

Shyness, Unsociability, and Socio-Emotional Functioning at Preschool: The Protective Role of Peer Acceptance

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Published online: 26 December 2016
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Abstract In present study, we examined the protective role of peer acceptance in the links between two subtypes of social withdrawal (shyness, unsociability) and indices of young children's socio-emotional functioning. Participants were $N = 112$ Italian preschool children ($n = 54$ boys) aged 36–74 months ($M = 56.85$ months, $SD = 10.14$). Multi-source assessments included: (1) parental ratings of children's shyness and unsociability; (2) teacher ratings of children's internalizing problems, externalizing problems, and social competence; (3) child interview assessments of preference for solitary play; and (4) peer (sociometric) ratings of peer acceptance. Among the results, shyness was associated with internalizing problems at preschool, whereas unsociability was related to a preference for solitary play. In addition, results from multiple regression analyses indicated significant interactions between peer acceptance and both shyness and unsociability in the association with indices of socio-emotional functioning. For example, at lower levels of peer acceptance, shyness was positively related to children's preference for solitary play, whereas children's unsociability was associated with externalizing problems. In contrast, these relations were attenuated at higher levels of peer acceptance. Findings are discussed in term of the potential protective role of young children's peer acceptance for different subtypes of social withdrawal during early childhood.

Keywords Shyness · Unsociability · Peer acceptance · Preference for solitary play · Preschoolers

Introduction

Starting in early childhood, the peer context represents an important and unique resource for children's healthy socio-emotional development (Rubin et al. 2015). Preschool children with harmonious peer relationships are more likely to display cooperative behaviors, school liking, and to be accepted by their peers during kindergarten and the primary school years (Eggum-Wilkens et al. 2014; Torres et al. 2015). In contrast, other children are more likely to be socially withdrawn, removing themselves from opportunities for peer contact (Coplan et al. 2013; Liu et al. 2014). Socially withdrawn young children are at increased risk for developing a wide range of socio-emotional difficulties, including internalizing problems (e.g., anxiety) and negative peer experiences (e.g., rejection) (Rubin et al. 2009).

Contemporary theory and research now indicate that there are subtypes of social withdrawal, each characterized by distinct temperamental, emotional, and motivational substrates (Coplan et al. 2013). For example, shyness is the most investigated subtype of social withdrawal during childhood, and shares considerable conceptual overlap with a number of other similar constructs, (e.g., behavioral inhibition, Kagan 1997; anxious solitude, Gazelle and Ladd 2003). Shy children experience an inner conflict between social approach and social avoidance motivations, whereby their desire to interact with peers is simultaneously inhibited by feelings of anxiety, worry, and fear of negative judgments (Asendorpf 1990; Jones et al. 2014). As a

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consequence, shy children are prone to the display socially reticent behaviors (e.g., watching other peers play without joining in) in both familiar and unfamiliar social contexts (Coplan et al. 2009).

Previous scholars have demonstrated a connection between shyness in childhood and negative social outcomes, both concurrently and later in life (Rubin et al. 2009; Walker et al. 2014). Indeed, because they withdraw from social situations, shy children may miss out on important opportunities to practice and develop new cognitive and social skills (Jones et al. 2014). Perhaps as a result, shyness has been related to difficulties in social relationships (e.g., peer exclusion, victimization), a lack of social competence, and greater internalizing problems (Bohlin et al. 2005; Clauss and Blackford 2012). For example, Karevold et al. (2012) reported that preschoolers' shyness predicted anxiety symptoms and poorer social skills at ages 12–13 years. Indeed, as evidenced in a meta-analysis conducted by Clauss and Blackford (2012), shyness during early childhood represents one of the principal risk factors for the later development of social anxiety disorder.

In contrast, unsociability (also sometimes labelled social disinterest) has been mostly studied in adults and only recently is receiving growing attention in childhood (Coplan et al. 2015). Unsociable children are conceptualized as not fearing social contact, but at the same time, having less of a desire to engage with peers and more interest in solitary activities (Asendorpf 1990; Coplan et al. 2013). Thus, unsociable children appear to be content to play alone and are characterized by a temperamental trait of non-fearful preference for solitude.

