The Many Faces of Shyness in Childhood Across Cultural Contexts

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Introduction

Shyness represents a common yet diverse experience across cultures. Some shy individuals are highly wary of novel and uncertain social situations, exhibiting shyness mostly toward strangers. Others are often concerned about being negatively evaluated by others, and as a consequence afraid to interact with even people they have known for a long time. Still others tend to engage in nonassertive, unassuming, and polite behavior, particularly in conspicuous and potentially conflictual situations. These distinct experiences of shyness may serve important adaptive functions, yet manifest differently across cultural contexts. The purpose of this chapter is to elucidate adaptive roles different forms of shyness may play and how cultural influence may shape the expression of shyness and its relation to psychosocial adjustment.

Definition of Shyness

As a socially devised lay term, shyness has been used to refer to a wide range of experiences. Interviews with children and adults from different cultural contexts (Bayram Özdemir, Cheah, & Coplan, 2015; Crozier, 1995; Crozier & Burnham, 1990; Xu & Farver, 2009; Xu, Farver, Chang, Zhang, & Yu, 2007; Xu, Farver, Yang, & Zeng, 2008; Zimbardo, 1977) have shown that shyness may be manifested in varying manners such as reticent, wary, and unassuming behaviors, and related to distinct feelings,

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including concerns about negative evaluations and self-consciousness of public attention, formal situations, and breaches of privacy.

The diverse experiences of shyness are reflected in the various ways of how shyness is defined in the research literature. As seen in Table 1, a review of two edited books on shyness by leading researchers in the field (Rubin & Asendorpf, 1993; Rubin & Coplan, 2010), as well as the most recent journal articles devoted to shyness, clearly shows that research definitions of shyness vary in scope and emphasis, ranging from a narrower focus on inhibited behavior and anxiety (e.g., Cheek & Buss, 1981; Leary, 1986) to a wider range of wariness, self-consciousness, and

Table 1 Examples of definitions of shyness

Definition	Year	Researchers
Tension and inhibition when with others	1981	Cheek & Buss
A heightened state of individuation characterized by excessive egocentric preoccupation and overconcern with social evaluation … with the consequence that the shy person inhibits, withdraws, avoids, and escapes social interactions	1982	Zimbardo
Inhibited and awkward behavior when with casual acquaintances or strangers, with feelings of tension and distress, and a tendency to escape from social interaction	1984	Buss & Plomin
Excessive and nervous attention to the self in social settings, resulting in timid and often inappropriate overt behaviors as well as emotional and cognitive distress	1986	Briggs, Cheek, & Jones
Discomfort or inhibition in the presence of others	1986	Jones, Briggs, & Smith
An emotional-behavioral syndrome characterized by social anxiety and interpersonal inhibition or avoidance	1986	Leary
A preoccupation with the self in response to real or imagined social situations leading to social inhibition and anxiety	1990	Melchior & Cheek
A form of social withdrawal that is motivated by social evaluative concerns, primarily in novel settings	1993	Rubin & Asendorpf
Apprehension about being evaluated, as well as responses to novel situations	1999	Crozier
Slow or inhibited approach in situations involving novelty or uncertainty	2001	Rothbart, Ahadi, Hershey, & Fisher
Wariness and anxiety in the face of social novelty and perceived social evaluation	2004	Rubin & Coplan
Various forms of modest, reserved, wary, inhibited, anxious, or withdrawn behaviors in social situations	2009	Asendorpf
Temperamental wariness in the face of social novelty and/or self-conscious behavior in situations of perceived social evaluation	2010	Coplan & Rubin
Anxious, vigilant, and wary reactivity in challenging social settings	2019	Chen

Note: The examples of definitions of shyness were based on two edited books: Rubin and Asendorpf (1993). *Social withdrawal, inhibition, and shyness in childhood: Conceptual and definitional issues*, and Rubin and Coplan (2010). *The Development of Shyness and Social Withdrawal*, as well as the journal articles published since 2017 with the keyword "shyness" in the field of Abstract retrieved from the database, PsycInfo

reserved and modest behavior (e.g., Asendorpf, 2009; Coplan & Rubin, 2010). Not surprisingly, Pilkonis and Zimbardo (1979, p. 133) concluded that "…shyness still remains a fuzzy concept that defies simple definition…," a remark that remains valid 40 years later.

The divergence among these definitions creates a dilemma when applying them to refer to shyness experienced by lay people. On the one hand, narrower definitions of shyness such as "tension and inhibition when with others" refer to behaviors that may not be logically necessary for inferring shyness. For instance, individuals who engage in nonassertive and unassuming behavior do not necessarily exhibit any observable tension or inhibition, but they often report being shy themselves (Xu & Farver, 2009) and are labeled "shy" by other people (e.g., Xu et al., 2007, 2008). Thus, applying a definition with a narrower focus may inadvertently "disqualify" some shy people from calling themselves "shy" (Harris, 1984). On the other hand, a broader definition of shyness such as "…modest, reserved, wary, inhibited, anxious, or withdrawn behaviors in social situations…" covers quite diverse behaviors that may only occasionally co-occur in the same individual.

There are at least two approaches that can be used to address the challenge of defining shyness. Some researchers use terms, such as behavioral or social inhibition (e.g., Asendorpf, 1990; Fox, Henderson, Marshall, Nichols, & Ghera, 2005; Kagan, 1994), social reticence (e.g., Coplan, Rubin, Fox, Calkins, & Stewart, 1994; Degnan et al., 2014), or anxious solitude (e.g., Gazelle & Ladd, 2003), so that they could avoid the use of the term "shyness" altogether. The advantage of this approach is that the phenomenon of interest can be defined without requiring an argument about whether it really represents shyness or not. For instance, Kagan, Reznick, Clarke, Snidman, and Garcia-Coll (1984, p. 53) used the term "behavioral inhibition to the unfamiliar" (BI) to refer to "…the child's initial behavioral reactions to unfamiliar people, objects, and contexts, or challenging situations…" This definition delineates two criteria for BI: it has to be initial behavioral reaction, which does not necessarily involve experiences of shyness, and it must occur in response to unfamiliar or challenging social situations, as well as nonsocial stimuli (e.g., objects) that only activate fear but not shyness (Xu & Krieg, 2015). Using this definition, Kagan (1994, p. 42) was able to distinguish the temperamental category of BI from shyness and concluded that "…most adults who say they are shy do not belong to the temperamental category favoring this quality…."

Alternatively, given its varying forms, shyness may be better treated as an umbrella term and consists of multiple subtypes, rather than as a unidimensional construct. Researchers may choose to add qualifiers to the lay term "shyness" to prescribe the boundaries of the conceptual terrains of their interest. That is, they could develop definitions of different forms or subtypes of shyness, corresponding to distinct aspects of lay people's experiences of shyness, such as fearful and self-conscious shyness (Buss & Plomin, 1984; Eggum-Wilkens, Lemery-Chalfant, Aksan, & Goldsmith, 2015), avoidant and conflicted shyness (Schmidt & Poole, 2019), negative and positive shyness (Colonnesi, Napoleone, & Bögels, 2014), and shyness toward strangers/temperamental shyness, anxious shyness, and regulated shyness (Xu, Farver, Yu, & Zhang, 2009). By focusing on specific forms of shyness

that are clearly defined, researchers are no longer guilty of *psychological imperialism*, "…in which psychologists effectively superimpose their professional definitions of psychological constructs upon those developed by the lay person…" (Harris, 1984, p. 169). Rather, they are able to map concepts of specific forms of shyness, though not necessarily exhaustively, onto different aspects of shyness experienced by lay people, an approach my colleagues and I took to understand shyness across cultural contexts.

