

# Shyness and Nonsocial Behavior in different Settings Among Chinese Children

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## Introduction

Shy children often engage in low levels of social interaction, particularly with unfamiliar people and in novel situations. These children are also referred to as socially reticent (Asendorpf, 1990). Another group of children who also display low level of social interaction but instead engage in solitary exploration of objects and constructive play, referred to as solitary-passive play (Rubin, 1982). There have been two interpretations for the motivation and consequences of solitary-passive play: one suggests that these behaviors are not associated with anxiety elicited by novel stimuli, while the other proposes that this form of solitary behavior reflects a strategy for coping with the approach-avoidant conflict and anxious feelings arise from unfamiliar situations and thus may bear consequences for later peer relations (Henderson et al., 2004). This study investigated relations between shyness and children's observed nonsocial behavior in two different settings: interaction with a stranger and free play with familiar peers. Children's nonsocial behaviors were also examined in relation to teachers' perception of social competence and problems.

## Research Questions

- How are children's behavior organized in the situation where they interact with a stranger?
- How are children's nonsocial behavior displayed in the two different situations (i.e., interaction with a stranger and free play with familiar peers) associated?
- Are teachers' perception of children's social competence and problems associated with different forms of nonsocial behavior?

## Methods

### Participants

- Children were selected from 224 kindergarten aged children in a metropolitan area in China.
- Shy group: n = 38 (17 girls, 21 boys); parents' and teachers' shyness ratings at top quartile.
- Non-shy group: n = 24 (10 girls, 14 boys); shyness ratings at bottom quartile.
- At the beginning of the study the children were aged 5.8 to 6.8 years (M = 6.4 years).
- Shy and nonshy group were not different in any of the demographic characteristics.

### Procedure

Laboratory procedure, the "adult stranger" session, (adapted from Asendorpf, 1990) consisted of four episodes with about 3 minutes each:

- The child being alone
- The stranger present, no interaction
- The interaction period
- The child left alone with the toys

Observation of free play



### Measures

• The adult stranger session was coded for (within each episode): attention, solitary focused play with toys, speech directed to the stranger, interactive play with the stranger, and anxious behavior.

• **Play Observation Scale** (POS; Rubin, 2001). Children's behavior during free play were coded for *solitary-passive play*, *group play*, and *anxious behaviors*. When the child engaged in group play, whether he/she or others initiated the play activity were also coded. Each child's behavior was recorded for 15 minutes.

• **Teacher-Child Rating Scale** (T-CRS 2.1; Perkins & Hightower, 2002). Children were rated by teachers on a 5-point scale regarding school-related competence and problems, including *assertive social skills*, *Shy-anxious*, *peer social skills*, and *peer social problems*.

## Results

### Factor Analysis of Behaviors during Interaction with a Stranger

- Three Factors emerged from the children's behaviors during the adult stranger session:

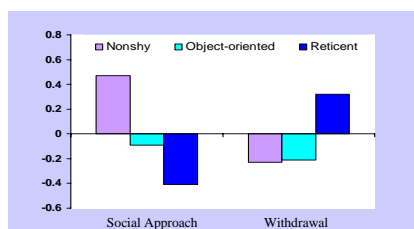
	factor1	Factor 2	Factor 3
<b>Factor 1: Social approach</b>			
Talking to stranger	.72		
Interactive play	.66		
No. of toys played	.64		
Looking at stranger	.62		
Latency of 1st utterance to stranger	-.86		
<b>Factor2: Object orientation</b>			
Looking at toys (stranger present)		.90	
Solitary focused play (stranger present)		.82	
Focused play (alone)		.58	
Looking at toys (alone)		.55	
Latency of touching the 1st toy		-.55	
<b>Factor 3: Withdrawal</b>			
Reading the book (stranger present)			.86
Anxious behavior (alone)			.61
Anxious behavior (stranger present)			.60
Looking at stranger play			-.79
Reading the book (stranger present)			.86
Variance explained	22.1%	18.9%	16.2%
Alpha	.84	.83	.77

### Creating Subgroups of Shy Children

The shy group was divided into two groups using a mean split based on the factor score of object orientation. Shy children who had above-average scores on this factor were assigned to the *object-oriented* group (n = 13), and the rest of the shy children, the *reticent* group (n = 25).

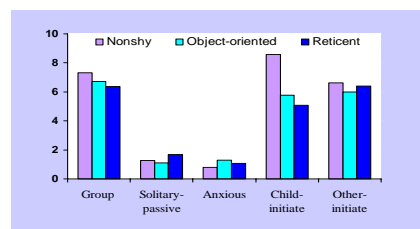
### Group Differences on Behavioral Clusters during Interaction with a Stranger

- Group differed on both social approach and withdrawal factors ( $F_s = 11.14$  and  $9.37$ ,  $p_s < .001$ ):
- Nonshy group was higher on social approach than both shy groups.
- Reticent group was higher on withdrawal than nonshy and object-oriented group.



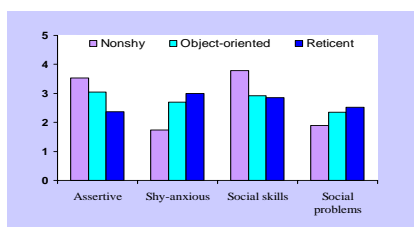
### Group Differences on Behaviors in Free Play

- Group differed only on the child-initiated group play with peers ( $F = 5.43$ ,  $p < .01$ ): nonshy children initiated more group play than the two shy groups.



### Group Differences on Teacher Ratings of Social Competence and Problems

- Groups were different on all four measures: assertive social skills ( $F = 12.74$ ,  $p < .001$ ), shy-anxious ( $F = 14.95$ ,  $p < .001$ ), peer social skills ( $F = 6.89$ ,  $p < .01$ ), and peer social problems ( $F = 3.60$ ,  $p < .05$ ).
- Nonshy group was rated higher on assertive social skills and lower on peer social problems than reticent group; object-oriented group was not different from either.
- Nonshy group was rated as having higher peer social skills and being less anxious than both shy groups.



## Discussion

• Children seemed to differ in their reaction to social versus nonsocial stimuli. In novel situations, children's approaching to a stranger and exploration of objects tended to be related but separate dimensions.

• Children's nonsocial behaviors displayed in familiar versus unfamiliar situations were not associated. Regardless of whether they approached the stranger or explored the objects in unfamiliar settings, children in all groups were equally likely to engage in social interaction and solitary-passive play in free play with familiar peers. Although nonshy children were more likely to initiate group play than shy children, the two shy groups were not different.

• There seemed to be differences to some extent between the two shy groups. While the reticent group were rated by teachers as being different from the nonshy group on social skills and problems, the object-oriented group was not different than the nonshy group on assertive social skills and peer social problems.

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