Unsociability appears to be a comparatively benign subtype of social withdrawal, particularly in early childhood. For example, unsociable young children do not tend to differ from their non-withdrawn counterparts in terms of most indices of socio-emotional functioning (Coplan et al. 2004; Spangler and Gazelle 2009). However, there is some evidence to suggest that unsociability can be associated with negative peer experiences, including peer dislike and exclusion (Coplan et al. 2007; Coplan and Weeks 2010). For instance, Coplan et al. (2007) found that young children preferred to play with hypothetical socially competent peers, followed by shy, unsociable, and, lastly aggressive peers. Thus, it is possible that the preference for solitary activities may influence peers to, as consequence, actively reject unsociable children (Coplan et al. 2013).

Positive social relationships with important others may represent a protective factor for both subtypes of socially withdrawn children, who generally spend less time in interaction with others (e.g., Coplan et al. 2008; Graham and Coplan 2012). For example, young shy children particularly benefit from positive (i.e., warm/close, not overly-dependent or conflictive) relationships with teachers.

Indeed, supportive and close relationships between teachers and shy children are predictive of both social and school adjustment (Arbeau et al. 2010; Sette et al. 2014). Developmental scientists also highlight the critical and unique contribution of positive peer relationships to young children's socio-emotional adaptation (Rubin et al. 2015). Accordingly, children's social acceptance from peers has been associated with sympathy and prosocial behavior (Eisenberg et al. 2015). For example, Malti et al. (2012) found that being liked by peers was a significant predictor of children's sharing behaviors. There is at least some evidence to suggest that negative peer relationships may represent a particular risk factor for socially withdrawn children and adolescents (Markovic and Bowker 2015; Rubin et al. 2006). For example, Gazelle and colleagues (Gazelle and Ladd 2003; Gazelle and Rudolph 2004) found that peer exclusion exacerbated the development of depressive symptoms among socially withdrawn anxious children. In early childhood, Coplan et al. (2014) reported that peer exclusion increased the positive association between shyness and children's reported preference to play alone (rather than with peers).

In sum, most previous research on the peer relationships of socially-withdrawn children has focused on the potential exacerbating effects of peer rejection and exclusion. As well, previous samples have mostly included older children and adolescents and the central construct assessed was either shyness or a global measure of social withdrawal (i.e., lack of consideration of unsociability). Accordingly, the purpose of the present study was to examine the moderating role of positive peer experiences (i.e., peer acceptance) in the links between social withdrawal subtypes (i.e., shyness, unsociability) and indices of socio-emotional functioning in young children at preschool. We hypothesized that at lower levels of peer acceptance, shyness would be more strongly associated with indices of maladjustment in the preschool (e.g., internalizing problems, a lack of social competence, lesser desire to play with peers). In contrast, we hypothesized that these associations would be attenuated at higher levels of peer acceptance. For unsociability, hypotheses were more speculative in nature. Unsociable children are thought to be able to demonstrate competent social skills during peer interactions. Thus, positive experiences with peers might create an attractive social environment for unsociable children, which in turn could encourage a higher level of peer interaction. However, given that unsociable children generally do not experience social fear/anxiety, it is possible that their experiences of lower levels of peer acceptance may result in differential adjustment difficulties as compared to shy children. Finally, we also considered possible gender differences in the association between shyness, unsociability, and children's socio-emotional functioning.

Method

Participants

Participants of the present study were $N = 112$ preschool children (79.5% Caucasian; 54 boys, 58 girls) between the age of 36 and 74 months ($M = 56.85$ months, $SD = 10.14$). Children were attending five different preschool classrooms in Italy. The families of the children who participated in the study belonged to a low or medium-low socioeconomic status. Approximately 37.5% of fathers and 35.7% of mothers had attended only high school, 37.5% of fathers and 41.1% of mothers had a university degree or beyond, 11.6% of fathers and 10.7% of mothers finished middle school, and only 2.7% of fathers and 0.9% of mothers achieved an elementary school education (parental education was not available for 10.7% of fathers and 11.6% of mothers). Teachers who participated (one per classroom) were all females, with age of 41–50 years and with teaching experience of 16–20 years.

