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The relationships between shyness and unsociability and peer difficulties: The moderating role of insecure attachment

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Abstract

The main purpose of the study was to examine the moderating role of the insecure mother–child attachment in the relations between social withdraw and peer difficulties. Participants were 487 urban children (247 boys, 240 girls) in elementary schools in Shanghai, the People's Republic of China. Data on attachment-relevant coping styles in insecure relationships with mother were collected from children's self-reports. Information concerning social withdrawal (i.e., shyness and unsociability) and peer difficulties (i.e., peer victimization and rejection) was obtained from peer nomination. Among the results, both shyness and unsociability were positively related to peer victimization and rejection. However, several interaction effects were also observed. Both avoidant and ambivalent attachment served an exacerbating role for peer difficulties for shy and unsociable children, with these patterns differing by gender. Implications for the contributions of attachment to socially withdrawn children's peer adjustment are discussed.

Keywords

China, insecure attachment, peer difficulties, shyness, unsociability

Social withdrawal has long been viewed as undifferentiated (Rubin, Stewart, & Coplan, 1995), which is a vague term encompassing a given behavioral solitude derived from a variety of underlying causes (Coplan & Rubin, 2004; Rubin, Coplan, & Bowker, 2009). For example, children who prefer to be alone (e.g., preference for solitude, social disinterest, or unsociability) are marked as socially withdrawn, but those who are intentionally inhibited in approaching others (e.g., active isolation) and those who are too shy to initiate social interaction (e.g., shyness, anxious solitude, or reticence) are also identified as socially withdrawn. Since the over- arching umbrella of social withdrawal captures so many psychological functions and meanings, researchers often fail to draw a clear line between them and thus find mixed results (Harrist, Zaia, Bates, Dodge, & Pettit, 1997; Rubin et al., 2009). Against this backdrop, some developmental researchers (e.g., Asendorpf, 1990; Rubin & Mills, 1988; Xu, Farver, Yu, & Zhang, 2009) have begun to differentiate different subtypes of social withdrawal.

In the present study, we focused on two main distinct subtypes of social withdrawal—shyness and unsociability. Shyness is derived from motivational conflict between high social-approach and high social-avoidance (Asendorpf, 1990, 1993). In this regard, shy children have a desire to interact with peers, but are simultaneously inhibited by social fears and anxiety and lack self-confidence in social evaluative situations. In contrast to shyness, unsociability is characterized by a combination of both low social-approach and social-avoidance motivations (Asendorpf, 1990, 1993). Unsociable children lack a strong desire to play with others although they may not be strongly averse to peer interaction (Coplan, Prakash, O'Neil, & Armer, 2004). A large and convergent body of literature in Western cultural contexts indicates generally that shyness is associated with difficulties in peer relationships (Coplan et al., 2004; Gazelle & Ladd, 2003; Rubin & Mills, 1988). However, far less empirical attention has focused on the association between unsociability and peer relationships, although it has been proposed that unsociability is a relatively benign form of nonsocial behavior in early childhood in Western cultures (Coplan & Weeks, 2010a; Rubin, 1982). In one of the few published studies to examine these associations, Coplan et al. (2004) found that unsociable preschool-age children were more likely to be excluded by their peers. The same results were also found in early and late adolescents (Ojanen & Findley, 2011; Wang, Rubin,

Laursen, Booth-LaForce, & Rose-Krasnor, 2013). This suggests that unsociability may become increasingly maladaptive in later years (Coplan & Weeks, 2010a). As one of the goals of the present study, both shyness and unsociability were included to examine their relationships with peer difficulties. The former has been extensively studied both in Western and non-Western samples (e.g., Bowker & Raja, 2011; Hart et al., 2000; Prakash & Coplan, 2007), but the latter has not been the focus of existing developmental studies, especially in Chinese society.

Recently, some researchers (e.g., Rubin & Coplan, 2004) have postulated a number of moderating factors including parent–child relationships that might influence the associations between social withdrawal and adjustment outcomes. As a second goal, the present study focuses specifically on children's attachment relation- ships with their parents. By identifying parent–child attachment styles that exacerbate or buffer the effect of socially withdrawn behaviors on social adjustment in the peer contexts, developmental psychologists may help relevant practitioners to more effectively target high-risk withdrawn children and suggest avenues for intervention. In the present study, therefore, insecure mother–child attachment was explored as a potential moderating factor for the relationship between socially withdrawn behaviors and peer difficulties in the sample of Chinese urban children in middle childhood.

The cultural implication of shyness and unsociability in Chinese urban context

It has been widely recognized that with social changes and transformation, the cultural value system within a society has become a mixed orientation combining individualism and collectivism (Kagitcibasi, 2005; Luo, 1996; Tamis-LeMonda et al., 2008; Yang, 1996). With the rapid change in Chinese society toward a market- oriented economy in the last three decades, Western, more individualistic, values have been introduced, especially in urban areas. As a result, these urban areas like Beijing and Shanghai may find themselves a unique context where Western individualism and Chinese traditional collectivism values coexist. But it should be noted that the roots of Chinese traditions have not disappeared. Instead, the core values of collectivistic cultures (e.g., the collective harmony and relatedness) should be integrated with the

individualism values (e.g., autonomy and assertiveness). For example, a recent large-scale survey has indicated that although urban adolescents appreciated individualism values such as assertiveness, they continued to have strong traditional values of group orientation and social connectedness (X. Chen, Wang, & Liu, 2012). Against this background, by focusing on a Chinese urban sample, we examined whether the findings from individualistic societies (primarily from North America) can be generalized to the current sample.

From a contextual-developmental perspective, functional meaning of children's social behaviors should be grounded in the specific cultural contexts (for reviews, see Bornstein, 1995; X. Chen & French, 2008; Greenfield, 2009; Sharma & Fischer, 1998). In this regard, it should be similarly argued that the functional meaning of shyness and unsociability should be interpreted and evaluated based on this particular cultural context in Chinese urban areas.

Shy children in traditional Chinese society are regarded as mature in their social interpersonal skills. Shyness is considered as a modesty strategy beneficial to collective harmony (X. Chen, Rubin, & Li, 1995; X. Chen, Rubin, Li, & Li, 1999; Xu, Farver, Chang, Zhang, & Yu, 2007), therefore shy children are viewed by their peers as more competent in social and school contexts. However, it should be noted that social transformation may have a role in shaping the relations between shyness and adjustment (X. Chen, 2010; X. Chen & Chen, 2010). China, particularly its urban areas, has changed dramatically towards a market-oriented society. As a result, shy- ness which was traditionally endorsed as adaptive social functioning (e.g., X. Chen et al., 1999; X. Chen et al., 1995) has become incompatible with the requirements of urban society which emphasizes individual initiative and autonomy. For example, Chen and his colleagues (X. Chen, Cen, Li, & He, 2005) found that shyness was positively associated with adjustment outcomes in 1990, but negatively associated with adjustment outcomes in 2002. Data collected after 2000 have been accumulating in support of this argument (e.g., Chang, 2003, 2004; Chang et al., 2005; Xu et al., 2007).