The Multidimensional Model of Childhood Shyness

My colleagues and I have developed a multidimensional model of shyness (Xu & Farver, 2009; Xu et al., 2007, 2008, 2009; Xu, Farver, & Shin, 2014; Xu & Krieg, 2014; Xu, Zhang, and Hee, 2014; also see Asendorpf, 2009) that identified and distinguished three forms of shyness in childhood: shyness toward strangers, anxious shyness, and regulated shyness that seem to capture the most salient experiences of shyness in childhood across cultural contexts. Although all of the three forms of shyness are characterized by an "asocial" behavioral manner, manifested in relatively low frequency of social interaction, reticence, quieting of behavior, and lack of initiation attempts, they vary based on other prototypical behaviors, accompanying emotional experiences (or lack thereof), and primary eliciting situations (Xu et al., 2007, 2008, 2009; Xu & Farver, 2009). For instance, shyness toward strangers is shown as inhibited behavior accompanied by a fear of novelty or uncertainty in unfamiliar social situations (e.g., meeting someone for the first time), whereas anxious shyness is activated mostly in social evaluative situations (e.g., being criticized or expecting being criticized by an authority figure or peer) where children are anxious or nervous about real or imagined negative feedback or disapproval. In contrast, regulated shyness is not accompanied by observable fear or anxiety, but tends to involve self-consciousness about being a likely target of public attention (Xu & Farver, 2009). Regulated shyness is most salient in conspicuous and potentially conflictual situations (e.g., being complimented by others, facing disagreement with others) and is shown as acquiescent, unassuming, and polite behavior through which children refrain from assertive attempts and/or remain reticent (Xu et al., 2007, 2009).

Motivational and Executive Inhibition. The multidimensional model of shyness was partly built upon the theoretical accounts of inhibitory control processes proposed by Nigg (2000). Nigg (2000) distinguished motivational inhibition, or "… bottom-up interruption of ongoing behavior or suppression of behavioral response due to fear or anxiety in the presence of immediate novel social situation or cues for punishment…" (Nigg, 2000, p. 238), from executive inhibition that refers to "…the processes for intentional control or suppression of response in the service of higher order or longer term goals (as opposed to immediate stimulus incentives)…" (Nigg, 2000, p. 238). Drawing from Gray's (1987) model of behavioral inhibition system, Nigg (2000) argued that motivational inhibition consists of two distinct yet related processes toward different eliciting contexts: response to novelty and response to

conditioned punishment or non-reward cues; the former resembles Kagan's conceptualization of reactivity toward novelty (Kagan, Reznick, & Snidman, 1988), whereas the later may be associated with neurotic personality in adults and anxiety about being negatively evaluated by others in both children and adults. In contrast, executive inhibition seems to resemble what Rothbart and Bates (1998) referred to as "effortful control," and is associated with constraint and conscientiousness in adults and impulse control and compliance in both children and adults.

Nigg (2000) proposed that motivational inhibition may be mediated by the early developing septal-hippocampal formation and amygdaloid complex and may emerge during the first year of life. In contrast, executive inhibition seems to be supported by the later development of prefrontal cortex/anterior cingulate and thus likely emerges near the end of the first year and continues to grow into childhood and adolescence (Posner & Rothbart, 2000; Rothbart, 1989). Moreover, later developing executive inhibition, which is often related to socialization experiences and learning of cultural norms (Rothbart & Bates, 1998), represents a malleable and goal-directed top-down process that may modulate or regulate the bottom-up processes of motivational inhibitory control.

Shyness Toward Strangers. The relative strengths of executive and motivational inhibitory control processes, as well as the development of and interaction between the two inhibition systems, may represent a plausible underlying mechanism for development and divergence of the three forms of shyness in childhood. For instance, a strong early developing motivational inhibitory control in response to novel or "discrepant" events may frequently activate vigilance, quieting of behavior, and orienting to novel stimulus (Kagan, 1997), and thus predisposes some children to develop shyness toward strangers. This novelty-driven motivational inhibition system is manifested in relatively low neural activation thresholds in the amygdala and its associated circuitry and shown behaviorally as fearful and inhibited responses in unfamiliar situations (Kagan, Reznick, & Snidman, 1990). With limited socialization experiences and insufficient regulation by executive inhibition system that develops relatively late in life (Nigg, 2000; Rothbart, 1989), shyness toward strangers can be easily identified in young children as an aspect of the most salient temperamental attributes (Kagan, 1994), and thus may also be referred to as temperamental shyness (e.g., Balkaya, Cheah, Yu, Hart, & Sun, 2018; Schmidt, Fox, Schulkin, & Gold, 1999; Schmidt & Miskovic, 2013).

Anxious Shyness. With the increasing regulation of executive inhibitory control over time, a sensitive motivational inhibition system may not necessarily lead to fearful and inhibited behavior in later years (Buss & McDoniel, 2016; White, McDermott, Degnan, Henderson, & Fox, 2011). Nigg's concept of executive inhibition represents a willful or voluntary self-regulatory function in which an individual initiates, maintains, and modulates reactions in serving higher order or long-term goals. The development of executive inhibition is closely related to socialization of cultural norms (Rothbart & Bates, 1998) and shapes the way that individuals interpret the subtle aspects of environmental cues, understand social acceptability of reactions, and behave in accordance with societal expectations and social approval (Kopp, 1982, 1989). Therefore, while young children with a sensitive motivational

inhibition system are likely fearful and inhibited in unfamiliar social situations (i.e., demonstrating shyness toward strangers), they may gradually develop varying capacity of executive inhibitory control and thus differ in their ways of coping with a low threshold of arousal in later years.

In the absence of adequate regulation by executive inhibition system, for instance, children may be particularly vulnerable to negative social experiences that could further sensitize their motivational inhibition systems to not only cues of novelty, but also cues of conditioned punishment and non-reward (Asendorpf, 1990). The meanings of conditioned punishment or non-reward cues would be partly dependent on individual's cognitive construal of the self in relation to significant yet often familiar others, such as peers or school authority figures, who interact with and evaluate children based on cultural norms and societal expectations on a daily basis. When peers' or authorities' evaluations tend to be, or are perceived to be undesirable, children are likely to construe such negative social evaluations as cues of punishment or non-reward, and over time develop what we referred to as anxious shyness. Anxious shyness tends to emerge later than shyness toward strangers because it requires developing cognitive capacity of construing oneself in relation to others and accumulating experiences of being (or perceiving being) a target of repeated negative social evaluations (Asendorpf, 1990).