Procedure

The present study was part of a larger research project aimed at investigating children's social withdrawal from ages three to six years. Parental consent was obtained for all children. Multi-source assessments were employed, including parent, peer, and teacher ratings, as well as child interviews. Parents provided background information and rated children's shyness and unsociability. Teachers assessed children's social behaviors at preschool. Children were interviewed to assess their preference for solitary play, and peers rated classmates on their level of social acceptance. Teachers and parents were not paid to participate in the present research and children did not receive any rewards or gifts after the interview.

Measures

Social withdrawal subtypes

Parents completed the Italian version of the Child Social Preference Scale (CSPS; Coplan et al. 2004), which assesses subtypes of social withdrawal in early childhood. The scale was translated and then back-translated for its use in the Italian sample. The CSPS includes 11 items rated on a five-point Likert scale (1 = Not at all, 5 = A lot) with subscales assessing shyness (7 items, $\alpha = 0.76$; e.g., "My child seems to want to play with other children, but is sometimes nervous to") and unsociability (4 items, $\alpha = 0.73$; e.g., "My child often seems content to play alone"). The two subscales demonstrated alpha values consistent with other studies (Coplan et al. 2014; Dyson et al. 2011). The CSPS has been

previously successfully translated and validated for use in other cultures (e.g., Li et al. 2016; Okada et al. 2012).

Preference for solitary play

To assess child preference for solitary activities, we used the Preference for Solitary Play Interview (PSPi), recently developed by Coplan et al. (2014). Female interviewers, who had previously familiarized with the group class, presented each child 11 cartoon images (in a random order) representing a wide range of play activities, including games-with-rules (e.g., board games), sensorimotor/functional games (e.g., climbers, slide), dramatic games (e.g., dress-up), and constructive games (e.g., legos, blocks). Children indicated if they preferred to perform each activity with another child or alone by pointing to the relevant representative image (i.e., child alone or child with a peer). The final score was calculated by summing the children's responses (1 = play alone, 0 = play with another child) and dividing the total by the number of items presented. The Cronbach's alpha for the current study was .82, which was consistent with the findings of Coplan et al. (2014).

Children's socio-emotional behaviors

One teacher for each class completed the Italian version of the Social Competence and Behavior Evaluation scale (SCBE; Sette et al. 2015; originally developed by LaFreniere and Dumas 1996). The SCBE includes 21 items rated on a six-point Likert scale (1 = never, 6 = always), with subscales assessing social competence ($\alpha = 0.91$; e.g., "Cooperates with other children"), externalizing problems ($\alpha = 0.87$; "Opposes the teacher's suggestions"), and internalizing problems ($\alpha = 0.91$; "Inhibited or uneasy in the group").

Peer acceptance

Peer acceptance was assessed using the sociometric procedure developed by Asher et al. (1979). Each child was presented with three boxes with different smiley faces, representing happy, neutral, and sad emotional expressions. The child was asked to insert pictures of classmates into one of the three boxes with the following explanation: happy face = children you like to play with; neutral face = children you kind of like to play with; sad face = children you do not like to play with. The total score of peer acceptance was calculated by summing the three scores (i.e., 3, 2, and 1 scores for the happy, neutral, and sad faces, respectively) and dividing the total by the number of children in the class. The final score was standardized for each child within the classroom.