Unsociability and shyness are regarded as different constructs in Chinese culture because they carry different culturally endorsed meanings in social interaction. Unsociable children, who prefer to stay away from the peer group, are often considered

as anti- collective, self-serving, and deviant in the group (X. Chen, Wang, & Cao, 2011; Ho, 1986), therefore unsociability is not encouraged as part of the socialization process (X. Chen, 2010; Rubin et al., 2009). Cheah and Rubin (2004) found that Mainland Chinese mothers in modern urban cities felt more anxious if they saw their children playing alone in a hypothetical setting, and tended to train those children to act in more sociable way. Recent evidence (X. Chen et al., 2011; Liu et al., 2014) has indicated that unsociability was related to social adjustment problems both in rural areas where traditional collectivistic values remain dominant and in urban areas influenced by Western individualistic values. It suggests that as unsociability has the functional meaning of anti-collective which is harmful to the core traditional values, it is maladaptive in nature, no matter whether it is in rural or urban area.

The relationships between shyness, unsociability, and peer difficulties

Rubin, LeMare, and Lollis (1990) have proposed that social with- drawn behaviors may be one of the risk factors that lead to peer difficulties in childhood. However, empirical research to test how different types of social withdrawal are related to different forms of peer difficulties is limited because multiple forms of peer difficulties have seldom been investigated (however, see Bowker & Raja, 2011; Shell, Gazelle, & Faldowski, 2014). Thus, in this study, we examined two forms of peer difficulties—peer rejection and peer victimization—as adjustment outcomes of social withdrawal. Peer rejection reflects the negative attitudes of an entire peer group toward an individual (Ladd & Troop-Gordon, 2003). Given that both shyness and unsociability show socially-inadequate competence in a Chinese urban context, shy and unsociable children are expected to experience elevated peer rejection. For example, research based on samples of urban children showed that shyness was associated with negative sociometric nominations (X. Chen et al., 2005; X. Chen, Wang, & Wang, 2009). In another example, unsociable Chinese children were perceived by peers as having a greater negative impact in class compared to shy children (Coplan, Zheng, Weeks, & Chen, 2012), which might lead unsociable children to experience social rejection in the peer group. Therefore, it was hypothesized that shyness and unsociability would both be associated with peer rejection.

Peer victimization occurs when a child is the target of negative actions from her/his peers (Perry, Kusel, & Perry, 1988). Shy and unsociable children who both initiate few peer interactions may be perceived by their peers as easy to be bullied because these children are frequently alone (Liu et al., 2014), and have less social approval by teachers or friends to protect them (B.-B. Chen, Liu, Li, French, & Chen, 2014; Xu et al., 2007). Therefore, it was also hypothesized that shyness and unsociability would be associated with peer victimization.

The moderating role of insecure attachment

Although there is a rather extensive literature linking social withdrawal subtypes with peer difficulties, evidence found in both Western society (e.g., Gazelle, 2006; Rydell, Diamantopoulou, Thorell, & Bohlin, 2009) and Chinese urban society (e.g., Hart et al., 2000) is emerging, suggesting that not all children who are shy or unsociable show problematic peer relationships. The question is why children with social withdrawal have different social outcomes in peer relationships. To answer this question, the present study took the perspective that an insecure parent–child attachment may moderate the associations between shyness and unsociability and peer difficulties.

During middle childhood, children's attachment to parents remain important for helping them respond to social nature of the peer context (Kerns, Tomich, & Kim, 2006). Children during middle childhood who have attachment security tend to show higher levels of social competence (Carlson, Sroufe, & Egeland, 2004; Diener, Isabella, Behunin, & Wong, 2008), peer acceptance (Szewczyk-Sokolowski, Bost, & Wainwright, 2005), and popularity (Bohlin, Hagekull, & Rydell, 2000). In contrast, insecure-ambivalent attachment is characterized by hyperactivating coping strategies that intensify emotional response in order to draw the caregivers closer, whereas avoidant attachment is characterized by deactivating coping strategies that suppress emotional response (Ainsworth, Blehar, Waters, & Wall, 1978; Finnegan, Hodges, & Perry, 1996; Yunger, Corby, & Perry, 2005). Overall, children of both types of insecure attachment approach new social relationships with less confidence or feelings of trust yet more negative expectations (Cassidy, Kirsh, Scolton, & Parke, 1996), and these children may therefore be poorly equipped to handle peer relationships (Berlin, Cassidy, & Appleyard,

2008).

In China, research using the strange situation has indicated that a high percentage of secure attachment classifications, and a relatively low percentage of avoidant and anxious attachment classifications were found in recent studies using urban samples in infancy and early childhood (Hu & Meng, 2003; Liang, Chen, & Chen, 2000). In middle childhood, consistent findings has demonstrated that children were more likely to have a secure attachment (B.-B. Chen, 2012; Li, He, & Li, 2009). However, the results with avoidant and anxious attachment are more complex. Some research has shown that there was no differences in the proportions of anxious and avoidant attachment (Li et al., 2009), but other research has shown that there was more anxious attachment than avoidant attachment (B.-B. Chen, 2012; B.-B. Chen & Chang, 2012). This disparity may be due to the different assessment tools. Nevertheless, these results, especially for secure attachment, seem to resemble the patterns found in Western societies (e.g., Brumariu & Kerns, 2008; Van IJzendoorn & Kroonenberg, 1988). It may be suggested that Chinese parents in modern urban areas are more likely to employ parental practices that are characterized by encouragement of autonomy and independence which are consistent with the requirement of a competitive society in urban areas (X. Chen, Bian, Xin, Wang, & Silbereisen, 2010; X. Chen & Chen, 2010).

Nevertheless, it has been suggested that an insecure parent– child attachment relationship serves as a risk factor which may alter the nature of the connection between social withdrawal and adjustment in peer relationships (Hastings, Nuselovici, Rubin, & Cheah, 2010; Rubin & Coplan, 2004). In this perspective, an insecure parent–child attachment relationship may exacerbate the impact of social withdrawal on peer difficulties. This exacerbating effect may result from a negative ‘‘internal working model’’ of self and relationships. This theoretical logic regarding children’s internal work- ing model would also apply for children’s coping with insecurity in the attachment relationship with their mother (Finnegan et al., 1996), which was the focus in our study. Finnegan et al. developed a self-report scale designed to capture coping styles specific to inse- cure attachment relationships with caregivers when faced with everyday stressors. It was suggested that the coping styles may grow out of insecure attachment (Dwyer, 2005). Specifically, an insecure attachment-relevant coping strategy adopted by

a child may reflect his or her poor concept of self in relation to the care- giver and expectation of inharmonious interactions with peers (Card & Hodges, 2003). For example, research found that ambivalent coping was associated with fear of negative evaluation from peers (Brumariu & Kerns, 2008).