Regulated Shyness. Unlike anxious shyness, the development of regulated shyness may be associated with an increasingly strong executive inhibition, i.e., voluntary or intentional control on prepotent responses (e.g., fearful responses toward strangers), that is partly due to accumulating socialization experiences that help cope with stress associated with social interactions (Rothbart & Bates, 1998; Zhou, Eisenberg, Wang, & Reiser, 2004). On the one hand, similar to the other two forms of shyness, regulated shyness may be mediated by a sensitive motivational inhibition system which limits the frequency of social interactions and results in an "asocial" tendency to remain quiet and constraint, i.e., behaviors of the least risk for appearing bold or intrusive, particularly in conspicuous and potentially conflictual situations. On the other hand, unlike anxious shyness, regulated shyness may be supported by a strong executive inhibition system that modulates the function of motivational inhibition system. Specifically, aspects of executive inhibition, such as attention regulation (e.g., orienting away from potential sources of non-reward/punishment) and cognitive reappraisal of social evaluative cues, may not only help control for easily escalated emotional arousal and inhibited behavior, which are undesirable for long-term goals of maintaining harmonious social relationships, but also activate behaviors that may increase the chance of fitting in with others within the constraint of a sensitive motivation system, such as acquiescent, unassuming, and polite behavior that are characteristic of regulated shyness. Therefore, even though a sensitive motivational inhibition system may hold children back from intensive social participation, with regulation of executive inhibition, children are able to exhibit regulated shyness that would help make social encounters more manageable and less threatening by conveying an important message to peers that they desire to fit in with others.

Support for the Multidimensional Model of Shyness

Correspondence to Lay People's Experiences of Shyness. Harris commented on the use of the term "shyness" by researchers and argued more than 30 years ago that "… it is clearly nonsense for psychologists to borrow a term from the lay person and then construct a definition of that term which enables them to subsequently inform the lay person that he or she is using the term incorrectly…" (Harris, 1984, p. 174). Other researchers recommended coding and analyzing lay people's own open-ended accounts of shyness to address the problem (Cheek & Watson, 1989). Therefore, it is an imperative first step to explore whether the three forms of childhood shyness proposed in our multidimensional model tap conceptions of shyness by children themselves.

Xu et al. (2008) asked 9–10-year-old Chinese children to nominate peers whom they felt were "very shy" and then explain the reasons why they considered the peers best described as shy. This open-ended approach identified a large number of behaviors that were considered characteristic of shyness by children themselves, most of which represent prototypical attributes of the three forms of shyness. For instance, the most frequently mentioned behavior "…is embarrassed when being criticized…" reflects anxious shyness, whereas the second frequently mentioned attribute "…does not show off…" demonstrates regulated shyness. The third frequently mentioned behavior "…does not talk much…" suggests an "asocial" manner that characterizes all the three forms of shyness, and "…is afraid to talk to someone s/he does not know…," the fourth frequently mentioned attribute, represents a prototypical behavioral marker of shyness toward strangers. Thus, the most salient attributes in children's conceptions of shyness are in line with defining behaviors of the three forms of shyness, at least in the Chinese culture.

Furthermore, using cluster analysis, Xu et al. (2008) were able to identify four clusters of prototypical characteristics of shyness based on children's conceptions: fearfulness/anxiety toward novelty or challenge, fearfulness/anxiety toward negative social evaluation, nonsocial and unassuming behavior, and self-consciousness. The first three clusters consist of observable behaviors that correspond to shyness toward strangers, anxious shyness, and regulated shyness, respectively, whereas the fourth "self-consciousness" cluster represents experiences of "feeling shy" that was found to be related to both anxious shyness and regulated shyness (Xu & Farver, 2009). Moreover, consistent with the prediction of our multidimensional model that the three forms of shyness might be related differently to executive inhibition system, the results of multidimensional scaling analyses showed that the cluster "nonsocial/unassuming behavior" tended toward the "regulated" side, whereas the clusters "fearfulness/anxiety toward novelty or challenge" and "fearfulness/anxiety toward negative social evaluation" were located on the "reactive" side of the reactive-regulated dimension.

Similarities and Differences. There are three main propositions of the multidimensional model of shyness with regard to the similarities and differences among the three forms of shyness. First, a sensitive motivational inhibition system may

underlie all the three forms of shyness, but it may manifest differently, depending on eliciting contexts. In support of this proposition, studies of children from various cultural contexts have revealed moderate interrelations among the three forms of shyness, though the relations tended to be small when different forms of shyness were rated by different informants (e.g., parents and teachers) who were familiar with children's behaviors in different kinds of contexts (Xu et al., 2007; Xu et al., 2014; Xu & Krieg, 2014). For instance, informants such as parents might be more likely than teachers to witness children's experiences of interacting with strangers, whereas teachers, rather than parents, have more opportunities of observing children's interactions with familiar peers at school (Eisenberg, Shepard, Fabes, Murphy, & Guthrie, 1998). In a similar vein, an underlying sensitive motivation system may also limit the frequency of social participation associated with all three forms of shyness, and as a consequence, studies have found positive associations of the three forms of shyness with asocial and solitary behaviors at school (Xu et al., 2007; Xu & Farver, 2009; Xu et al., 2014).

Furthermore, Xu et al. (2009) found that shyness toward strangers was associated with observational ratings of inhibited behavior in Chinese children during a stranger encounter situation, whereas anxious shyness was related to observational ratings of inhibited behavior in a card-sorting task with negative social evaluative cues. Interestingly, although regulated shyness was not related to inhibited behavior in either situation, it was associated with lowered heart period (a marker of physiological arousal) in the stranger encounter situation. This inconsistency between behavior and physiology suggested that children who engaged in regulated shyness, despite not showing highly inhibited behavior, may remain susceptible to the uncertainty or unpredictability of the novel stimuli (Buss & McDoniel, 2016; Xu et al., 2009), as indicated by lowered heart period, possibly due to a sensitive motivational inhibition system that not only underlies shyness toward strangers and anxious shyness, but also regulated shyness.

Second, given the early emerging motivational inhibition in response to novelty, shyness toward strangers is expected to emerge earlier than the other two forms of shyness. In contrast, the development of anxious shyness and regulated shyness, but not that of shyness toward strangers, is expected to be closely related to experiences with familiar peers at school. Consistent with this argument, much research has shown that shyness toward strangers can be identified as one key aspect of temperament in very young children (Buss & McDoniel, 2016; Kagan, 1994), whereas the emergence of anxious shyness seems to be associated with accumulating negative experiences with familiar peers over years (Asendorpf, 1990). Furthermore, studies of Chinese, South Korean, and Asian American children have shown that anxious shyness was related to peer rejection, whereas regulated shyness was associated with peer acceptance at school (Xu et al., 2007; Xu et al., 2014; Xu & Krieg, 2014).

Third, the multidimensional model of shyness would predict that whether shyness toward strangers would later develop into anxious shyness or regulated shyness is dependent on growing capacity of executive inhibition system that is susceptible to socio-cultural influences. In line with this argument, Xu et al. (2007), Xu, Farver, and Shin (2014) and Xu et al. (2015) were able to replicate the differential relations

of anxious shyness (negative) and regulated shyness (positive) to executive inhibition, operationalized as measures of effortful control (Rothbart & Bates, 1998), in studies of Chinese, South Korean, and Asian American children. In another longitudinal study of Chinese children, Xu et al. (2009) found that while early shyness toward strangers was related to later regulated shyness among children with high or moderate effortful control, it was associated with later anxious shyness among children with low or moderate effortful control, providing support for the key role executive inhibition system may play in the development and divergence of anxious and regulated shyness over time.