Table 1 Means, standard deviations, and correlations among the study variables

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9
1. Shyness	2.08	0.69	–								
2. Unsociability	2.02	0.76	0.47***	–							
3. Preference for solitary play	0.31	0.27	0.10	0.20*	–						
4. Internalizing problems	2.32	0.91	0.24**	0.15	0.10	–					
5. Externalizing problems	2.03	0.97	0.02	0.13	0.03	–0.01	–				
6. Social competence	3.85	0.91	–0.11	–0.06	–0.15	–0.36***	–0.31***	–			
7. Peer acceptance	2.16	0.26	–0.02	0.01	–0.01	–0.12	–0.31***	0.40***	–		
8. Child age	56.85	10.14	0.11	–0.11	–0.19*	–0.22*	–0.04	0.40***	0.25**	–	
9. Gender	–	–	–0.07	0.28**	0.02	0.08	–0.08	0.25**	0.01	–0.15	–

Note. For peer acceptance, we reported the unstandardized score. Gender (0 = boys, 1 = girls)

* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

Data Analyses

Data were first checked for normality (e.g., skewness, kurtosis) and then correlations analyses were computed to assess associations among the study variables. We also conducted a series of ANOVAs to examine gender differences for the main study variables. Finally, we computed four separate hierarchical multiple regression equations to examine the potential moderating role of peer acceptance in the links between subtypes of social withdrawal (i.e., shyness, unsociability) and indices of socio-emotional functioning. For these analyses, preference for solitary play, internalizing problems, externalizing problems, and social competence served as dependent variables. For each regression, child gender and age were entered as control variables at Step 1, main effect variables (shyness, unsociability, peer acceptance) were entered at the Step 2, and the conceptually relevant interaction terms (shyness x peer acceptance, unsociability x peer acceptance) were entered at Step 3. We also tested two-way interactions terms involving gender and each of the social withdrawal subtypes (i.e., gender x shyness, gender x unsociability). Significant interaction terms were decomposed using simple slope analyses.

Results

Results from preliminary analyses indicated that none of the study variables revealed significant deviations from normality (values less than |2| for skewness and |7| for kurtosis; see Curran et al. 1996) or univariate outliers. Descriptive statistics and correlations among all study variables are presented in Table 1. Of note, children’s age was significantly and negatively related to preference for solitary play and internalizing problems and positively associated with peer acceptance and socially competent behaviors.

Results of the ANOVAs indicated that, overall, girls were rated by parents as more unsociable ($M = 2.22$, $SD = 0.83$) than boys ($M = 1.80$, $SD = 0.60$), $F(1, 100) = 8.392$, $p = 0.01$, partial $\eta^2 = 0.08$, and that girls were rated by teachers as more socially competent ($M = 4.07$, $SD = 0.93$) than boys ($M = 3.62$, $SD = 0.83$), $F(1, 110) = 7.236$, $p = 0.01$, partial $\eta^2 = 0.06$. No other significant gender differences emerged. Accordingly, both child age and gender were statistically controlled for in subsequent analyses.

Overall, the pattern of linear associations among variables was consistent with our expectations (see Table 1). For example, although shyness and unsociability were significantly inter-related, shyness was significantly and positively related to teacher-rated internalizing problems, whereas unsociability was significantly and positively associated with children’s self-reported preference for solitary play.

Complete results of hierarchical multiple regression analyses are presented in Table 2. Here, we focus the discussion on the interaction effect results (Step 3). Since the two-way interactions terms involving gender and each of the subtypes of social withdrawal were not statistically significant in any model, results are presented here without them to ease presentation.

For preference for solitary play, results indicated a significant shyness x peer acceptance interaction effect. Results from the simple slope analyses (see Fig. 1) revealed that among children with lower levels of peer acceptance (1 SD below the mean), shyness was significantly and positively related to preference for solitary play ($b = 0.15$, $p = 0.03$). However, at higher levels of peer acceptance (1 SD above the mean), this association was negative (although only marginally significant; $b = -.12$, $p = 0.08$).

