an unfamiliar peer. Similarly, when
inhibited toddlers were observed again at 7.5 years of age in a group of unfamiliar peers, they were observed to be more distant from their playmates and less likely to converse with them (Kagan & Snidman, 1991). Finally, mothers and fathers who perceive their toddlers to be socially inhibited maintain these perceptions when their children are preschoolers (Rubin, Nelson, Hastings & Asendorpf, in press).

The Developmental Course of Social Withdrawal

Having described the putative antecedents of social withdrawal in childhood, we now turn to an examination of its correlates and consequences. In our developmental model of pathways leading to and following from social withdrawal, we have argued that reticence to explore novel, out-of-home settings impedes: (a) the possibility of establishing normal social relationships; (b) the experience of normal social interactive play behaviors; and (c) the development of those social and cognitive skills supposedly encouraged by peer relationships and social play (Rubin, Stewart & Coplan, 1995). Further, the developmental process begins with a socially inhibited, fearful, insecure child who withdraws from social interaction and thereby fails to develop those skills derived from peer communication, negotiation, and compromise. This relative lack of peer interaction causes the child to become increasingly uncomfortable and anxious amongst peers, and ultimately leads to isolation from the peer group. We have also posited that the recognition of one’s social failure results in thoughts and
feelings of negative self-regard. These thoughts and feelings are repeatedly reinforced as the child continues to demonstrate inadequate social skills.

**Different Forms of Withdrawal**

Support for these conjectures emanates from several sources. First, it is essential to note that whilst alone, children are not necessarily avoiding their peers. Some children prefer to play alone in the peer group; these children are often observed engaging in exploratory and constructive activity (Asendorpf 1990, 1993; Coplan et al., 1994; Rubin, 1982). Other children appear to spend time alone whilst among peers because they are fearful and wary of social interaction. It is this particular group of children who we believe have the biological underpinnings of wariness and anxiety, and who have been socially inhibited as toddlers (Fox & Henderson, 1998).

**Reticence and Emotion Dysregulation**

Fox and colleagues have demonstrated that reticent, fearful, solitary behavior is associated with greater relative right frontal EEG activation; but constructive solitude is not (Fox et al., 1995). Further, those reticent children who have such EEGs are viewed by their parents as being anxious and as having internalizing difficulties (Fox, Calkins, Schmidt, Rubin, & Coplan, 1996). Interestingly, sociable children with demonstrably greater relative right frontal EEG activation are viewed by parents as having externalizing problems (Fox et al., 1996). Fox and colleagues explain these findings by noting that frontal EEG
activation may reflect an individual's ability to regulate affective arousal. Many of the cognitive competencies (e.g., analytic abilities, verbal mediation) involved in successful affect regulation may be mediated by left frontal lobe areas. Thus, individuals with greater relative left frontal activation may have the means to successfully regulate affective arousal. On the other hand, individuals with greater relative right frontal EEG activation may not have access to the same language and analytic based strategies, thereby rendering affect regulation more difficult. This would be true whether the affect arousal was extremely negative or positive, although the behavioral consequences would obviously differ. In the case of extreme negative affect arousal, unsuccessful regulation might lead to withdrawal and/or depressive symptoms. In the instance of extreme positive affect arousal, unsuccessful regulation may lead to aggression and oppositional behaviors.

Further evidence for affect dysregulation being associated with social withdrawal is drawn from the research of Eisenberg and colleagues. These researchers found that among kindergarten to second grade children, shyness was positively associated with internalized negative emotions such as nervousness, distress, and upset; shyness was negatively related to positive emotions such as enthusiasm and excitement (Eisenberg, Shepard, Fabes, Murphy & Guthrie, 1998). They also reported that the internalization of negative emotions including increased anxiety levels led to children’s coping with problematic social situations by avoiding peer interaction.
Social Withdrawal, Social Skills, and Self Regard

If socially withdrawn children are too fearful to engage in peer interaction, it follows that they might not develop those skills that emanate from peer interaction. In this regard, it has been found that socially withdrawn children do lack the social skills that endear themselves to peers or that elicit positive thoughts and feelings about the self. During the preschool and primary grade school years, these children are less able to comprehend the perspectives of others (LeMare & Rubin, 1987). From mid-to-late childhood withdrawn children are also less competent than are sociable children in using interpersonal negotiation strategies to solve problems and conflicts (Adalbjarnardottir, 1995). Further, withdrawn children are more likely than their more sociable agemates to be adult-dependent and unassertive when faced with interpersonal dilemmas (Rubin, 1982b; Rubin, Daniels & Bream, 1984). When they do attempt to assert themselves or gain compliance from peers, they are more likely than sociable agemates to be rebuffed (Rubin & Krasnor, 1986). Importantly, the social initiations of withdrawn children become increasingly assertive, and noncompliance to their requests increases from early to middle childhood (Stewart & Rubin, 1995).