From the theoretical perspective of an internal working model of attachment, insecure children's internal working model characterized by mistrust, fear, and poor emotion regulation may carry into the peer context, and as a result, they have more negative representations of peer relationships than secure children (Cassidy et al., 1996). Consistent with this, we argue that with an insecure attachment-relevant coping style, socially withdrawn children may be more likely to have negative representations of peer relation- ships, and hence may be less able to handle peer relationships than those with a secure attachment-relevant coping style. There is some evidence that insecure attachment can moderate the effect of social withdrawal on peer difficulties. One study showed that children's high level of shyness was associated with poor peer competence when they had avoidant attachment representations (Rydell, Bohlin, & Thorell, 2005). Another study by Bohlin, Hagekull, and Andersson (2005) found that behavioral inhibition led to poorer social competence among insecurely attached children only. There- fore, the insecure coping strategies may act as an exacerbator of the negative effects of social withdrawal on peer difficulties. It was expected that children high on shyness and unsociability would be especially at risk for peer difficulties if they also had high levels of insecure attachment-relevant coping strategy, whereas these children's risk for peer difficulties would be lower if they had low levels of insecure attachment-relevant coping strategy.

In addition, a large body of evidence has shown that there are sex biases in two insecure attachment styles during middle child- hood with boys showing a prevalence of avoidant attachment and girls showing an opposite prevalence of ambivalent attachment (e.g., B.-B. Chen & Chang, 2012; Del Giudice, 2008; Finnegan et al., 1996; Granot & Mayseless, 2001; Karavasilis, Doyle, & Markiewicz, 2003). Gender differences in attachment have an adaptive significance which emerge during middle childhood in order to respond to new challenges in the social world (Del Giudice, 2009). Given the gender difference in insecure attachment, the moderating role of ambivalent

coping was expected to be more pronounced for girls than boys, whereas the moderating role of avoidant coping was expected to be more pronounced for boys than for girls.

The present study

The present study was designed to test the effects of social withdrawal and the moderating effects of insecure attachment- relevant coping on peer difficulties (specifically, peer victimization and rejection) in Chinese urban children during middle childhood. In particular, we included two subtypes of social withdrawal, shy- ness and unsociability. On the basis of the above review of the extant literature, we expected that both shyness and unsociability would be positively related to peer difficulties. Given that social withdrawal may be perceived as less acceptable for boys than for girls in Chinese culture (Ho, 1986), the relations between with- drawn behaviors and peer difficulties were expected to be more pronounced for boys. The central goal of the present study was to explore the moderating role of insecure attachment-relevant coping in peer difficulties of shy and unsociable children. It was expected that relations between shyness and unsociability and peer difficulties would be stronger among children who have higher level of ambivalent and avoidant coping styles than those who have lower level of ambivalent and avoidant coping styles (i.e., exacerbating process). Last, given the gender differences in insecure attachment, the moderating role of ambivalent coping was expected to be more pronounced for girls than boys, whereas the moderating role of avoidant coping was expected to be more pronounced for boys than for girls.

Methods

Participants

The sample consisted of 487 children (247 boys, 240 girls) in public primary schools that were selected in Shanghai, People's Republic of China. To ensure the sample we selected were all from urban areas in Shanghai, the geographic area is inside the outer circle (i.e., central city area; cf. the area outside the outer circle is the sub- urban zone). We used a simple random sample in which we first randomly selected four of the 11 districts which are all located in the central city area, and then randomly

selected one public school from each district. Because each school had different teaching arrangements, we could not select equal number of grades from each school. Nevertheless, we still randomly selected two classes from each grade. Two Grade 2, two Grade 3, two Grade 4, and two Grade 5 classes, respectively, were selected from school A. In school B, two Grade 2 and two Grade 5 classes, respectively, were selected. In school C, two Grade 2 and two Grade 3 classes, respectively, were selected. Two Grade 4 classes were selected in school D. There were 175 children in Grade 2 (M_{age}=8.26; *SD*=.32), 102 children in Grade 3 (M_{age}=9.28; *SD*=.43), 109 children in Grade 3 (M_{age}=10.42; *SD*=.77), 101 children in Grade 5 (M_{age}=11.18; *SD*=.38).

Approximately 34% of mothers and 30% of fathers had completed high school, 37.1% of mothers and 43% of fathers had a college/university degree, and 10% of mothers and 12% of fathers had at least some post-graduate training. The sample was representative of middle-childhood children in an urban area in China.

Procedures

After obtaining signed consent forms, we group-administered a peer assessment measure of social withdrawal and a sociometric nomination measure of peer victimization and rejection. The children were also asked to complete the self-report measures of insecure attachment-relevant coping styles. The administration of all measures was carried out by a group of psychology graduate students.

Measures

Insecure attachment-relevant coping styles. Self-reports of insecure attachment-relevant coping styles were conducted using a shorter version of the Coping Strategy Questionnaire (CSQ; Finnegan et al., 1996; Yunger et al., 2005). The 20 item scale measures middle-childhood children's coping strategies with their mother in attachment-relevant stressful situations. Separate scales of 10 items each assessed preoccupied (ambivalent) and avoidant attachment. In order to minimize the influence of social desirability response biases, each item contains two opposing statements to cope with the hypothetical situation, with a ''Some kids … BUT Other kids … '' format. The

children were asked to designate which statement was more like him or her and indicate the degree of the item's applicability.

Following Finnegan et al.'s (1996) procedure, items on the pre- occupied scale were scored as values of 0, 0, 1, and 2 to response options designating that the children indicated that the statements reflecting, respectively, (a) the non- preoccupied coping was ''very true'', (b) the non- preoccupied coping was ''sort of true'', (c) the preoccupied coping was ''sort of true'', (d) preoccupied coping was ''very true''. A value of 0 was assigned to both of the non- preoccupied coping options (i.e., ''sort of true'' and ''very true'') because neither indicated any degree of preoccupied insecurity. Items on the avoidant scale were scored analogously (i.e., with a value of 0 assigned to both non-avoidant options and values of 1 and 2 assigned, respectively, to lesser and greater endorsement of avoidant options). As suggested by Finnegan et al. (1996), item scores were averaged for each scale so that every participant received two scores on continuous dimensions of preoccupied (ambivalent) and avoidant coping.

The scale has proved reliable and valid in previous studies to assess children's attachment insecurity during middle childhood (e.g., Booth-LaForce, Oh, Kim, & Rubin, 2006; Yunger et al., 2005). Finnegan et al. (1996) reported that the 2-week test-retest correlations for the preoccupied and avoidant subscales were .83

and .76, respectively, and the two subscales were moderately correlated (r = -.47), suggesting satisfactory divergent validity. In addition, the short version of the questionnaire has proved reliable and valid in previous studies. Analyses (Brumariu & Kerns, 2008) indicated that scores calculated from the short and long versions of the questionnaire were highly correlated (rs > .95). Furthermore, the existing literature has shown that the short versions of the subscales were significantly correlated with caregiving and parental styles (Karavasilis et al., 2003; Yunger et al., 2005), social anxiety sub- types (Brumariu & Kerns, 2008), social competence (Booth- LaForce et al., 2006) and several indices of school adjustment (Kerns, Tomich, Aspelmeier, & Contreras, 2000). The short versions of the two subscales were internally consistent across several samples of Chinese children (B.-B. Chen, 2012; B.-B. Chen & Chang, 2012), with alpha coefficients ranging from .70 to .72 for ambivalent attachment and .65 to .72 for avoidant attachment. The internal consistency reliability estimates in current

sample were .70 and .65 for ambivalent and avoidant coping, respectively.