For externalizing problems, findings revealed a significant unsociability x peer acceptance interaction. Simple slope analyses (Fig. 2) indicated that the association between unsociability and externalizing problems was

Table 2 Summary of the regression models analyzing the role of peer acceptance in the link between shyness, unsociability, preference for solitary play, and socio-emotional behaviors

	Step 1				Step 2				Step 3			
	B	β	<i>T</i>	<i>p</i>	B	β	<i>t</i>	<i>p</i>	B	β	<i>t</i>	<i>p</i>
<i>DV = Preference for solitary play</i>												
Gender	-0.02	-0.04	-0.399	0.69	-0.05	-0.08	-0.784	0.44	-0.04	-0.07	-0.635	0.53
Age	-0.01	-0.23	-2.260	0.03	-0.01	-0.23	-2.229	0.03	-0.01	-0.29	-2.769	0.01
Shyness					0.02	0.05	0.404	0.69	0.02	0.04	0.322	0.75
Unsociability					0.06	0.17	1.437	0.15	0.06	0.17	1.469	0.15
Peer acceptance					0.02	0.06	0.632	0.53	0.03	0.10	0.976	0.33
Shyness × Peer acceptance									-0.13	-0.30	-2.740	0.01
Unsociability × Peer acceptance									0.04	0.11	1.037	0.30
	<i>F</i> (2, 98) = 2.555, <i>p</i> = 0.08				<i>F</i> (5, 95) = 1.873, <i>p</i> = 0.11				<i>F</i> (7, 93) = 2.490, <i>p</i> = 0.02			
<i>R</i> ²	0.05				0.09				0.16			
<i>DV = Externalizing problems</i>												
Gender	-0.13	-0.07	-0.654	0.52	-0.21	-0.11	-1.065	0.29	-0.18	-0.09	-0.910	0.37
Age	-0.01	-0.03	-0.293	0.77	0.01	0.08	0.746	0.46	0.01	0.07	0.701	0.49
Shyness					-0.14	-0.10	-0.873	0.39	-0.11	-0.08	-0.715	0.48
Unsociability					0.28	0.21	1.828	0.07	0.23	0.18	1.557	0.12
Peer acceptance					-0.32	-0.33	-3.313	0.01	-0.32	-0.33	-3.354	0.01
Shyness × Peer acceptance									0.16	0.11	0.951	0.34
Unsociability × Peer acceptance									-0.27	-0.23	-2.096	0.04
	<i>F</i> (2, 99) = 0.232, <i>p</i> = 0.79				<i>F</i> (5, 96) = 2.854, <i>p</i> = 0.02				<i>F</i> (7, 94) = 2.718, <i>p</i> = 0.01			
<i>R</i> ²	0.01				0.13				0.17			
<i>DV = Social competence</i>												
Gender	0.60	0.33	3.831	0.001	0.59	0.32	3.768	0.001	0.59	0.32	3.796	0.001
Age	0.04	0.48	5.551	0.001	0.04	0.41	4.842	0.001	0.04	0.42	4.947	0.001
Shyness					-0.13	-0.10	-1.059	0.29	-0.12	-0.09	-0.936	0.35
Unsociability					-0.07	-0.06	-0.608	0.55	-0.09	-0.07	-0.734	0.47
Peer acceptance					0.28	0.31	3.739	0.001	0.27	0.30	3.643	0.001
Shyness × Peer acceptance									0.21	0.15	1.557	0.12
Unsociability × Peer acceptance									-0.15	-0.14	-1.489	0.14
	<i>F</i> (2, 99) = 19.921, <i>p</i> = 0.001				<i>F</i> (5, 96) = 12.581, <i>p</i> = 0.001				<i>F</i> (7, 94) = 9.539, <i>p</i> = 0.001			
<i>R</i> ²	0.29				0.40				0.42			
<i>DV = Internalizing problems</i>												
Gender	0.04	0.02	0.221	0.83	0.08	0.04	0.425	0.67	0.05	0.03	0.282	0.78
Age	-0.02	-0.20	-1.960	0.05	-0.02	-0.22	-2.125	0.04	-0.02	-0.21	-2.019	0.05
Shyness					0.37	0.28	2.456	0.02	0.36	0.26	2.328	0.02
Unsociability					-0.02	-0.02	-0.163	0.87	0.01	0.01	0.065	0.95
Peer acceptance					-0.03	-0.04	-0.366	0.72	-0.03	-0.04	-0.370	0.71
Shyness × Peer acceptance									-0.10	-0.07	-0.598	0.55
Unsociability × Peer acceptance									0.21	0.18	1.647	0.10
	<i>F</i> (2, 99) = 2.063, <i>p</i> = 0.13				<i>F</i> (5, 96) = 2.467, <i>p</i> = 0.04				<i>F</i> (7, 94) = 2.171, <i>p</i> = 0.04			
<i>R</i> ²	0.04				0.11				0.14			

Note. Unstandardized (B) and standardized (β) beta coefficients are reported. Gender (0 = boys, 1 = girls)

significant and positive at lower levels of peer acceptance ($b = 0.51, p = 0.01$). However, this relation was attenuated at higher levels of peer acceptance ($b = -.04, p = 0.85$).