This increasing experience of failure following social initiation suggests that a socially withdrawn child may incur peer rejection on a continual basis; such negative experiences may produce unpleasant cognitions and emotions. As a
result of frequent interpersonal rejection by peers, withdrawn children may begin
to attribute their social failures to internal causes; in other words, they may come
to believe that there is something wrong with themselves rather than attributing
their social failures to other people or situations. Supporting these notions, Rubin
and Krasnor (1986) found that extremely withdrawn children tended to blame
social failure on personal, dispositional characteristics rather than on
circumstances or external events. The combination of peer rejection and internal
(dispositional) attributions for peer noncompliance could be construed as creating
a feedback loop whereby an initially fearful, withdrawn child begins to believe
that his/her social failures are personality-based, and then these beliefs are
reinforced by increasing failure of social initiatives or interactions (Rubin &
Stewart, 1996). Ultimately, the consequence of such cognitions may be further
withdrawal from the social environment.

As children approach the mid-to-late years of childhood, there is evidence
to support an association between social withdrawal or social anxiety and both
intrapersonal and interpersonal difficulties. Given that peers often do not comply
with, or reciprocate, social initiations beginning in primary school, it makes sense
that observational and peer assessments of social withdrawal have been associated
with sociometric assessments of peer rejection and unpopularity by middle to late
childhood (e.g., Harrist, Zaia, Bates, Dodge, & Pettit, 1997; Rubin, Chen, &
Hymel, 1993). Why socially withdrawn children’s peers dislike them by mid-to-
late childhood despite their not being rejected in early childhood may be explained by the increasing negative salience of playing alone as children get older. With the recognition that social solitude represents a behavior that deviates from the norm, it becomes increasingly viewed as deviant by the peer group (Younger, Gentile & Burgess, 1993). Moreover, by mid-to-late childhood, children are better able to recognize or perceive peers’ “internally driven” problems such as anxiety and hypersensitivity, which often accompany social withdrawal.

Previously, we have argued that the constellation of social withdrawal, social inadequacy, and peer rejection sows the seeds for internalizing problems such as negative self-regard, low self-esteem, anxiety, loneliness, and depression (e.g., Rubin, 1993). In fact, investigators have found that beginning in middle childhood, socially withdrawn children have negative self-perceptions of their social competence and interpersonal relationships (e.g., Hymel, Bowker & Woody, 1993; Rubin, Hymel & Mills, 1989). In addition to negative self-perceptions, socially withdrawn children actually do experience feelings of anxiety, loneliness and depressed mood by mid/late childhood (e.g., Boivin, Hymel & Bukowski, 1995; Rubin et al., 1989). In pre- to early adolescence they report anxiety, depressive symptoms, and somatic complaints (Burgess & Younger, 1996).
Consequences of Social Withdrawal

Highlighting the potential long-term outcomes of social withdrawal is a recent report which showed that a composite of observed and peer assessed social withdrawal at age seven years predicted negative self-perceived social competence, low self-worth, loneliness, and felt peer group insecurity among adolescents aged 14 years (Rubin et al., 1995). These latter findings are augmented by related research findings. For example, Renshaw and Brown (1993) found that passive withdrawal at ages 9-to-12 years predicted loneliness assessed one year later. Ollendick, Greene, Weist, and Oswald (1990) reported that 10-year-old socially withdrawn children were more likely to be perceived by peers as withdrawn and anxious, more disliked by peers, and more likely to have dropped out of school than their well-adjusted counterparts five years later. Finally, Morison and Masten (1991) indicated that children perceived by peers as withdrawn and isolated in middle childhood were more likely to think negatively of their social competencies and relationships in adolescence. In sum, it would appear as if early social withdrawal, or its relation to anxiety, represents a behavioral marker for psychological and interpersonal maladaptation in childhood and adolescence.