The Adaptive Functions of Different Forms of Shyness

While the three forms of shyness differ in their relations to children's psychosocial adjustment, they seem to serve a similar adaptive function of appeasement that is essential for establishing and/or reestablishing cooperative social relations, though in varying social situations.

Cooperation and Appeasement. As favored by natural selection owing to direct fitness benefits (mutually beneficial cooperation) or indirect fitness benefits (altruistic cooperation), cooperative interactions are "…those in which two or more individuals incur some cost, investing time, energy, or resources, or forgoing other opportunities, in order to behave in a fashion that will benefit all involved…" (Fessler, 2007, p. 178). Natural selection also favors the evolution of appeasement displays or "…the process by which individuals placate or pacify others in situations of potential or actual conflict…" (Keltner, Young, & Buswell, 1997, p. 360), to establish and/or reestablish cooperation, because it is less costly to signal acquiescence than to engage in conflict that may escalate into a fight one may lose. Human appeasement behaviors are nonassertive in nature and often include gaze aversion, lowering the head, and postural and behavioral constraints that are also found in appeasement behaviors of animals (De Waal, 1988), as well as nonintrusive speech or reticence, self-conscious emotions, deference, politeness, and modesty that are byproducts of the unique human capacity of taking others' perspective upon the self, and in particular upon one's public appearance (Gruenewald, Sally, Dickerson, & Kemeny, 2007; Keltner, 1995; Keltner et al., 1997). These behaviors act to signal one's commitment to the social relationship and are often perceived by others as a promise to fit in and to engage in appropriate behavior worthy of others' trust and respect (Castelfranchi & Poggi, 1990; Goffman, 1967). As a consequence, appeasement behaviors often elicit cooperative or affiliative behaviors in others and reduce potential conflict and aggression (Keltner et al., 1997).

Shyness and Appeasement. Shyness, regardless of its specific form, shares the conditions, behavior, and social consequences of appeasement (Keltner et al., 1997), and a sensitive motivational inhibition system mentioned above may form the basis for dispositional appeasement that characterizes all the three forms of shyness. First, behavioral markers of an asocial manner, which are likely related to a sensitive

motivational inhibition system and shared by the three forms of shyness, include reticence or nonintrusive speech, behavioral constraint, and limited assertive attempts; these behavioral characteristics are also prototypical attributes of appeasement. Second, the primary conditions for activating appeasement behavior include interacting with strangers, authority figures, peers of higher status, as well as potential interpersonal conflict, all of which represent key eliciting situations for shyness as well (Keltner et al., 1997).

The instrumental role of appeasing others is evident for all the three forms of shyness, but may be most salient in different situations for different forms of shyness. Appeasement may occur in situations such as meeting and interacting with a stranger in which there is a significant amount of uncertainty or "risks" with regard to establishing a cooperative relationship with an "unknown" person (Fessler, 2007). By engaging in shyness toward strangers and exhibiting wariness and inhibition rather than initiating social contact right away, children recruit a conservative and nonassertive option to increase the chance of keeping peace with someone with whom they are not familiar.

In a similar vein, appeasement may also occur in situations that involve a heightened awareness of being (or imagining being) negatively evaluated by others that may indicate a disrupted social relationship, particularly by authority figures and peers of higher status. Anxious shyness often involves an exaggerated sense of social inefficacy and failure and is shown in worry about failing to meet some threshold for social acceptability and maintaining cooperative relationships with others (Shepperd & Arkin, 1990). It may, however, temporarily appease others, given that its inhibited and submissive gesture may be perceived as an intention to remain affiliative with others (Gilbert & Trower, 1990), and consequently, protecting oneself from further harsh judgment (Cheek & Briggs, 1990; Shepperd & Arkin, 1990).

Appeasement may also be activated in conspicuous situations where one's public appearance may be perceived as indicating unrestricted claims regarding the self or a discernable attempt of standing out from others, both of which may evolve into conflict or confrontation and result in disrupted social relationship. Regulated shyness, which is characterized by nonassertive, unassuming, and polite behaviors, is particularly instrumental in appeasing others in such situations (Keltner et al., 1997). It represents a social interactional strategy that resolves around regulation of untoward impulses and behaviors, especially those that encroach upon the rights of others, and that may be construed as an attempt of distancing oneself from others or as insensitivity to others' needs (Chance, 1988; Goffman, 1967). Regulated shyness bestows respect and deference on others, and would thus increase social harmony and cooperation, the ultimate goals of appeasement (Keltner et al., 1997).

Culture and Shyness: The Processes of Hyper- and Hypocognition

The three forms of shyness are not just byproducts of natural selection as key aspects of human appeasement; they are also expected to vary based on the degree to which cultures emphasize appeasement as a key interpersonal function and apply them to solve problems of social cooperation. The appeasement functions of a particular form of shyness may be differentially formalized in social institutions, which could result in either a highly elaborate conception, i.e., hypercognition, or an underrepresentation, i.e., hypocognition, of this form of shyness and its appeasement functions in various cultural contexts.

Hypercognition and Hypocognition. The terms "hypercognition" and "hypocognition" were coined by Levy (1973) in his consideration of emotions in relation to cultural structuring of emotion knowledge. Specifically, these two terms are used to refer to cultural processes of variously elaborating, i.e., hypercognizing, or suppressing, i.e., hypocognizing, conscious recognition of particular emotions (Levy, 1973; Lutz, 1986; Shaver, Wu, & Schwartz, 1992). For instance, in some East Asian cultures such as China and Japan, the emotion of shame is highlighted as one primary way of appeasement and is endorsed as a method of enforcing group norms and maintaining social cooperation (Marsella, Murray, & Golden, 1974; Wilson, 1981). Consequently, its functions as a social control strategy are formalized and elaborated in these cultures via the process of hypercognition. The process of hypercognition is manifested in early socialization of shame as a primary cultural goal (Fung, 1999), resulting in the understanding of the term "shame" among 95% of 2.5- and 3-year-old Chinese children (Fung, 1999; Shaver et al., 1992) and transmission of cultural knowledge of shame via parenting practices (Fung, 1999). This is in clear contrast to only 10% of American children of the same age group who understood the term "shame" and little socialization effort related to shame by parents, possibly because in the American culture, shame is not viewed as a common social control strategy, and thus being hypocognized as a less salient emotion (Russell & Yik, 1996; Shaver et al., 1992). While shame may still serve important appeasement functions in the American culture, it is however, not considered as a hypercognized way of fulfilling such functions (Shaver et al., 1992).

Culture and Shyness. Cultural variations in the prevalence, expression, and socialization of the three forms of shyness may be understood via the processes of hypercognition and hypocognition. Different forms of shyness may be perceived as culturally structured but personally articulated ways of appeasement in fulfilling the goal of social cooperation, via the processes of hyper- and hypocognition. The predominant cultural norms and beliefs are expected to constrain conscious recognition and evaluation of both behaviors and situations related to shyness and shape cultural views with regard to the effectiveness of each form of shyness as a strategy of appeasement, as well as the types of focal events, i.e., the events corresponding to central cultural values and concerns (Mesquita & Frijda, 1992), that are most salient in eliciting various forms of shyness.