Finally, for social competence and internalizing problems, no significant interaction terms emerged. However, the main effects of peer acceptance on social competence

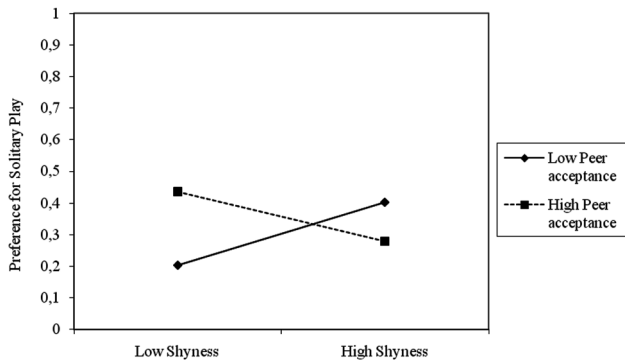


Fig. 1 The moderating role of peer acceptance in the association between shyness and preference for solitary play

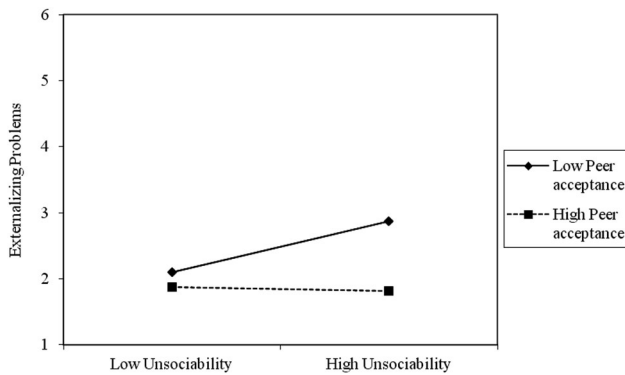


Fig. 2 The moderating role of peer acceptance in the association between unsociability and externalizing problems

and shyness on internalizing problems were found (see Table 2).

Discussion

The primary goal of this study was to examine the potential protective role of positive peer experiences in the links between the two subtypes of social withdrawal (i.e., shyness, unsociability) and young children’s socio-emotional functioning. Overall, shyness was positively related to internalizing problems, whereas unsociability was associated with self-reported preference for solitary activities. Some initial support was also found for the protective role of peer acceptance, but differential findings were evident for different subtypes of social withdrawal. For example, among preschool children with lower levels of peer acceptance, shyness was associated with a preference for solitary activities. In contrast, at higher levels of peer acceptance, this relation was attenuated. Somewhat surprisingly, unsociability was associated with externalizing problems among children with lower, but not higher, levels of peer acceptance. Thus, there is at least some preliminary

evidence to suggest that the protective role of positive peer experiences functions somewhat differently among subtypes of social withdrawal during early childhood.

Results from the current study at to the growing number of studies demonstrating differential associations between subtypes of social withdrawal and young children’s socio-emotional behaviors (e.g., Coplan et al. 2004; Harrist et al. 1997). First, maternal-rated shyness was associated with teacher ratings of internalizing problems at preschool. This finding is consistent with previous researches linking shyness to indices of internalizing problems. For example, Karevold et al. (2011) reported that shyness during infancy and early childhood was a significant predictor of internalizing problems at age 8.5 years.