Stability of Social Withdrawal

Not only is social withdrawal associated with numerous negative inter- and intra-personal phenomena, it also appears to be an insidiously stable entity.
Initial evidence for its stability came from the Waterloo Longitudinal Project (WLP), which followed a normative sample of public school children from kindergarten to ninth grade. Observed social withdrawal was relatively stable from ages 5 to 9 years (Rubin, 1993); peer assessments using the Revised Class Play yielded significant intercorrelations (all \( p < .001 \)) between ages 7 to 10 years. When a categorical approach was used to identify extreme groups of socially withdrawn children in the WLP, approximately two-thirds of the withdrawn children maintained their status across any two-year period from 5- to 11-years old (Rubin et al., 1993). Supporting this finding is Kagan and colleagues’ (e.g., Kagan, 1989) contention that the developmental continuity of inhibition is strongest when an extreme group (i.e., top 15%) is selected from the longitudinal sample. It should be noted, however, that different subtypes of withdrawal may be differentially stable depending upon the ages studied and methods of measurement.

In a longitudinal study extending into adulthood, Caspi and Silva (1995) found that individuals identified as shy, fearful, and withdrawn at three years reported that they preferred to stick with safe activities, be cautious, submissive, and had little desire to influence others at 18 years. A subsequent follow-up at age 21 on interpersonal functioning showed that these same children were normally adjusted in both their work settings and their romantic relationships (Newman, Caspi, Moffitt & Silva, 1997).
**Clinical Status**

Most samples described in our review have been normal, non-clinic-referred children. Furthermore, the outcomes of social withdrawal have not typically involved clinical assessments. This leaves open the question of whether clinically-assessed psychological disturbance can be predicted from earlier indices of social withdrawal and its concomitants. To address this question, Rubin (1993) administered the Child Depression Inventory (CDI; Kovacs, 1980/81) to the 11-year olds participating in the WLP. Those whose CDI scores were one standard deviation or more above the mean for their age group were identified; these children constituted the top eight percent of children in terms of CDI scores (their scores were above the clinical cut-off for depression). These children were then compared with their nondepressed schoolmates on indices of social and emotional well-being assessed at age 7 years. Follow-back discriminant function analyses indicated that the depressed children could not be distinguished from their normal counterparts on the basis of their popularity or aggressive behaviors among peers at age 7 years; however, they could be distinguished on observed and peer-assessed social withdrawal, and self-reported negative self-perceptions of social competence. These results support the model offered above in which social withdrawal is described as a risk factor for the development of internalizing disorders (e.g., Rubin & Stewart, 1996). Despite this initial support for the model, it is clear that further longitudinal research is necessary before social withdrawal
can be implicated causally in the development of maladaptation in adolescence and adulthood.

**The Parents of Socially Withdrawn Children**

We have noted that when interacting with their inhibited young children, parents demonstrate directive and overly solicitous behaviors (e.g., Rubin et al., in press; Chen et al., 1998). Indeed, we have also found that perceiving one’s two-year-old as socially wary and inhibited actually predicts overprotective parenting two years hence at child age 4 years (Rubin et al., in press). These latter findings provide support for our earlier contention that once an inhibited behavioral style is established, parents may sense the child's anxieties and insecurities, and seek to help the child's mastery of the environment through authoritarian direction, protection, and oversolicitousness (e.g., solving the child's interpersonal and intrapersonal problems for her/him). These links between parenting and both social reticence and withdrawal have been examined in a number of studies.

**Parenting beliefs and social withdrawal**

Parenting behaviors have been posited to be partly influenced by parents’ notions concerning when it is that children come to demonstrate particular behaviors or ways of thinking; why it is that children behave in the ways they do; and how it is that parents can influence growth or inhibit maladaptive behavior (Bugental & Goodnow, 1998). In a series of studies conducted by Rubin and Mills, parenting beliefs about children’s socially withdrawn behaviors were
assessed. In one study, Rubin and Mills (1990) presented the mothers of extremely anxious-withdrawn children with stories describing hypothetical incidents in which their own child consistently behaved in a socially withdrawn fashion. Compared to mothers of nonanxious (“normal”) children, mothers of anxious-withdrawn children were more likely to suggest the use of high control strategies (e.g., directives) and less likely to prefer low-power strategies (e.g., redirecting the child) and indirect-no response strategies (e.g., seeking information from others, arranging opportunities for peer interaction, not responding) in reaction to their children's demonstration of socially withdrawn behavior. Also, these mothers were more likely to attribute the consistent display of social withdrawal to dispositional sources; and they expressed more anger, disappointment, embarrassment, and guilt about their children's displays of withdrawal.

