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Self-reported shyness in Chinese children: Validation of the *Children's Shyness Questionnaire* and exploration of its links with adjustment and the role of coping

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ABSTRACT

The aims of the present study were to: (1) examine the psychometric properties of the Chinese version on the *Children's Shyness Questionnaire* (Crozier, 1995) among elementary school children; and (2) explore the links between shyness, coping style, and indices of socio-emotional functioning. Participants were $N = 580$ children (311 boys, 269 girls, $M_{age} = 11.14$ years, $SD = 1.37$) in Shanghai, People's Republic of China. Measures of shyness, coping style, and adjustment were gathered using multi-source assessments, including self-reports, peer nominations, teacher-ratings. Consistent with findings in North American samples, results from factor analysis suggested a single-factor model of shyness among Chinese youth. Shyness was also associated with a wide range of negative socio-emotional difficulties. As well, emotion-focused coping was found to partially mediate relations between shyness and children's adjustment. Results are discussed in terms of the validity of this self-reported measure of shyness and the role of coping for shy children's adjustment in China.

1. Introduction

Social withdrawal refers to the process whereby children remove themselves from opportunities for social interactions and frequently display solitary behaviors in social contexts (Coplan & Rubin, 2010). It should be noted that under the wider "umbrella" term of social withdrawal, there are varieties of reasons why children might choose to be alone (Coplan & Armer, 2007). A prominently studied subtype of social withdrawal is *shyness*, a temperamental trait characterized by excessive wariness and feelings of unease in the face of social novelty and perceived social-evaluation (Rubin, Coplan, & Bowker, 2009). According to the motivation theory of Asendorpf (1990), shyness reflects a combination of high social-approach motivation and high social-avoidance motivation. Therefore, shy children tend to experience an approach-avoidance conflict, whereby they wish to interact with peers but also fear social situations (Coplan, Prakash, O'Neil, & Armer, 2004).

In recent years, researchers have begun to explore the meaning and implications of shyness in non-Western cultures such as China (Chen, Cen, Li, & He, 2005). For the most part, shyness in these studies has been assessed using peer nomination procedures (e.g., Chen et al., 2005). Although such protocols offer various advantages (i.e., multiple ratings for each child averages across classmates), self-reports may also provide unique advantages for the assessment of shyness (particularly among older children) because of the internal motivational and emotional processes that underlie this construct. Accordingly, the primary goals of this study were to examine the psychometric properties of a newly developed Chinese version of an often-used self-report measure of shyness (*Children's Shyness Questionnaire*, Crozier, 1995) and to explore the links between shyness, coping styles, and indices of socio-emotional functioning among Chinese children.

1.1. Shyness and adjustment in Western cultures

From early childhood to adulthood, there is now considerable empirical evidence concurrently and predicatively linking shyness with indexes of socio-emotional maladjustment (Rubin et al., 2009). For example, shy children are more likely to report lower

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self-esteem, greater loneliness and depression, and tend to be rejected by peers (e.g., Coplan, Arbeau, & Armer, 2008; Crozier, 1995; Ladd, Kochenderfer-Ladd, Eggum, Kochel, & McConnell, 2011). Moreover, extreme shyness also places children at increased risk for the later development of more serious mental health difficulties, including anxiety disorders (e.g., Hirshfeld-Becker et al., 2007).

1.2. Shyness and adjustment in China

Culture plays a critical role in the development of children's social functioning. For example, peers and adults in different cultures may evaluate specific socio-emotional behavior differently (Chen & French, 2008). In traditional Chinese society, wariness and behavioral restraint are thought to be more positively evaluated and highly encouraged, and are thought to reflect social maturity, mastery, and understanding (Chen, 2010; Ho, 1986). As a result, children who are shy, sensitive, and wary may obtain approval and support from important others (parents, peers, teachers), which would help them to succeed socially and academically. In support of this notion (and in contrast to results in Western societies), shyness has been found to be *positively* associated with indices of social, emotional, and school adjustment (e.g., Chen, Rubin, & Sun, 1992).

However, during the past two decades China has been experiencing large-scale economic reforms and dramatic societal changes. Certain behavioral characteristics, such as initiative and self-expression, would be more adaptive in urban areas to adjust this more competitive environment (Chen et al., 2005). Results from recent studies indicated that shyness in urban China is now associated with adjustment *difficulties*, including peer rejection, loneliness, and depression (Chen, Wang, & Wang, 2009; Chen et al., 2005; Liu, Chen, Li, & French, 2012; Liu, Coplan, Chen, Li, Ding, & Zhou, 2014).