All three forms of shyness represent important ways of appeasing others; yet, the extent to which each of them is able to fulfill the goal of social cooperation is dependent on whether it is hyper- or hypocognized in a particular cultural context. For example, strangers are often perceived as out-group members in relatively homogeneous cultural contexts such as Japan where there is a heightened awareness of the distinction between in-groups and out-groups (Gudykunst & Nishida, 1994; Itoh, 1996; Neuliep, Chaudoir, & McCroskey, 2001; Yamagishi, Jin, & Miller, 1998). In a confrontation-averse culture like Japan, wariness and hesitancy to approach/initiate contact with strangers, or shyness toward strangers, is recognized as a common and acceptable way of showing respect for not imposing oneself on others, especially when there is a great amount of uncertainty when interacting with members of out-groups (Gudykunst & Nishida, 1994). Thus, shyness toward strangers is hypercognized as an instrumental way of social appeasement in the Japanese culture and is considered functional in ensuring a peaceful first-time interpersonal exchange. In addition, meeting with strangers also represents an appeasement-related focal event defined in the Japanese culture where gaze aversion, minimal or nonintrusive speech, and postural constraint, all of which are behavioral markers of shyness toward strangers, are expected as part of the cultural norms (Krieg & Xu, 2015, 2018; Krieg, Xu, & Cicero, 2018; Sakuragi, 2004; Senju et al., 2013). In contrast, many metropolitan areas of the USA represent culturally and ethnically heterogeneous contexts where being able to proactively navigate the social relationships with out-group members, such as strangers on daily basis, is considered an attribute for social success. Shyness toward strangers is thus likely hypocognized or deemphasized as an appeasement strategy in these types of settings where the potential "cost" associated with being wary, hesitant, and inhibited outweighs the "gain" related to conveying an implicit appeasing and affiliative gesture. Consequently, meeting with strangers may be less likely to represent a focal event for activating appeasement in such cultural contexts. Social approach with warm greetings when meeting someone for the first time, rather than demonstration of appeasement, may be sought after as alternative to establish cooperation.

The hyper- and hypocognition processes could also be used to understand cultural variations in anxious shyness. In cultural settings where there is a strong emphasis on social hierarchy, anxious shyness may be hypercognized as a gesture of appeasement for individuals who are, or imagine themselves to be, at submissive social positions, when facing negative social evaluations from authority figures or peers of higher status. For example, subordinates' demonstration of anxious shyness in some collectivistic cultures such as the Japanese culture, where there are clear boundaries in the social ranking system (Krieg, Ma, & Robinson, 2018; Sakuragi, 2004), may be taken as an effort of appeasing and maintaining cooperation with authorities or peers of higher status (e.g., relatively popular children in a peer group or clique). Thus, situations that involve negative evaluations by authorities or peers of higher status represent focal events that activate anxious shyness as a hypercognized way of appeasement in the Japanese culture. Although most Western cultures do not consist of a rigid social hierarchical system as in the

Japanese culture, expression of anxious shyness is not uncommon in Western children when they are members of peer groups with varying social statuses. Studies of children's peer relationships have demonstrated that peer statuses tend to be stable, and "peripheral" members often rely on submissive appeasement strategies such as demonstration of anxious shyness to seek peace with peers of higher status and to protect themselves from additional social failure (Parker & Asher, 1987). Therefore, it seems that situations that involve negative evaluations by peers of higher status also represent focal events for activating anxious shyness in children from various Western cultures (Asendorpf, 1990, 2009). Given these cultural similarities in the hypercognition of anxious shyness and related focal events in childhood, it is not surprising that anxious shyness was found to be related to similar psychosocial adjustment outcomes in children across cultural contexts (Xu et al., 2007; Xu et al., 2014; Xu & Krieg, 2014).

Similarly, regulated shyness could also be hyper- or hypocognized across cultural contexts, depending on whether it is viewed as a prototypical way of appeasement in establishing/reestablishing social cooperation. Regulated shyness is likely hypercognized in a culture where its reciprocity is institutionalized and strictly enforced. That is, individuals are likely more willing to engage in regulated shyness and refrain themselves from standing out or acting assertively in cultures where they are socialized to believe that others will do likewise in similar situations (Gächter & Herrmann, 2008). For instance, reciprocity of acquiescent and nonassertive gestures in interpersonal relationships represents a core value in some East Asian cultures where traditional Confucianism remains influential (Gudykunst & Nishida, 1994; Singhal & Nagao, 1993), which likely hypercognizes regulated shyness as part of expectations for prospective cooperative partners. An important function of regulated shyness is to motivate reputation management behavior with regard to culturally constituted cooperative relationships. Furthermore, members of these cultures are constantly evaluating each other's command of, and motivation to conform to, cultural standards of behavior, which sensitize them to public attention and highlight conspicuous and potentially conflictual situations as focal events that activate regulated shyness. Not surprisingly, regulated shyness tends to be associated with children's positive peer relationships and psychosocial adjustment in cultures such as China and South Korea where it may be hypercognized (Xu et al., 2007; Xu et al., 2014). In contrast, in many Western cultures where there is a lack of institutionalization of reciprocity of appeasement behaviors in conspicuous and conflictual situations, regulated shyness may be hypocognized due to the risk that individuals who exhibit nonassertive and unassuming behaviors may be exploited by those who do not conform to these standards. Instead, these cultures may hypercognize assertive or even confrontational problem-solving rather than seeking reciprocal appeasement.

Summary and Future Directions

In summary, there is increasing evidence to suggest that shyness is a multidimensional phenomenon in childhood across cultural contexts, and the differentiation of three forms of childhood shyness, shyness toward strangers, anxious shyness, and regulated shyness, seems to correspond to distinct lay conceptions of shyness. Drawing from Nigg's (2000) model of motivational and executive inhibition, we argue that all the three forms of shyness may be related to an early emerging sensitive motivational inhibition system that predisposes children to dispositional appeasement and manifests as asocial and solitary behaviors, but they seem to vary in their relations to a later developing executive inhibition system. There are both within- and between-cultural differences in these three forms of shyness. Within each culture, shyness toward strangers, anxious shyness, and regulated shyness vary in their primary eliciting situations and accompanying behaviors and emotions that are associated with different peer relationships and psychosocial adjustment. Across cultural contexts, predominant values and beliefs may shape hyper- and hypocognition of the three forms of shyness, as well as their appeasement functions and focal events that activate each form of shyness. As a consequence, cultural variations are often found in prevalence, expression, and socialization of shyness toward strangers, anxious shyness, and regulated shyness.