The finding that these mothers placed greater importance on a directive approach to teaching social skills than did mothers of average children, and that they were more likely to choose controlling strategies for dealing with unskilled social behaviors, suggests that children who are socially anxious and wary tend to have mothers who may be overinvolved. The causal attributions and emotional reactions of these mothers are also indicative of overinvolvement, and provide some tentative insights about why they may be overinvolved. This dynamic is reminiscent of the pattern of anxious, overprotective parenting which has
previously been linked to internalizing difficulties in children (Parker, 1983). It may be that mothers of socially withdrawn preschool-age children transmit their own internalizing problems to their children through overinvolved parenting, which creates a sense of felt insecurity. Indeed, preschool-age children of depressed mothers exhibit significantly more inhibited and anxious-withdrawn forms of play with both familiar and unfamiliar playmates than do children of non-depressed mothers (Kochanska, 1991; Rubin, Both, Zahn-Waxler, Cummings, & Wilkinson, 1991). Further, it may be that mothers are highly sensitized to their children’s social and emotional characteristics; and such sensitivity may provoke well-meaning overcontrol and overinvolvement. This reaction to their child's social characteristics may produce a mixture of defensive reactions (e.g., downplaying the importance of social skills) and negative emotions. Thus, it would appear as if children's social withdrawal may be a function of the interplay between maternal and child characteristics and the dialectic processes that are produced therein.

**Parenting Behaviors and Childhood Social Withdrawal**

Given that parental beliefs and cognitions may influence parents’ behaviors (Bugental & Goodnow, 1998), it would seem natural to expect that the socialization practices of parents whose children are withdrawn differ from those of parents whose children are ‘normal’ and socially competent. As noted above, the mothers of anxious/withdrawn children believe strongly in the use of highly
controlling behaviors to “deal with” their children’s demonstration of social withdrawal in the peer group. That socially anxious and withdrawn children are the recipients of highly directive parenting behaviors has been demonstrated by Baumrind (1967). Further, MacDonald and Parke (1984) found that boys perceived by teachers as socially withdrawn, hesitant, and as spectators in the company of peers had fathers who were highly directive and less engaging and physically playful during father-son interactions. The findings were less clear-cut for socially withdrawn daughters. In general, though, the researchers reported that during parent-child play, the parents of socially withdrawn children were less spontaneous, playful, and affectively positive than parents of more sociable children. Further, the mothers of inhibited toddlers have been shown to be “oversolicitous” in their observed behaviors. Maternal overcontrol and oversolicitousness encompass not only restrictions on parenting behavior, but also manifestations of anxiety and concern that convey a lack of confidence in the child (Mills & Rubin, 1998). Such parenting practices may also be accompanied by expressions of criticism and disapproval that attack the child’s sense of self worth.

More recently, Mills and Rubin (1998) found that, relative to mothers of normal children, mothers of extremely anxious-withdrawn children (aged 5-to-9 years) were observed to direct significantly more behavior control statements to their children. Further, mothers of anxious-withdrawn children used more
psychological control statements (defined by devaluation statements or nonresponsiveness to the child).

Finally, Rubin, Cheah, and Fox (under review) reported that the mothers whose preschoolers frequently displayed socially reticent behavior among peers were more likely than mothers whose children rarely displayed social reticence to use control statements during free play with the child. Directiveness during goal-oriented tasks may be expected of parents (e.g., Kuczynski & Kochanska, 1995), but there is no compelling reason for parents to control their child's behavior in a pleasant, non-stressful play environment. The use of a highly directive parenting style during free-play may suggest that the parent is attempting to protect the child from harm or stress when neither is objectively present. Yet, in the Rubin et al. study, socially fearful behavior among preschoolers was predicted by mothers' displays of highly controlling and oversolicitous behaviors during a free-play session. Thus, these mothers appear to provide guidance and directives when neither is necessary, thereby precluding the child from independent exploration.