1.3. Shyness, coping style, and indices of adjustment

Although substantial research has reported associations between shyness and socio-emotional difficulties, less is known about the conceptual mechanisms that may underlie these relations. One construct that has begun to receive attention in explaining the links between shyness and maladjustment is children's coping style (e.g., Findlay, Coplan, & Bowker, 2009; Kingsbury, Coplan, & Rose-Krasnor, 2013; Markovic, Rose-Krasnor, & Coplan, 2013). Coping style refers to the typical pattern of responses one adopts when faced with a stressor (Causey & Dubow, 1992). Of particular interest for the present study were *emotion-focused* coping styles (e.g., worrying, getting mad), which are considered maladaptive and tend to be associated with greater behavior problems and lower social competence (e.g., Compas, Connor-Smith, Salzman, Thomsen, & Wadsworth, 2001; Endler & Parker, 1990).

Results from studies in Western samples indicate that shy children are more likely to use emotion-focused coping styles in response to social stressors (Eisenberg, Shepard, Fabes, Murphy, & Guthrie, 1998; Jackon & Ebnet, 2006; Markovic et al., 2013). Moreover, there is some recent evidence to suggest that emotion-focused coping also appears to act as a *mediator* of the relations between shyness and adjustment outcomes (Kingsbury et al., 2013). For example, Findlay et al. (2009) reported that emotion-focused coping partially mediated relations between shyness and indices of internalizing problems (e.g., social anxiety, loneliness). However, to date the mediated pathway from shyness, to emotion-focused coping, to socio-emotional functioning has not been examined among Chinese children.

1.4. The present study

Previous studies of shyness in Chinese children have all relied upon peer-nominated assessments. Although peer reports offer many advantages, the internal emotional and motivational processes that underlie shyness may be best assessed using self-report measures, particularly with older children (Liu et al., 2014). With this in mind, we sought to validate a Chinese version of the *Children Shyness Questionnaire* (CSQ, Crozier, 1995), a psychometrically sound and well-validated self-report measure of childhood shyness used often in Western cultures (e.g., Arbeau, Coplan, & Matheson, 2012; Coplan et al., 2013; Kingsbury et al., 2013). Nevertheless, the psychometric properties of this measure have not been examined in Chinese culture. Given the rapid process of modernization changed the adaptive function of shyness in urban China (Chen et al., 2005), we expected self-reported shyness to be associated with indices of children's socio-emotional difficulties.

There is some evidence to suggest that emotion-focused coping is also associated with socio-emotional difficulties among Chinese children and adolescents (e.g., Auerbach, Abela, Zhu, & Yao, 2010; Li, Chung, Wong, & Ho, 2010). However, links between shyness and coping have not been explored to date among Chinese children. Drawing upon recent findings in Western cultures (Findlay et al., 2009; Kingsbury et al., 2013), we speculated that shyness would be linked to maladjustment outcomes via a mediated pathway through emotion-focused coping.

2. Method

2.1. Participants

Participants in this study were N = 580 children (311 boys, 269 girls) in grade 4, 5, and 6 (M_{age} = 11.14 years, SD = 1.37). Children were selected randomly from 8 classes (with 30–40 students in each class) in four public elementary schools in Shanghai, People's Republic of China. Almost all children were of Han nationality, which is a predominant ethnic group (over 90% of the population) in China. The demographic data for the present sample were typical elementary school children and similar to those reported by China State Statistics Bureau (e.g., National Bureau of Statistics of China, 2011) concerning the urban population in China.

2.2. Measures

2.2.1. Self-reported shyness

Children completed the newly created Chinese version of the *Children's Shyness Questionnaire* (CSQ, Crozier, 1995), a self-reported assessment of shyness in elementary school children. The original version of this measure includes 25-items describing the emotional and behavior components of shyness (e.g., "I find it hard to talk to someone I don't know", "I feel shy when I have to read aloud in front of the class"). The questionnaire was translated by a Chinese psychology professor and then independently back-translated to English. Minor discrepancies between the two versions were then discussed and resolved. The factor structure and psychometric properties of the Chinese version of the CSQ in the current sample are reported in the Results section.

2.2.2. Other self-report measures

Children's *loneliness* was assessed by a Chinese version of self-report measure which developed by Asher, Hymel, and Renshaw (1984). This measure includes 16 self-statements rated on a 5-point scale (α = .84, e.g., "I feel lonely") and has been shown to be reliable and valid with Chinese children (e.g., Liu et al., 2014). Children's *depression* was measured by a Chinese version of the