Despite the recent effort of understanding shyness as a multidimensional phenomenon across cultural contexts, it remains unclear what might help interpret cultural similarities and differences in developmental outcomes associated with childhood shyness. Drawing from social psychological literature on interpersonal perception and relationships (Chiu & Dweck, 1997; Dweck & Leggett, 1988; Erdley, Cain, Loomis, Dumas-hines, & Dweck, 1997; Erdley & Dweck, 1993), more recently, researchers have begun to explore how cultural variations in children's implicit theories of shyness may help understand cultural differences in perception of and relationship with shy children. Implicit theories are shared by lay people and represent the way how they interpret and react to social situations (Chiu & Dweck, 1997) and can be distinguished into at least two different views: an implicit entity theory that construes traits or behaviors as fixed and immutable qualities, often resulting in a tendency to make global, rigid, and enduring judgments of others on the basis of limited information; an implicit incremental theory that focuses on changing nature of abilities or personalities over time and across situations, and that tends to lead to relatively flexible interpersonal judgment. Zhang and Xu (2019) found that in comparison to Chinese children, American children reported stronger entity theories of shyness and were more likely to view shyness as a stable and immutable trait, which in a mediation model partly explained why they had worse relationship with shy peers. Zhang and Xu (2019) speculated that cultural differences in socialization of entity and incremental views of shyness may shape the way children perceive and react to their shy peers. Although this study failed to distinguish different forms of shyness and their relations to entity and incremental theories, the findings nevertheless highlighted an important future

direction of exploring the roles implicit theories may play in understanding cultural similarities and differences in interpersonal perception of and relationship with shy children.

References

Asendorpf, J. B. (1990). Development of inhibition during childhood: Evidence for situational specificity and a two-factor model. *Developmental Psychology, 26*, 721–730. https://doi.org/10.1037/0012-1649.26.5.721

Asendorpf, J. B. (2009). Shyness. In J. B. Benson & M. M. Haith (Eds.), *Social and emotional development in infancy and early childhood* (pp. 389–397). Elsevier.

Balkaya, M., Cheah, C. S. L., Yu, J., Hart, C. H., & Sun, S. (2018). The role of maternal encouragement of modesty and anxious withdrawal in the associations between Chinese American children's temperamental shyness and social adjustment: A moderated mediation analysis. *Social Development, 27*, 876–890. https://doi.org/10.1111/sode.12295

Bayram Özdemir, S., Cheah, C. S. L., & Coplan, R. J. (2015). Conceptualization and assessment of multiple forms of social withdrawal in Turkey. *Social Development, 24*, 142–165. https://doi.org/10.1111/sode.12088

Briggs, S. R., Cheek, J. M., & Jones, W. H. (1986). Introduction. In W. H. Jones, J. M. Cheek, & S. R. Briggs (Eds.), *Shyness: Perspectives on research and treatment* (pp. 1–14). New York, NY: Plenum Press. https://doi.org/10.1007/978-1-4899-0525-3_4

Buss, A. H., & Plomin, R. (1984). *Temperament: Early developing personality traits*. Hillsdale, NJ: Erlbaum. https://doi.org/10.1007/978-1-4899-0643-4_4

Buss, K. A., & McDoniel, M. E. (2016). Improving the prediction of risk for anxiety development in temperamentally fearful children. *Current Directions in Psychological Science, 25*, 14–20. https://doi.org/10.1177/0963721415611601

Castelfranchi, C., & Poggi, I. (1990). Blushing as a discourse: Was Darwin wrong? In W. R. Crozier (Ed.), Shyness and embarrassment: Perspectives from social psychology (p. 230–251). Cambridge University Press.

Chance, M. R. A. (1988). *Social fabrics of the mind*. Hillsdale, NJ: Erlbaum.

Cheek, J. M., & Briggs, S. R. (1990). Shyness as a personality trait. In W. R. Crozier (Ed.), *Shyness and embarrassment: Perspectives from social psychology* (pp. 315–337). New York, NY: Cambridge University Press. https://doi.org/10.1017/CBO9780511571183.012

Cheek, J. M., & Buss, A. H. (1981). Shyness and sociability. *Journal of Personality and Social Psychology, 41*, 330–339. https://doi.org/10.1037/0022-3514.41.2.330

Cheek, J. M., & Watson, A. K. (1989). Psychological imperialism or construct validity. *Journal of Social Behavior and Personality, 4*, 85–95.

Chen, X. (2019). Culture and shyness in childhood and adolescence. *New Ideas in Psychology, 53*, 58–66.

Chiu, C., & Dweck, C. S. (1997). Lay dispositionism and implicit theories of personality behavior in one situation. *Journal of Personality and Social Psychology, 73*, 19–30. https://doi.org/10.1037/0022-3514.73.1.19

Colonnesi, C., Napoleone, E., & Bögels, S. M. (2014). Positive and negative expressions of shyness in toddlers: Are they related to anxiety in the same way? *Journal of Personality and Social Psychology, 106*, 624–637. https://doi.org/10.1037/a0035561

Coplan, R. J., & Rubin, K. H. (2010). Social withdrawal and shyness in childhood: History, theories, definitions, and assessments. In R. J. Coplan & K. H. Rubin (Eds.), *The development of shyness and social withdrawal* (pp. 3–20). New York, NY: Guilford Press.

Coplan, R. J., Rubin, K. H., Fox, N. A., Calkins, S. D., & Stewart, S. L. (1994). Being alone, playing alone, and acting alone: Distinguishing among reticence and passive and active solitude in

young children. *Child Development, 65*, 129–137. https://doi.org/10.1111/j.1467-8624.1994.tb00739.x

Crozier, W. R. (1995). Shyness and self-esteem in middle childhood. *British Journal of Educational Psychology, 65*, 85–95. https://doi.org/10.1111/j.2044-8279.1995.tb01133.x

Crozier, W. R. (1999). Individual differences in childhood shyness: Distinguishing fearful and self-conscious shyness. In L. A. Schmidt & J. Schulkin (Eds.), *Extreme fear, shyness, and social phobia* (pp. 14–29). New York, NY: Oxford University Press.

Crozier, W. R., & Burnham, M. (1990). Age-related differences in children's understanding of shyness. *British Journal of Developmental Psychology, 8*, 179–185. https://doi.org/10.1111/j.2044-835X.1990.tb00832.x

de Waal, F. B. M. (1988). The reconciled hierarchy. In M. R. A. Chance (Ed.), *Social fabrics of the mind* (pp. 105–136). Hillsdale, NJ: Erlbaum.

Degnan, K. A., Almas, A. N., Henderson, H. A., Hane, A. A., Walker, O. L., & Fox, N. A. (2014). Longitudinal trajectories of social reticence with unfamiliar peers across early childhood. *Developmental Psychology, 50*, 2311–2323. https://doi.org/10.1037/a0037751

Dweck, C. S., & Leggett, C. S. (1988). A social-cognitive approach to motivation and achievement. *Journal of Personality and Social Psychology, 54*, 5–12.

Eggum-Wilkens, N. D., Lemery-Chalfant, K., Aksan, N., & Goldsmith, H. H. (2015). Self-conscious shyness: Growth during toddlerhood, strong role of genetics, and no prediction from fearful shyness. *Infancy, 20*, 160–188. https://doi.org/10.1111/infa.12070

Eisenberg, N., Shepard, S. A., Fabes, R. A., Murphy, B. C., & Guthrie, I. K. (1998). Shyness and children's emotionality, regulation, and coping: Contemporaneous, longitudinal, and across-context relations. *Child Development, 69*, 767–790.

Erdley, C. A., Cain, K. M., Loomis, C. C., Dumas-hines, F., & Dweck, C. S. (1997). Relations among children' s social goals, implicit personality theories, and responses to social failure. *Developmental Psychology, 33*, 263–272.

Erdley, C. A., & Dweck, C. S. (1993). Children's implicit personality theories as predictors of their social judgments. *Child Development, 64*, 863–878.