Although our study was cross-sectional, these findings represent a potential indicator for concern for shy children, as elevated but sub-clinical symptoms of anxiety in children may be predictive of more serious internalizing problems in later years. For example, Goodwin et al. (2004) reported an association between anxious-withdrawn behaviors at 8-year-olds (e.g., fearfulness of new situations or people) and internalizing behaviors (e.g., social phobia, depression) at 16–21 year-olds (while controlling for family, childhood, and social risk factors).

However, it is also worth noting that our results did not reveal significant associations between shyness and other indices of children’s socio-emotional functioning, including preference for solitary play, social competence, and peer acceptance. It has been previously reported that preschool children who prefer to play with other children did not differ in term of shyness from children who prefer play alone or with the teacher (Coplan et al. 2004). This result could be interpreted as support for the notion that shy children do indeed desire social interaction. Accordingly, other researchers have argued that although shy children may remove themselves from larger peer groups, they may be more apt to establish close relationships with one or few peers (Rubin et al. 2006). In future studies, it would be interesting to analyze other types of social interactions with others to understand if shy children display differences in playing in dyadic or in small group interactions.

Notwithstanding, the non-significant associations between young children’s shyness and both social competence and peer acceptance is not consistent with previous studies conducted in North American samples (e.g., Coplan et al. 2008; Gazelle and Ladd 2003). Moreover, in one of the few previous studies of shyness in young Italian children, Sette et al. (2014) reported a significant association between shyness and both internalizing behaviors and peer rejection (but not social competence). It is not clear why these associations did not emerge in the present sample, although a comparatively smaller sample size may have reduced power to detect associations.

Overall, unsociability was only significantly associated with children's self-reported preference for solitary activities, and not with other indices of socio-emotional difficulties (e.g., internalizing problems). These findings are in keeping with the notion that unsociable children manifest a non-fearful preference to play alone—and that unsociability could represent a comparatively benign form of social withdrawal in early childhood (Coplan et al. 2004). However, as we will discuss in more detail in a later section, unsociable behaviors may still come with some social costs for the child, particularly in the realm of peer relations (Coplan et al. 2013).

Interestingly, girls were rated by parents as being more unsociable than boys. This gender difference has not been reported in previous studies of unsociability in North America (e.g., Coplan et al. 2013; Coplan and Weeks 2010). However, it is possible that Italian parents perceived unsociability as more acceptable in girls than in boys, given that solitary activities could be reflective of the gender stereotype that girls are more quiet than boys (Doey et al. 2014). Indeed, there is some previous evidence to suggest that unsociability carries more negative consequences in boys than in girls (e.g., Coplan et al. 2013; Ding et al. 2015). For instance, Spangler and Gazelle (2009), reported that unsociability was more strongly related to peer exclusion in boys than in girls in middle childhood.

Although we did not find any associations between children's social withdrawal subtypes and peer acceptance, our results indicated that peer acceptance moderated the relations among each type of social withdrawal and different indices of children's socio-emotional functioning. More specifically, among children who were less accepted by peers, shyness was associated with a greater preference to play alone. Conversely, at higher levels of peer acceptance, this positive association was not only attenuated, but became a marginally significant negative association. These findings are consistent with the previous results of Coplan et al. (2014), who also reported a similar pattern of results in an interaction between shyness and peer exclusion in the association with the preference for solitary play. More negative peer experiences may heighten feelings of anxiety and depression among children already prone to shyness (Gazelle and Ladd 2003). This in turn may serve to extinguish social approach motivations and heighten the desire to play alone (Coplan et al. 2015).

In contrast, greater acceptance by peers may help young shy children feel more comfortable and confident during social interactions. As consequence, it is possible that shy children have more opportunity to improve the quality of social interactions and acquire new social skills. Indeed, recent early intervention programs for young extremely shy children that have included components of social skills training and adult-facilitated peer play have demonstrated

encouraging initial results. As compared to waitlist comparisons, young shy children in the intervention groups have demonstrated increased levels of peer play at preschool and reduced anxiety post intervention (Chronis-Tuscano et al. 2015; Coplan et al. 2010; Li et al. 2016).