Peer-nominated social withdrawal. We conducted peer assessments of social behaviors adopted from the Revised Class Play (RCP; Masten, Morison, & Pellegrini, 1985). Research has indicated that children in middle childhood have the ability to make clear distinctions between the two subtypes of social withdrawal (Coplan et al., 2012; Crozier, 2010; Spooner, Evans, & Santos, 2005; Xu et al., 2008). The items were derived from the literature (e.g., Booth- LaForce et al., 2006; Hart et al., 2000) and have been used previously among Chinese children with satisfactory reliability (Chang, 2003; Chang et al., 2005; X. Chen et al., 1995, 2011). The two shy- ness items were ‘‘Someone who is very shy,’’ and ‘‘Someone whose feelings get hurt easily.’’ The four unsociability items were ‘‘Some- one who would rather play alone than with others,’’ ‘‘Someone who is not interested in group activities,’’ ‘‘Someone who doesn’t prefer social interaction,’’ and ‘‘Someone who would not like to talk with others.’’ For each item, students were asked to nominate three names in the class. The internal consistency reliability based on within-class standardized scores was .68 for shyness, and .78 for unsociability.

The peer nomination measure has long been used to assess shyness in the previous studies in Western (Hymel, Rubin, Rowden, & LeMare, 1990; Rubin & Mills, 1988) and Chinese societies (Chang, 2003; X. Chen et al., 1995). Evidence has shown that self-reported shyness was positively related to peer-rated shyness (Ding et al., 2014; Paulhus & Morgan, 1997; Watson & Clark, 1991). However, relatively little attention has been given to unsociability, and only limited evidence demonstrated that peer-rated unsociability was positively related to teacher-rated unsociability (Ladd, Kochenderfer-Ladd, Eggum, Kochel, & McConnell, 2011). Of note, recent analysis via multi- trait–multimethod (MTMM) correlation matrices has shown that peer nomination measures of both unsociability and shyness consistently demonstrated the best convergent and divergent validity whereas the measure from other sources including teachers, observers, and the self tended to show medium levels of convergent and divergent validity (Spangler & Gazelle, 2009). Further- more, when testing the convergent and divergent validity in the MTMM model, there was no gender difference, and peers and teachers demonstrated the best validity.

Table 1. Means and standard deviations of all variables.

	Boys		Girls				
Variables	*M*	*SD*	*M*	*SD*	*t* value (*df*)	*M* diff	95% CI
Social withdrawal							
Shyness	-.22	1.56	.18	1.77	-2.66 (485)	-.40**	[-.70, -.10]
Unsociability	.32	3.29	-.59	2.40	3.50 (450.51)	.91**	[.40, 1.42]
Insecure attachment							
Ambivalent coping	.69	.41	.79	.43	-2.47 (485)	-.09*	[-.17, -.02]
Avoidant coping	.32	.33	.23	.23	3.63 (440.60)	.09***	[.04, .14]
Outcome variables							
Peer victimization	.13	1.21	-.14	.66	3.12 (383.45)	.27**	[.10, .45]
Peer rejection	.12	1.11	-.20	.64	3.88 (396.11)	.32***	[.16, .48]

Note. The standardized scores for Shyness range from -2.47 to 10.03, and the standardized scores for Unsociability range from -4.41 to 17.18. Ambivalent and Avoidant coping scores range from 0 to 2. The standardized scores for Peer victimization range from -1.25 to 5.10, and the standardized scores for Peer rejection range from -1.27 to 5.15. For all variables, higher scores indicate more of that quality.
n =487. *p < .05; **p < .01; ***p < .001.

It should be noted, however, that the measures of shyness and unsociability via different raters may assess different aspects (Spooner et al., 2005). For example, self-reports may focus mainly on children's internal motivations and emotions. In contrast, peer nominations may focus mainly on the external aspects, and rate children based on their overt behavioral performance. However, it should be noted that both self-reported and peer-nominated shy- ness and unsociability have similar patterns of associations with other study variables (Ding et al., 2014).

Peer victimization and rejection. Each child was asked to nominate peers who are often bullied by others (index for peer victimization) and peers whom they disliked (index for peer rejection) in the class- room. Then, their raw frequency scores were converted into standardized *z* scores within the class group. Although only one item was used to assess peer victimization and rejection respectively, peer nomination procedures tend to yield reliable indices even when single-item scales are used (Coie, Terry, Lenox,

Lochman, & Hyman, 1995). The validity of peer nominations for peer victimization and rejection has been demonstrated repeatedly (e.g., Perry et al., 1988; Peters, Riksen-Walraven, Cillessen, & de Weerth, 2011).

Statistical analyses

Structural equation modeling conducted with Mplus (Muthe´n & Muthe´n, 2007) was used to examine whether ambivalent or avoidant coping moderated the associations between unsociability and shyness on peer victimization and rejection. Moreover, sex differences in the models were also explored. In all, three models were tested. The first model (model 01) examined the main effects of shyness, unsociability and the attachment variables on both out- comes simultaneously. Following that, moderating associations were tested in model 02. Lastly, a final model (model 03) tested for sex differences in the moderating associations to the outcomes using a multi-group comparison approach.

Results

Preliminary analysis

Simple *t*-test analyses were used to test for gender differences in social withdrawal, attachment and peer difficulties. They revealed significant gender differences for all the study variables. Girls received more peer nominations of shyness than boys, whereas peers nominated more boys on unsociability than girls. The girls reported having higher scores in ambivalent coping than boys, whereas boys reported higher scores in avoidant coping than girls. Boys also had greater scores in both peer victimization and rejection. The means and standard deviations of the variables as a function of gender are presented in Table 1.

Correlations between the study variables are presented in Table 2. Ambivalent coping of both boys and girls was associated with shyness, whereas ambivalent coping of boys was associated with unsociability. In addition, ambivalent coping of boys was associated with peer rejection, whereas ambivalent coping of girls was associated with peer victimization.

Table 2. Correlations between the study variables among boys (presented above the diagonal) and girls (presented below the diagonal).

Study variables	01.	02.	03.	04.	05.	06.
01. Shyness	–	.41 [.30, .51]*	.22 [.10, .33]*	-.05 [-.17, .08]	.34 [.22, .44]*	.33 [.21, .44]*
02. Unsociability	.34 [.23, .45]*	–	.24 [.12, .35]*	-.03 [-.15, .10]	.43 [.32, .53]*	.68 [.60, .74]*
03. Ambivalent coping	.17 [.05, .29]*	.02 [-.11, .14]	–	-.29 [-.40, -.17]*	.05 [-.08, .17]	.23 [.11, .35]*
04. Avoidant coping	-.03 [-.15, .10]	.08 [-.05, .20]	-.25 [-.37, -.13]*	–	.09 [-.04, .21]	.07 [-.06, .19]
05. Peer victimization	.41 [30., .51]*	.17 [.04, .29]*	.18 [.06, .30]*	-.09 [-.21, .03]	–	.50 [.40, .58]*
06. Peer rejection	.36 [.25, .47]*	.24 [.12, .36]*	.08 [-.04, .20]	.00 [-.13, .12]	.03 [-.09, .16]	–

Note. Values in bold represent statistically significant differences between the correlations of boys and girls. Values in brackets represent the 95% confidence intervals. *n*(boys) =247; *n*(girls) =240. *$p < .05$.