Fessler, D. M. T. (2007). From appeasement to conformity: Evolutionary and cultural perspectives on shame, competition, and cooperation. In J. L. Tracy, R. W. Robins, & J. P. Tangney (Eds.), *The self-conscious emotions: Theory and research* (pp. 174–193). Guilford Press. https://doi.org/10.5860/choice.45-5271

Fox, N. A., Henderson, H. A., Marshall, P. J., Nichols, K. E., & Ghera, M. M. (2005). Behavioral inhibition: Linking biology and behavior within a developmental framework. *Annual Review of Psychology, 56*, 235–262.

Fung, H. (1999). Becoming a moral child: The socialization of shame among young Chinese children. *Ethos, 27*, 180–209.

Gächter, S., & Herrmann, B. (2008). Reciprocity, culture and human cooperation: Previous insights and a new cross-cultural experiment about the centre or contact. *Experimental Economics, 364*, 791–806.

Gazelle, H., & Ladd, G. W. (2003). Anxious solitude and peer exclusion: A diathesis-stress model of internalizing trajectories in childhood. *Child Development, 74*, 257–278. https://doi.org/10.1111/1467-8624.00534

Gilbert, P., & Trower, P. (1990). The evolution and manifestation of social anxiety. In W. R. Crozier (Ed.), *Shyness and embarrassment: Perspectives from social psychology* (pp. 144–177). Cambridge University Press.

Goffman, E. (1967). Interaction ritual: essays on face-to-face interaction. Aldine Publishing Company. Garden City, NY.

Gray, J. A. (1987). *The psychology of fear and stress*. *Problems in the behavioural sciences* (Vol. 5). CUP Archive.

Gruenewald, T. L., Dickerson, S. S., & Kemeny, M. E. (2007). A social function for self-conscious emotions: The social self preservation theory. In J. L. Tracy, R. W. Robins, & J. P. Tangney (Eds.), The self-conscious emotions: Theory and research (p. 68–87). Guilford Press.

Gudykunst, W. B., & Nishida, T. (1994). *Bridging Japanese/North American differences. Communicating effectively in multicultural contexts*. Thousand Oaks: Sage.

Harris, P. R. (1984). Shyness and psychological imperialism: On the dangers of ignoring the ordinary language roots of the terms we deal with. *European Journal of Social Psychology, 14*, 169–181. https://doi.org/10.1002/ejsp.2420140204

Itoh, M. (1996). Japan's abiding sakoku mentality. *Orbis, 40*, 235–245. https://doi.org/10.1016/S0030-4387(96)90062-9

Jones, W. H., Briggs, S. R., & Smith, T. G. (1986). Shyness: Conceptualization and measurement. *Journal of Personality and Social Psychology, 51*(3), 629–639. https://doi.org/10.1037/0022-3514.51.3.629

Kagan, J. (1994). *Galen's prophecy: Temperament in human nature*. New York: Basic Books.

Kagan, J. (1997). Temperament and the reactions to unfamiliarity. *Child Development, 68*, 139–143. https://doi.org/10.1111/j.1467-8624.1997.tb01931.x

Kagan, J., Reznick, J., & Snidman, N. (1988). Biological bases of childhood shyness. *Science, 240*, 167–171. https://doi.org/10.1126/science.3353713

Kagan, J., Reznick, J. S., Clarke, C., Snidman, N., & Garcia-Coll, C. (1984). Behavioral inhibition to the unfamiliar. *Child Development, 55*, 2212. https://doi.org/10.2307/1129793

Kagan, J., Reznick, J. S., & Snidman, N. (1990). The temperamental qualities of inhibition and lack of inhibition. In *Handbook of developmental psychopathology* (pp. 219–226). Boston, MA: Springer US. https://doi.org/10.1007/978-1-4615-7142-1_17

Keltner, D. (1995). Signs of appeasement: Evidence for the distinct displays of embarrassment, amusement, and shame. *Journal of Personality and Social Psychology, 68*, 441–454. https://doi.org/10.1037/0022-3514.68.3.441

Keltner, D., Young, R. C., & Buswell, B. N. (1997). Appeasement in human emotion, social practice, and personality. *Aggressive Behavior, 23*, 359–374.

Kopp, C. B. (1982). Antecedents of self-regulation: A developmental perspective. *Developmental Psychology, 18*, 199–214. https://doi.org/10.1037/0012-1649.18.2.199

Kopp, C. B. (1989). Regulation of distress and negative emotions: A developmental view. *Developmental Psychology, 25*, 343–354.

Krieg, A., Ma, L., & Robinson, P. (2018). Making a good impression at work: National differences in employee impression management behaviors in Japan, Korea, and the United States. *Journal of Psychology: Interdisciplinary and Applied, 152*, 110–130. https://doi.org/10.1080/00223980.2017.1417817

Krieg, A., & Xu, Y. (2015). Ethnic differences in social anxiety between individuals of Asian heritage and European heritage: A meta-analytic review. *Asian American Journal of Psychology, 6*, 66–80.

Krieg, A., & Xu, Y. (2018). From self-construal to threat appraisal: Understanding cultural differences in social anxiety between Asian Americans and European Americans. *Cultural Diversity and Ethnic Minority Psychology, 24*, 477–488.

Krieg, A., Xu, Y., & Cicero, D. C. (2018). Comparing social anxiety between Asian Americans and European Americans: An examination of measurement invariance. *Assessment, 25*, 564–577.

Leary, M. R. (1986). Affective and behavioral components of shyness: Implications for theory, measurement, and research. In W. H. Jones, J. M. Cheek, & S. R. Briggs (Eds.), *Shyness: Perspectives on research and treatment* (pp. 27–38). New York, NY: Plenum Press. https://doi.org/10.1007/978-1-4899-0525-3_3

Levy, R. I. (1973). *Tahitians: Mind and experience in the Society Islands*. Chicago: University of Chicago Press.

Lutz, C. (1986). The anthropology of emotions. *Annual Review of Anthropology, 15*, 405–436. https://doi.org/10.1146/annurev.anthro.15.1.405

Marsella, A. J., Murray, M. D., & Golden, C. (1974). Ethnic variations in the phenomenology of emotions: Shame. *Journal of Cross-Cultural Psychology, 5*, 312–328. https://doi.org/10.1177/002202217400500305

Melchior, L. A., & Cheek, J. M. (1990). Shyness and anxious self-preoccupation during a social interaction. *Journal of Social Behavior and Personality, 5*, 117–130.

Mesquita, B., & Frijda, N. H. (1992). Cultural variations in emotions: A review. *Psychological Bulletin, 112*, 179–204. https://doi.org/10.1037/0033-2909.112.2.179

Neuliep, J. W., Chaudoir, M., & McCroskey, J. C. (2001). A cross-cultural comparison of ethnocentrism among Japanese and United States college students. *Communication Research Reports, 18*, 137–146. https://doi.org/10.1080/08824090109384791

Nigg, J. T. (2000). On inhibition/disinhibition in developmental psychopathology: Views from cognitive and personality psychology and a working inhibition taxonomy. *Psychological Bulletin, 126*, 220–246.