This study found a moderating role for peer acceptance in the link between unsociability and socio-emotional behaviors in early childhood. Results from some previous studies have suggested that unsociability is related to peer exclusion and rejection (e.g., Coplan et al. 2013; Coplan and Weeks 2010). However, our results revealed that such negative peer experiences may evoke harsh responses among some unsociable children. At lower levels of peer acceptance, we found that unsociability was (somewhat surprisingly) positively associated with teacher-ratings of externalizing problems. Conversely, at higher levels of peer acceptance, the relation between unsociability and externalizing problems was no longer significant. These results suggest that unsociable young children who experience less social acceptance by peers may actively react with anger and aggression.

This novel finding suggests that peer rejection may encourage some unsociable children to move against others, through aggressive and oppositional behaviors. Although the cross-sectional nature of our data, it is possible that children's aggression may predict higher levels of peer exclusion and children's adjustment problems over time (Ladd and Troop-Gordon 2003). This result seems to differentiate unsociable children from shy children, that differently withdrawn themselves from peer group at lower levels of social acceptance. Thus, experiencing (or not experiencing) anxiety or fear in presence of peer rejection may be a factor that differentiates the social behaviors of the two subtypes of social withdrawal (i.e., moving away from others for shy children and moving against others for unsociable children). However, the social acceptance appears to represent a protective factor for both subtypes of social withdrawal. In this regard, our results provide further evidence of the importance of differentiating between these two subtypes of social withdrawal: in social exclusion contexts, shyness and unsociability appear to be differentially related to indices of socio-emotional problems. Nevertheless, it would be interesting to understand the intensity and persistency of the preference for solitary play (for shy children) and externalizing problems (for unsociable children) as consequences of peer rejection over time.

Strengths and Limitations

Our findings add to the growing literature on subtypes of social withdrawal in childhood in several important ways.

For example, this study focused on positive peer relationships as a protective factor in the adjustment of subtypes of socially withdrawn young children – and during early childhood. As well, a particular strength of the study was the use of a multi-method and multi-informant approach, including peer ratings, parent and teacher evaluations, and child interview assessments.

Notwithstanding, some caveats and limitations should be considered in the interpretation of the results. First, this was the first time that the Child Social Preference Scale (CSPS, Coplan et al. 2004) has been used to assess shyness and unsociability among young children in Italy. We had no conceptual rationale for expecting a different factor structure for this measure in this cultural context, and the subscales did display acceptable internal reliability. However, our sample size was not large enough to permit a direct test of the factor structure. In addition, given that we used parents' perceptions on shyness and unsociability, it would be of use adopt other measures that investigate children's motivations underlying to their decisions to be socially withdrawn. Relatedly, the finding that parents rated girls as more unsociable than boys should also be interpreted with some caution given the small sample size. These results should be replicated before drawing strong inferences regarding the longer term implications of social withdrawal in Italian boys and girls.

In addition, we only tested the cross-sectional relations among subtypes of social withdrawal, peer acceptance, and children's socio-emotional functioning. Accordingly, we should also consider other plausible causal explanations for the pattern of results reported. For example, it may be that shy children who also prefer to play alone evoke more negative peer responses (i.e., lower peer acceptance) from their classmates. It is also possible that aggressive children may respond to peer dislike by becoming more unsociable over time. Future studies should investigate the associations among these variables longitudinally in order to understand possible consequences of subtypes of social withdrawal over time. This is particularly important for the long-term effects of unsociability that, to date, remain largely unexplored. For instance, Kopala-Sibley and Klein (2016) recently reported that unsociability at age 6 years significantly predicted depressive and anxiety problems at age 9 years.

Finally, although this study investigated the role of positive peer interactions for both subtypes of social withdrawal during early childhood, it would be necessary to investigate the protective role of peer acceptance for shy and unsociable children in other countries. For example, Liu et al. (2015) revealed more social adjustment difficulties (e.g., more loneliness and depression, poorer academic achievement) for unsociable children in China than Canada.

Compliance with Ethical Standards

Conflict of Interest The authors declare that they have no conflict of interests.

Ethical approval All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards.

Informed consent Informed consent was obtained from all individual participants included in the study.

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