Importantly, the findings described above derive from very few databases. Even though the findings support long-standing beliefs about the kinds of parental behaviors that may influence or reinforce socially anxious and withdrawn child behavior, the existing data still do not allow definitive conclusions on the topic of parenting and children’s withdrawal. Moreover, a bi-directional relation may
operate whereby children’s anxiety leads to overprotective parenting (Rubin et al., in press). Clearly, this is an avenue of research that requires additional attention.

**Epidemiological Factors Associated With Social Withdrawal**

**Gender Differences**

During the past decade, a number of longitudinal and correlational studies have suggested a different risk status for boys and girls who may experience social wariness/ fearfulness in the company of peers. Morison and Masten (1991) found that the risk of being socially withdrawn (as assessed via peer nominations) may differ depending on the child’s sex. For example, withdrawn-isolated boys reported lower self-esteem and less perceived athletic ability in adolescence than did girls. Caspi, Elder, and Bem (1988) reported that men who were shy/withdrawn as 8-to10-year-old boys were delayed, relative to the norm, with regard to the timing of marriage, parenthood, and career establishment. These men were also at greater risk for separation and divorce in adulthood. On the other hand, shy/withdrawn females were “on-time” and adjusted with respect to adult-role transitions into marriage and homemaking; and they did not evidence psychological difficulties. Now that women’s roles are changing in the latter 20th century, however, it remains to be seen how socially wary females fare with regard to non-traditional roles in relationships and in work settings.

A number of recent correlational reports support these longitudinal findings with respect to gender differences in social-emotional adjustment. For
instance, Rubin, Chen, and Hymel (1993) found that relative to socially normal children, extremely withdrawn 11-year old boys, but not girls, described themselves as being more lonely and having poor social skills.

Whether there are parenting differences regarding withdrawn boys and girls has been examined by several investigators. Stevenson-Hinde (1989) and Engfer (1993) reported that the parents of inhibited/withdrawn toddler- and preschool-age girls were warm, responsive, and sensitive; although this result was qualified by a subsequent study which also found positive interactions only for moderately inhibited girls but less positive interactions for extremely inhibited girls (Stevenson-Hinde & Glover, 1996). In contrast, withdrawn boys’ parents were cold, less affectionate, and less responsive than were average boys’ parents. Stevenson-Hinde and Glover (1996) also found that mothers interacted more positively with high shy boys than they did with high shy girls. Whether their measure of warmth could be construed as an index of oversolicitous parenting is a question worth addressing given the Rubin et al. (1997) report that warm, yet intrusive parenting is associated with socially wary and inhibited behaviors.

Recently, further evidence has been found for sex differences in parenting associated with the demonstration of social reticence (Rubin et al., under review). Preschool age boys whose mothers perceived them to be unable to regulate their emotions were less socially reticent among peers if their mothers were appropriately controlling in a situation that required parental guidance and support.
(e.g., a teaching task); whereas for dysregulated boys whose mothers offered little support and guidance, the demonstration of reticent behavior in the peer group appeared to be exacerbated. These relations between maternal guidance and emotion dysregulation were not found for preschool girls. These findings raise the possibility that when mothers provide guidance and support in an appropriate context, they are more likely to have an influence on their sons’ anxieties than on their daughters’. Importantly however, these researchers reported that the use of maternal control during situations in which such behavior could be construed as intrusive and inappropriate (e.g., during free play) was associated with both boys’ and girls’ social reticence in the peer group.

Lastly, the quality of parent-child attachment relationship has been associated with the display of shyness for boys but not girls. Insecurely attached ('C' status) boys, but not girls, are more likely than their secure counterparts to display passive-withdrawn behaviors in early and mid-childhood (Renken et al., 1989).

In summary, the empirical literature suggests that inhibited/withdrawn boys experience different socialization practices/ histories and more negative developmental outcomes compared to girls. Continuing to study significant adults’ and peers’ attitudes about reticence/ withdrawal in boys versus girls, as well as studying parental and peer behaviors during interactions with boys versus
girls will undoubtedly prove fruitful if our goal is to understand and alleviate childhood anxiety and withdrawal.

**Culture and Social Withdrawal**

The research reviewed thus far is derived almost exclusively from samples in the Western world – Australia, Canada, United Kingdom, Germany, Norway, Sweden, and the United States. Yet, the evaluation of social behavior is influenced by cultural values and social conventions. Specifically, people view children's behaviors as normal or abnormal from the perspective of cultural norms and ideologies.