Parker, J. G., & Asher, S. R. (1987). Peer relations and later personal adjustment: Are low-accepted children at risk? *Psychological Bulletin, 102*, 357–389. https://doi.org/10.1037/0033-2909.102.3.357

Pilkonis, P. A., & Zimbardo, P. G. (1979). The personal and social dynamics of shyness. In M. Zuckerman & C. E. Izard (Eds.), *Emotions in personality and psychopathology* (pp. 131–160). Springer Science & Business Media.

Posner, M. I., & Rothbart, M. K. (2000). Developing mechanisms of self-regulation. *Development and Psychopathology, 12*, 427–441. https://doi.org/10.1017/S0954579400003096

Rothbart, M. K. (1989). Temperament in childhood: A framework. In G. A. Kohnstamm, J. E. Bates, & M. K. Rothbart (Eds.), *Temperament in childhood* (Vol. 5973). John Wiley & Sons.

Rothbart, M. K., Ahadi, S. A., Hershey, K. L., & Fisher, P. (2001). Investigations of temperament at three to seven years: The children's behavior questionnaire. *Child Development, 72*(5), 1394–1408.

Rothbart, M. K., & Bates, J. E. (1998). Temperament. In W. Damon & N. Eisenberg (Eds.), *Handbook of child psychology: : Social, emotional, and personality development* (Vol. 3, pp. 105–176). John Wiley & Sons Inc.

Rubin, K. H., & Asendorpf, J. B. (1993). *Social withdrawal, inhibition, and shyness in childhood*. Hillsdale, NJ: Erlbaum.

Rubin, K. H., & Coplan, R. J. (2004). Paying attention to and not neglecting social withdrawal and social isolation. *Merrill-Palmer Quarterly, 50*, 506–534.

Rubin, K. H., & Coplan, R. J. (2010). *The development of shyness and social withdrawal*. New York: Guilford.

Russell, J. A., & Yik, M. S. M. (1996). Emotion among the Chinese. In M. H. Bond (Ed.), *The handbook of Chinese psychology* (pp. 166–188). New York, NY: Oxford University Press.

Sakuragi, T. (2004). Association of culture with shyness among Japanese and American university students. *Perceptual and Motor Skills, 98*, 803–813. https://doi.org/10.2466/pms.98.3.803-813

Schmidt, L. A., Fox, N. A., Schulkin, J., & Gold, P. W. (1999). Behavioral and psychophysiological correlates of self-presentation in temperamentally shy children. *Developmental Psychobiology, 35*, 119–135.

Schmidt, L. A., & Miskovic, V. (2013). A new perspective on temperamental shyness: Differential susceptibility to endoenvironmental influences. *Social and Personality Psychology Compass, 7*, 141–157. https://doi.org/10.1111/spc3.12014

Schmidt, L. A., & Poole, K. L. (2019). On the bifurcation of temperamental shyness: Development, adaptation, and neoteny. *New Ideas in Psychology, 53*, 13–21. https://doi.org/10.1016/j.newideapsych.2018.04.003

Senju, A., Vernetti, A., Kikuchi, Y., Akechi, H., Hasegawa, T., & Johnson, M. H. (2013). Cultural background modulates how we look at other persons' gaze. *International Journal of Behavioral Development, 37*, 131–136. https://doi.org/10.1177/0165025412465360

Shaver, P. R., Wu, S., & Schwartz, J. C. (1992). Cross-cultural similarities and differences in emotion and its representation: A prototype approach. In M. S. Clark (Ed.), *Review of personality and social psychology: Vol. 13. Emotion* (pp. 175–212). Newbury Park, CA: Sage.

Shepperd, J. A., & Arkin, R. M. (1990). Shyness and self-presentation. In W. R. Crozier (Ed.), *Shyness and embarrassment: Perspectives from social psychology* (pp. 286–314). London: Cambridge University Press.

Singhal, A., & Nagao, M. (1993). Assertiveness as communication competence a comparison of the communication styles of American and Japanese students. *Asian Journal of Communication, 3*, 1–18. https://doi.org/10.1080/01292989309359570

White, L. K., McDermott, J. M., Degnan, K. A., Henderson, H. A., & Fox, N. A. (2011). Behavioral inhibition and anxiety: The moderating roles of inhibitory control and attention shifting. *Journal of Abnormal Child Psychology, 39*, 735–747. https://doi.org/10.1007/s10802-011-9490-x

Wilson, G. D. (1981). Personality and social behavior. In H. J. Eysenck (Ed.), *A model for personality* (pp. 210–245). New York: Springer.

Xu, Y., & Farver, J. A. M. (2009). "What makes you shy?": Understanding situational elicitors of shyness in Chinese children. *International Journal of Behavioral Development, 33*, 97–104. https://doi.org/10.1177/0165025408098009

Xu, Y., Farver, J. A. M., & Shin, Y. (2014). Shyness and psychosocial functioning in south Korean children. *European Journal of Personality, 28*, 147–155. https://doi.org/10.1002/per.1938

Xu, Y., Farver, J. A. M., Yang, Y., & Zeng, Q. (2008). Chinese children's conceptions of shyness: A prototype approach. *Merrill-Palmer Quarterly, 54*, 515–544. https://doi.org/10.1353/mpq.0.0007

Xu, Y., Farver, J. A. M., Yu, L., & Zhang, Z. (2009). Three types of shyness in Chinese children and the relation to effortful control. *Journal of Personality and Social Psychology, 97*, 1061–1073.

Xu, Y., Farver, J. M., Chang, L., Zhang, Z., & Yu, L. (2007). Moving away or fitting in?: Understanding shyness in Chinese children. *Merrill-Palmer Quarterly, 53*, 527–556. https://doi.org/10.1353/mpq.2008.0005

Xu, Y., & Krieg, A. (2014). Shyness in asian american children and the relation to temperament, parents' acculturation, and psychosocial functioning. *Infant and Child Development, 23*, 333–342. https://doi.org/10.1002/icd.1860

Xu, Y., & Krieg, A. (2015). Personality development and temperament. In N. J. Smelser & P. B. Baltes (Eds.), *International encyclopedia of the social & behavioral sciences* (pp. 876–878). Oxford: Elsevier. https://doi.org/10.1016/B978-0-08-097086-8.92012-9

Xu, Y., Zhang, L., & Hee, P. (2014). Parenting practices and shyness in Chinese children. In H. Selin (Ed.), *Parenting across cultures* (pp. 13–24). Dordrecht: Springer.

Yamagishi, T., Jin, N., & Miller, A. S. (1998). In-group bias and culture of collectivism. *Asian Journal of Social Psychology, 1*, 315–328. https://doi.org/10.1111/1467-839X.00020

Zhang, Z., & Xu, Y. (2019). Implicit theories of shyness in American and Chinese children. *European Journal of Social Psychology, 49*, 200–210.

Zhou, Q., Eisenberg, N., Wang, Y., & Reiser, M. (2004). Chinese children's effortful control and dispositional anger/frustration: Relations to parenting styles and children's social functioning. *Developmental Psychology, 40*, 352–366.

Zimbardo, P. G. (1977). *Shyness: What it is, what to do about it*. Addison-Wesley Pub.. https://doi.org/10.1128/JCM.41.6.2669

Zimbardo, P. G. (1982). Shyness and the stresses of the human connection. In L. Goldberger & S. Breznitz (Eds.), *Handbook of stress: Theoretical and clinical aspects* (pp. 466–481). New York, NY: Free Press.