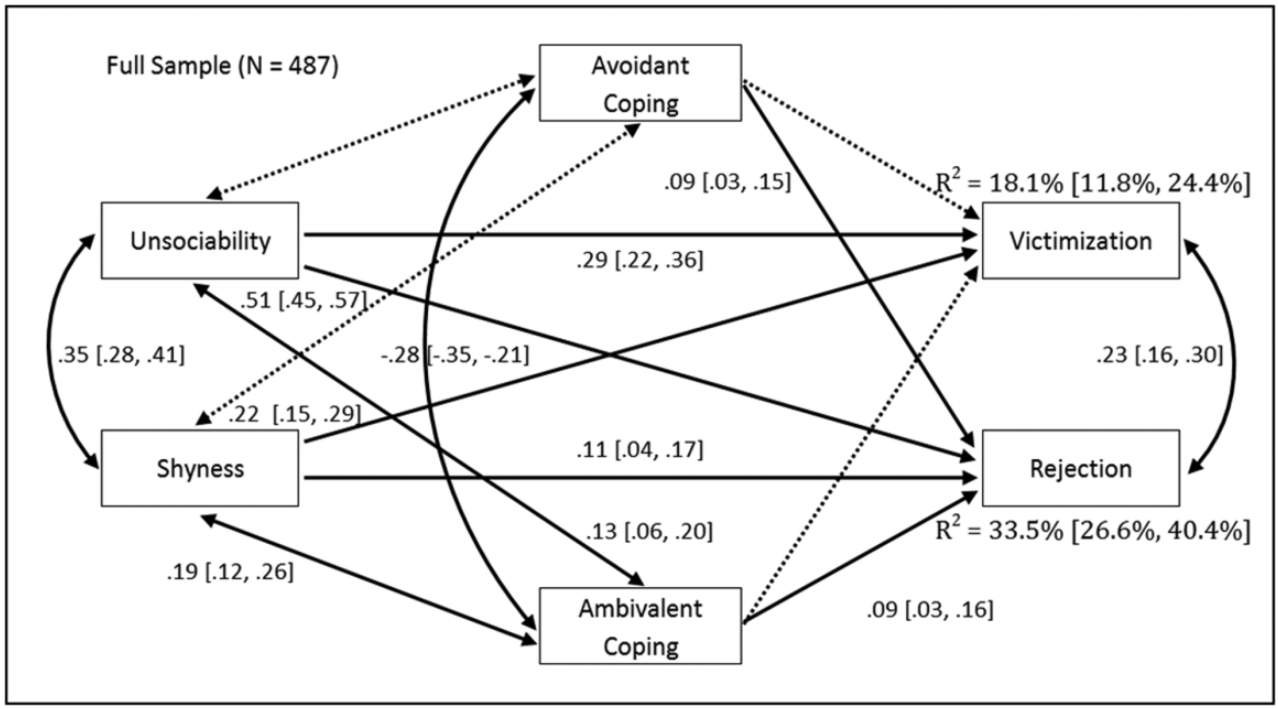

Figure 1. Main effects of unsociability, shyness and attachment styles on peer victimization and rejection (model 01). Standardized coefficients are provided. Values in brackets represent the 95% confidence intervals. Solid lines reflect significant associations ($p < .05$) while dotted lines were not.

Structural equation modeling

The first model examined the main effects of shyness, unsociability and attachment-relevant coping styles on peer victimization and rejection simultaneously using the full sample (Figure 1). The two outcomes were significantly correlated (r = .23, p < .05). Moreover, shyness and unsociability were also positively related (r = .35, p < .05). In addition, ambivalent coping was negatively correlated with avoidant coping (r = -.28, p < .05).

This first model showed that peer victimization was positively associated with shyness (β = .22, z = 5.07, p < .05) and unsociability (β = .29, z = 6.77, p < .05) whereas no significant main effects were observed for either ambivalent (β = .01, z = .31, p > .05) or avoidant coping (β = .07, z = 1.56, p > .05). Peer rejection on the other hand was positively associated with shyness (β = .11, z = 2.66, p < .05), unsociability (β = .51, z = 14.53, p < .05) and both ambivalent (β = .09, z = 2.30, p < .05) and avoidant coping (β = .09, z = 2.35, p < .05). All told, the predictors explained 18.1% of the variability in peer victimization and 33.6% of the variability in rejection. The resulting model was a good fit to the data, $x^2_{(2)}$ = 2.96, p > .05, CFI = .99, RMSEA = .03, SRMR = .02.

The second model included the potential moderation of attachment-relevant coping styles on the effects of shyness and unsociability again in the full sample. Two significant associations were observed. Specifically, both avoidant and ambivalent coping moderated the associations between unsociability and peer difficulties (Figure 2). To explain, the effect of unsociability on peer victimization was exacerbated at higher values of avoidant coping whereas the effect of unsociability on peer rejection was exacerbated at higher values of ambivalent coping. The addition of the moderating effects explained an additional 2.3% of the variability in peer victimization and 2.7% of the variability in rejection. The new model remained a good fit to the data, $x^2_{(2)}$ = 2.96, p > .05, CFI = .99, RMSEA = .03, SRMR = .01.

The third model split the analyses by gender (Figure 3). As observable from the figure, the pattern of associations differed noticeably between boys and girls. For one, the association between unsociability to peer victimization was significant among boys but not girls, and the association between unsociability and rejection was

also significant among boys but not girls. In contrast, the association between shyness and rejection was only significant among girls but not boys. We also tested the shared effect of shyness on victimization for differences between boys and girls. Constraining the effect to be identical among boys and girls did not significantly worsen the model, $x^2_{(1)} = .10$, $p > .05$. The same cannot be said however for the association between the outcomes. The correlation between peer victimization and rejection was significantly stronger among boys compared to girls as constraining them to be equal significantly worsened the model, $x^2_{(1)} = 26.75$, $p < .05$.