Clearly, social attitudes and values help set thresholds for concerns about problematic child behaviors, emotions, and thoughts. This reality has been elegantly demonstrated by Weisz, Suwanlert, Chaiyasit and Weiss (1988), who compared the judgements of Thai and American parents, teachers, and clinical psychologists about two children, one with overcontrolled problems (e.g., fear, shyness) and one with undercontrolled problems (e.g., disobedience, fighting). Compared to Americans, Thais rated problems of both types as less serious, less worrisome, less likely to reflect personality traits, and more likely to improve with time. Cross-national differences in perceived seriousness were more pronounced for parents and teachers than for psychologists, suggesting that professional backgrounds and higher education may mitigate the effects of national belief systems.
In Western cultures, passive, reticent, shy and withdrawn behavior is viewed negatively, not only by parents (Mills & Rubin, 1990) but also by peers (e.g., Harrist et al., 1997). As noted above, children who display such behaviors are considered socially immature, fearful and dependent (Morison & Masten, 1991). However, children growing up in China are actually encouraged to be dependent, cautious, self-restrained, and behaviorally inhibited (Ho, 1986; Ho & Kang, 1984) because such behaviors are generally considered indices of accomplishment, mastery, and maturity (Feng, 1962; King & Bond, 1985).

Similarly, shy, reticent, and quiet children are described as good and well-behaved. Indeed, researchers have consistently revealed that Chinese children, adolescents, and adults are more inhibited, anxious, and sensitive than their North American counterparts (e.g., Chan & Eysenck, 1981; Chen et al., 1998). Unlike North American children, shy/inhibited Chinese children are viewed as socially competent and they are accepted by the peer group (Chen, Rubin & Li, 1995; Chen, Rubin & Sun, 1992). These results suggest that societal values may have a differential effect on the perception and treatment of wary, fearful, and withdrawn behaviors. Given that the majority of the world's inhabitants do not reside in Western countries, the studies just described bear careful note. It would appear as if the definitions of normalcy and psychological disorder described in the vast majority of texts may be culture specific. Assuredly this is an issue that will require further examination, not only for the study of social withdrawal, but also
for most other supposed abnormal behaviors in childhood. Relatedly, it would
seem in the best interests of the psychological community of scholars not to
generalize to other cultures our own culture-specific theories of developmental
psychopathology.

**Conclusion**

The study of social withdrawal has garnered an enormous amount of
attention in the past decade. Most empirical research has focused on the
contemporaneous and predictive correlates of social reticence and withdrawal at
different points in childhood and adolescence. These correlated variables include
those of the biological, intrapersonal, interpersonal, and psychopathology ilk that
have been chosen from conceptual frameworks pertaining to the etiology,
stability, and outcomes of socially wary and withdrawn behaviors. Thus far, it
appears that socially inhibited children have a biological disposition that fosters
emotional dysregulation in the company of others. These children, if overly
directed and protected by their primary caregiver, become reticent and withdrawn
in the peer group. In turn, such behavior precludes the development of social
skills and the initiation and maintenance of positive peer relationships. Yet again,
this transactional experience seems to lead children to develop anxiety, loneliness,
and negative self-perceptions of their relationships and social skills.

Despite these strong conclusions, however, it is important to recognize
that the data bases upon which these conclusions rest are relatively few. Clearly,
replication work is necessary. The extent to which dispositional factors interact with parenting styles and parent-child relationships to predict the consistent display of socially withdrawn behavior in familiar peer contexts still needs to be established. Further, the sex differences discussed in our review require serious additional attention.

Lastly, our knowledge of the developmental course of social withdrawal is constrained by the almost sole reliance on data gathered in Western cultures. Little is known about the developmental course of the phenomenon in Eastern cultures such as those in China, Japan or India; and even less is known of social withdrawal in Southern cultures such as those found in South America, Africa, and southern Europe. It may well be that depending on the culture within which the phenomenon is studied, the biological, interpersonal, and intrapersonal causes, concomitants, and consequences of social withdrawal may vary. In short, cross-cultural research is necessary, not only for the study of social withdrawal, but also for most behaviors that are viewed as deviant or reflective of intrapsychic abnormalities in the West.
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