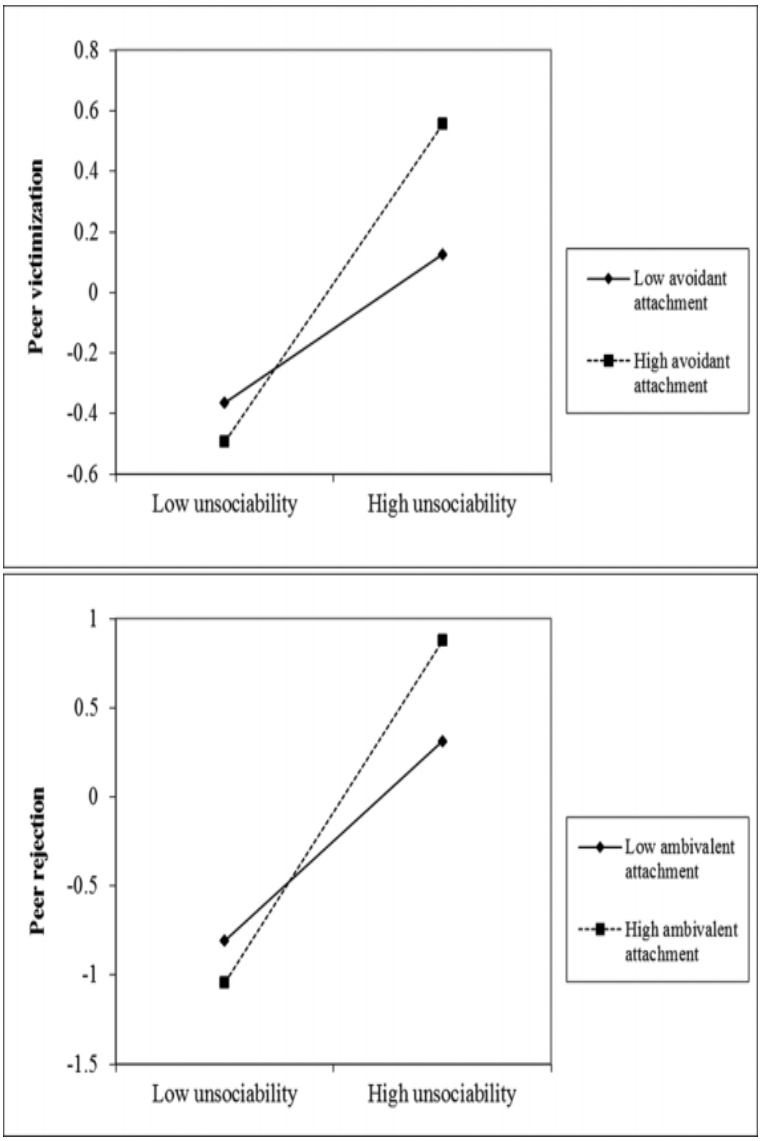

Figure 2. The moderating role of avoidant attachment on the relations between unsociability and peer victimization (top frame) and peer rejection (bottom frame). *n* ¼ 487.

Moreover, different moderating effects of ambivalent and avoidant coping were observed. Among boys but not girls, the effect of unsociability on peer victimization (see the top panel of Figure 4) and the effect of shyness on rejection was worsened at higher values of avoidant coping (see the bottom panel of Figure 4). Meanwhile among girls but not boys, the effect of unsociability and shyness on rejection was worsened at higher values of ambivalent coping (Figure 5). Examining the variance explained also showed no significant difference between boys (25.6%) and girls (17.9%) for peer victimization ($z = 1.64$, $p > .05$). Mean- while, for peer rejection, the difference was significant ($z = 7.02$, $p < .05$) with more than twice more variability explained among boys (49.8%) compared to the girls (18.2%). The final model remained a good fit to the data, $x^2_{(16)} = 10.37$, $p > .05$, CFI = 1.00, RMSEA =.02, SRMR = .01, with similar contribution to the chi-square from the group of boys ($x^2 = 4.86$) and girls ($x^2 = 5.51$).

Discussion

This study investigated the effects of social withdrawal on peer difficulties and the role of attachment-relevant coping as a moderator in these associations in Chinese urban children during middle child- hood. In support of the hypotheses, both shyness and unsociability were associated with peer victimization and rejection. Both ambivalent and avoidant coping served an exacerbating role for peer difficulties for socially withdrawn children (especially for unsociable children). The gender differences in the relationship between social withdrawal, attachment-relevant coping and peer difficulties were also observed.

As expected, shyness was positively related to both peer victimization and rejection. Shy children experienced peer difficulties in urban areas. A possible explanation is that shy behaviors are not compatible with the cultural endorsement of assertive and competitive competence in urban areas of China (X. Chen et al., 2005; X. Chen et al., 2009). Knowledge about the social adjustment of socially-withdrawn behaviors among Chinese urban children is largely based on findings from studies of shyness (e.g., Chang, 2003, 2004; X. Chen et al., 2005, 2009; Xu et al., 2007, 2009).

The link between unsociability and social adjustment in peer contexts remains understudied. The results of the present study indicated that unsociability was positively related to both peer victimization and rejection (above and beyond the effect of shyness). As discussed above, unsociability does not fit collective functioning (Ho, 1986), and hence is not socially acceptable. As a result, unsociability is likely to be associated with peer difficulties. Importantly, the results also showed that the relations between unsociability and peer rejection were more pronounced for boys than girls. It was consistent with past research suggesting that unsociability may be more detrimental for boys (e.g., Coplan & Weeks, 2010b). It would appear that Chinese children may be more likely to accept or tolerate their female peers who are unsociable than with male peers.

The primary goal of the present study was to examine the moderating role of coping styles in the attachment relationship with their mother on the links between social withdrawal and peer difficulties (i.e., peer victimization and rejection). Consistent with our predictions, the moderating role of ambivalent coping was more pronounced for girls than boys, whereas the moderating role of avoidant coping was more pronounced for boys than girls given the gender differences in avoidant and ambivalent coping. Further- more, the results demonstrated that avoidant coping, but not ambivalent coping, exacerbated socially withdrawn boys' peer difficulties, but the pattern of associations varied. Among boys who had high levels of avoidant coping, their unsociable behaviors were much more strongly associated with increased peer victimization. This finding suggests that unsociable children who prefer doing things alone and keeping themselves away from the peer group may be more likely to be bullied by their peers mainly because their higher levels of avoidant coping style may make them less motivated and less skilled in searching social support and relationship maintenance than those with lower levels of avoidant coping style. Boys' shyness was associated with peer rejection among those who had high level of avoidant coping, which is in line with results from a recent study (Rydell et al., 2005) demonstrating that shy children with avoidant attachment representations had poor peer competence. Some researchers (Bohlin et al., 2005) have suggested that in a secure relationship, an inhibited child may be more able to handle the fear of new or unfamiliar situations, which

in turn have more positive social experiences. Instead, as found in our study, with an insecurely avoidant coping strategy, a shy child may inhibit themselves to confidently initiate social interactions, which may result in much more difficulties in handling peer relationships. Therefore, shyness was associated with increased peer rejection especially among those w ho had high level of avoidant coping.

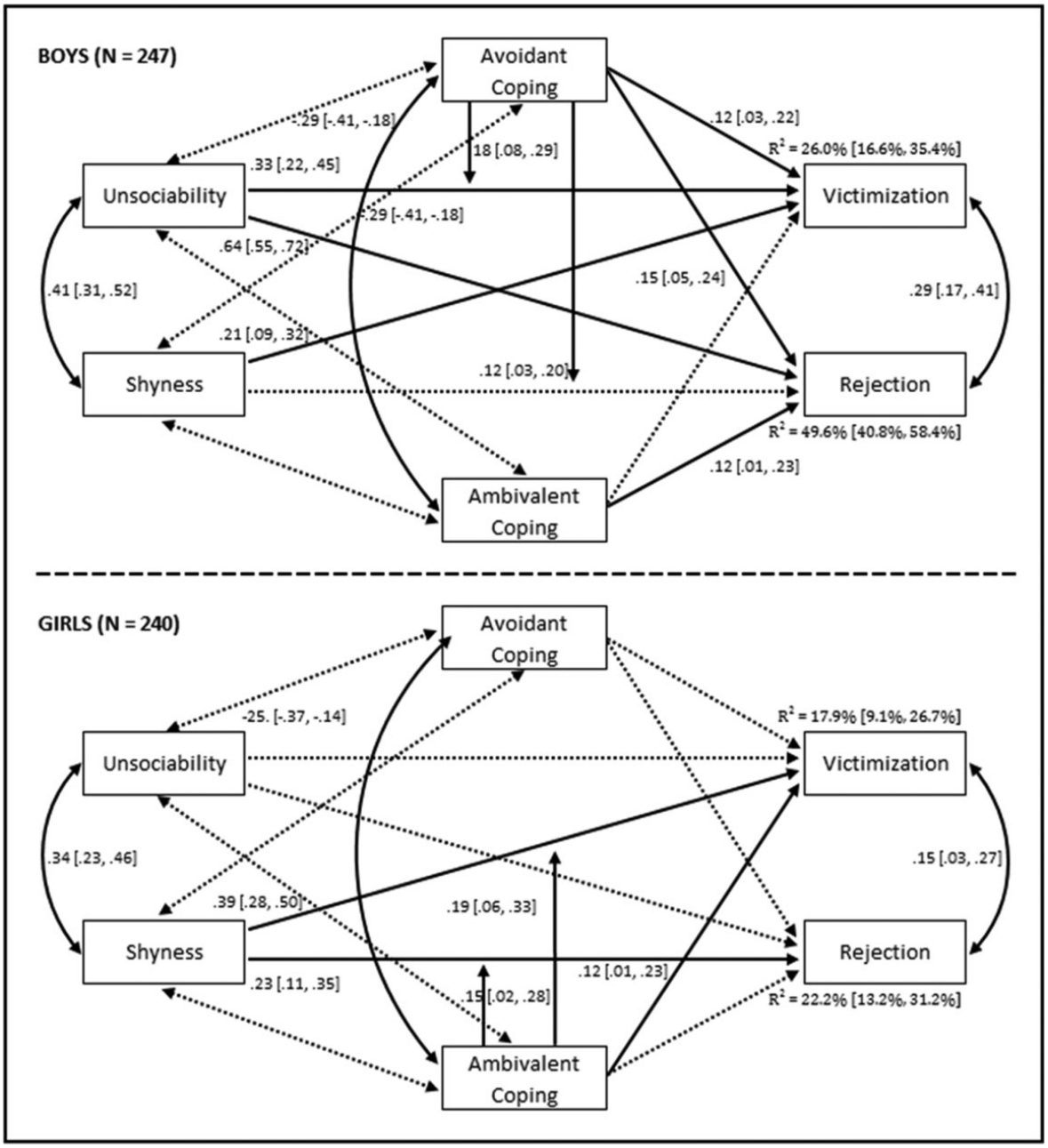

Figure 3. Moderation of attachment styles of the associations between unsociability, and shyness on peer victimization and rejection separated by gender (model 03; $x^2_{(16)}$ = 10.37, p > .05, CFI = 1.00, RMSEA = .02, SRMR = .01). Standardized coefficients are provided. Solid lines reflect significant associations (p < .05) while dotted lines were not.

In addition, as expected, the results demonstrated that ambivalent coping, but not avoidant coping, exacerbated peer rejection for both shy and unsociable girls. That is to say, girls high on unsociability and shyness were especially at risk for peer rejection if they had high levels of ambivalent coping. With an insecurely ambivalent coping style, a socially withdrawn girl may fear re-encountering negative experiences in peer groups, which may have much more peer difficulties. Therefore, ambivalent coping style may serve an exacerbating role for shy and unsociable girls' peer rejection.

However, unexpectedly, high levels of ambivalent coping were not detrimental for girls who had low levels of shyness and unsociability. These ambivalent girls, who fear to encounter abandonment and relationship loss, may be expected to be more accommodating and more active in peer relationship maintenance efforts. Given they are not shy and unsociable, therefore they may have relatively good social skills to interact with their peers, and hence may be not socially rejected in the peer group.

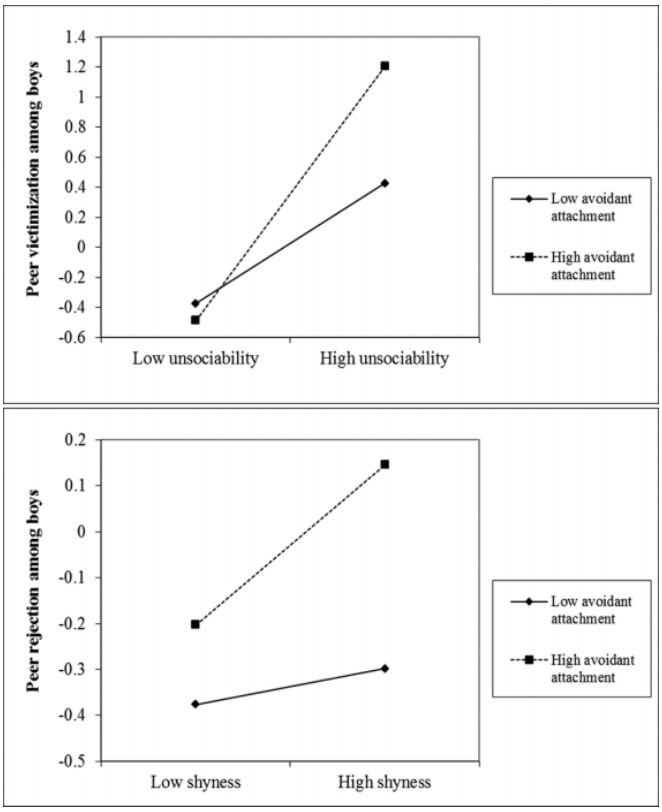

Figure 4. The moderating role of avoidant attachment on the relations between unsociability and peer victimization (top frame) and between shyness and peer rejection (bottom frame) among boys. *n* = 247.

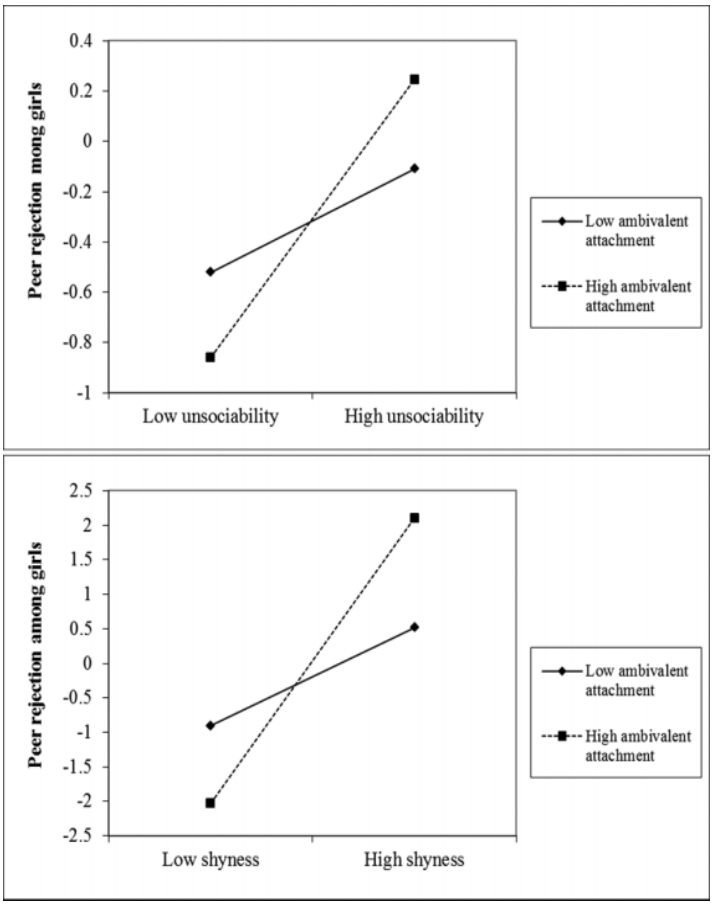

Figure 5. The moderating role of ambivalent attachment on the relations between unsociability (top frame) and shyness (bottom frame) on peer rejection among girls. *n* = 240.

In summary, the present study indicates that insecure attachment-relevant coping styles moderate the links between social withdrawal subtypes and peer difficulties. The negative moderation of insecure attachment may be attributed to children's internal working model. Insecurely-attached children's internal working model characterized by mistrust, fear and poor emotion regulation may influence their subsequent interactions in the peer context. As found by Cassidy et al. (1996), insecure children were more likely to have negative representations of peer relationships than secure children. Thus, socially withdrawn children, along with a negative internal working model, may lead to adjustment problems in peer contexts. However, according to a contextual- developmental perspective, the functional meaning of behaviors should be grounded in the specific cultural contexts (X. Chen, 2012; X. Chen & French, 2008; X. Chen, French, & Schneider, 2006). The two subtypes of social withdrawal of interest in the present study, shyness and unsociability, carry different culturally endorsed meaning in peer interactions within Chinese urban con- texts. On the one hand, shyness is associated with social maladjustment because it is not compatible with the requirement of the modern urban society which emphasizes assertiveness and autonomy (X. Chen et al., 2005, 2009). On the other hand, unsociability is not socially encouraged, and even prohibited, because its anti-collective nature may be harmful to the well- being of the group. Unsociability, unlike shyness, may be considered a more serious deviant behavior. Therefore, unsociable children may encounter more pervasive adjustment difficulties in the peer context, especially when they lack secure attachment relationships with their parents. In addition, given that boys are more likely than girls to show avoidant attachment during middle childhood (Del Giudice, 2009), the moderating role of avoidant coping is more pronounced for boys than girls; and given that girls are more likely than boys to show ambivalent attachment during middle childhood (Del Giudice, 2009), the moderating role of ambivalent coping is more pronounced for girls than boys.

Limitations and future directions

The results of the present study did not confirm the findings of other studies which

suggest that unsociability be a relatively ‘‘benign’’ form of social withdrawal, even in middle childhood and beyond (e.g., Bowker & Raja, 2011; Coplan & Weeks, 2010b; Kim, Rapee, Oh, & Moon, 2008), but demonstrated that both shyness and unsociability might lead to maladaptive outcomes in peer relation- ships during middle childhood in the particular cultural context of Chinese urban area. Importantly, the present study provided some of the first evidence to suggest that an insecure attachment coping style may serve an exacerbating role for shy and unsociable children's problematic peer relations, with these role patterns differing by gender. Nevertheless, these results must be interpreted cautiously because of several limitations.

First, causal links between the study variables could not be determined given the cross-sectional design and correlational nature of the data. In other words, it makes it impossible to draw firm conclusions in terms of the causal mechanisms that may underlie these relations between social withdrawal, insecure attachment and peer difficulties. For example, it is possible that insecurely- attached children who experience adjustment problems in peer relationships also tend to show socially-withdrawn behaviors. Or, another possibility is that social withdrawal may serve as the mediator in the linkage between attachment and problematic peer relations. Therefore, follow-up data may help clarify this issue, but the present study provides a first step in that direction.

Another limitation of the present study was that the two peer difficulty constructs, peer victimization and rejection, were assessed by the peer nomination based on a single item, respectively. Although peer nomination procedures tend to yield reliable indices even when single-item scales are used (Coie et al., 1995), future research that includes more items on these constructs may enhance the psychometric reliability. Furthermore, the absence of other sources of measurement to assess peer difficulties was also a limitation. Data collected from peers may only represent a sample of behavior that is more limited to peer difficulties occurring during the school day. However, data collected from others sources, for example self-report, teacher- and parent-rating, may span school, neighborhood, and community contexts. Future research that includes more than one informant on these constructs may provide additional richness in the assessment of the associations addressed in the present

study.

Third, it is important to bear in mind that the findings apply to urban children and their parents in China. There are regional, particularly urban-rural, differences in social and economic development in China (X. Chen et al., 2010; Fuligni & Zhang, 2004). Despite dramatic social and economic changes in urban areas, the rural areas are less developed and traditional Chinese values are not influenced by Western social values and ideologies. As it has been suggested that macro-level social and cultural context may influence socialization and its outcomes (e.g., X. Chen et al., 2005, 2009), it will be interesting to examine whether the effects of social withdrawal and the moderating effects of insecure mother–child attachment on peer difficulties vary as a function of different regions within China.

Fourth, recent research has indicated that there are two forms of shyness (i.e., anxious and regulated shyness) that have been identified in Chinese Children (Xu et al., 2007, 2008). Anxious shyness, conceptually, is similar to the shyness tested in the present study. But regulated shyness refers to a form of self-controlled social restraint in a non-assertive and unassuming manner. In addition, unlike unsociability, regulated shyness conveys an important message to peers that he or she wants to fit in with the group (Xu et al., 2007). It seems to show that regulated shyness is consistent with a group orientation, but still not compatible with the requirement of an individualistic orientation such as assertiveness and autonomy. Therefore, it is interesting to examine whether regulated shyness may have same association patterns that we have found in the present study.

Finally, the present study indicated that the impact of children's social withdrawal can depend on their attachment with parents, but there are likely to be other important moderating variables. Children's relationships with their friends (e.g., Bukowski, Laursen, & Hoza, 2010) or teachers (e.g., Arbeau, Coplan, & Weeks, 2010) may help to determine which relationships are destructive and to what extent, as well as developmental changes in what is protective/exacerbating for children's adjustment in peer contexts.

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