The impact of gender on Chinese elementary school teachers' perceptions of student behavior problems

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Abstract

Background: Research on teacher perceptions of student behavior problems is relatively recent in the People's Republic of China. Although some findings are consistent with research in Western settings, interesting differences have emerged. A question that has yet to be examined is the role of teacher and student gender in teachers' perceptions of student behavior problems in China.

Aims: To examine the effects of student and teacher gender on Chinese teachers' perceptions of student behavior problems. In the first study teachers rated the frequency of student behavior problems, while in the second study teachers rated the seriousness of student behavior problems.

Sample: In the first study 527 elementary school teachers from five provinces of China participated; 217 elementary school teachers from four provinces participated in the second study.

Method: The first study was comprised of two phases: developing student behavior problem categories and questionnaire items via interviews with teachers, and collecting teacher questionnaire responses. In the second study teachers were surveyed about how serious they thought behavior problems would be if displayed by a boy versus a girl.

Results: Non-attention was seen as the most frequent behavior problem for girls, while overactive was the most frequent for boys. Interaction effects for teacher and student gender, as well as main effects for teacher gender, were evident on ratings of the seriousness of student behavior problems. Teachers tended to rate less frequent behavior problems as more serious and vice versa.

Conclusions: Results suggest that the most frequent type of student behavior problems in China differ from the West, and also differ for boys and girls. Teacher gender and student gender interactions appeared to influence teachers' perceptions of behavior problem seriousness. These findings support the idea that an exploration of gender and culture may be required for a more complete understanding of students' behavior problems.

Keywords: Chinese elementary schools, teacher perceptions, student behavior problems, gender differences

中國小學教師對學生問題行為知覺的性別效應

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摘要

背景：近年來，教師對學生問題行為知覺的研究在中國逐漸引起重視。儘管一些研究發現與西方的研究相一致，然而仍然顯現出一些有意思的差異。在中國教師對學生問題行為的知覺上，教師與學生的性別所起的作用是一個值得探究的問題。

目的：考察學生和教師的性別在中國教師對學生問題行為知覺上的差異。研究一中，教師對學生問題行為出現的頻率進行了打分；而研究二中，教師對學生問題行為的嚴重性進行了打分。

取樣：研究一的被試為來自中國五個省市的527名小學教師，研究二的被試為來自中國四個省市的217名小學教師。

方法：研究一由兩部分組成，首先通過對教師的訪談歸納學生問題行為的類別，然後由此開發相應的問卷，并收集教師對問卷的反饋。研究二中，運用問卷法分別測查教師對男生和女生問題行為的嚴重性知覺。

結果：研究結果發現，教師認為女生表現出頻率最高的問題行為是上課走神，而男生表現出頻率最高的問題是多動。在對學生問題行為嚴重性的知覺上，教師和學生性別的交互效應顯著，教師性別的主效應顯著。同時，教師傾向于認為出現頻率較低的問題行為更為嚴重，反之相反。

結論：結果表明中國教師認為學生表現出的頻率最高的問題行為與西方有所不同，男生和女生表現出的頻率最高的問題行為也不同。教師性別與學生性別的交互效應對教師問題行為嚴重性的知覺具有影響作用。這些發現給我們的啟示是要想更全面的理解學生的問題行為，有必要考察性別和文化等因素。

關鍵詞：中國小學，教師知覺，學生問題行為，性別差異。

Student behavior problems can have a significant impact on student success (Hinshaw, 1992; Masten, et al., 2005) and teacher confidence (Martin, Linfoot, & Stephenson, 1999). Gender differences associated with both student behavior problems and teacher response have been examined (Beaman, Wheldall, & Kemp, 2006). Although various possible causes for these discrepancies have been discussed—including inherent and socially constructed gender differences, gender stereotyping, and socio-political factors—there has been a remarkable level of agreement in the finding that boys typically have more behavior problems than girls. This finding has been notably consistent across as well as within cultures (Beaman et al., 2006; Beaman, Wheldall, & Kemp, 2007).

An emerging topic in the literature is the role that *teacher* gender might play in reported gender discrepancies in student behavior problems (Borg, 1998; Kokkinos, Panayiotou, & Davazoglou, 2004). Research on teacher perceptions in general, including gender differences in perceptions of student behavior problems are relatively new in the People's Republic of China (China), which is the setting for the present studies. Initial research suggests that China might provide a particularly valuable setting for examining teacher perceptions of student behavior problems due to differing perceptions than the West (Ding, Li, Li, & Kulm, 2008; Shen, Zhang, Zhang, Caldarella, Richardson & Shatzer, 2009).

It should be noted the meaning and the context of the term student behavior problems. Student behavior problems are any classroom behaviors that interfere with the student's own learning, with another student's learning, or with the teacher's ability to teach and manage the class effectively (Merrett & Wheldall, 1984). Behavior problems should not be confused with diagnosed emotional or behavioral disorders, but are a continuum of behaviors that may cause discomfort to teachers or other students (Beaman, Wheldall, & Kemp, 2007). In the current paper, the context in which these behaviors are discussed is limited to teachers' perceptions of behavior in the classroom.

Review of Literature

Perceptions of Behavior Problems and Student Gender

Research has demonstrated that boys are more often perceived as displaying greater levels of behavior problems than girls. Early studies examining the percentage of teachers selecting boys or girls as the most troublesome reported that between 71% and 76% of teachers selected boys (Houghton, Wheldall, & Merrett, 1988; Wheldall & Merrett, 1988). In Hong Kong, 93% of primary teachers (Leung & Ho, 2001) and 71% of secondary teachers (Ho & Leung, 2002) found boys' behavior problems to be the most troublesome. Arbuckle and Little (2004), who examined the percentage of students accounting for disruptive behaviors that required interventions, reported that approximately 18% of males and 7% of females accounted for the most severe disruptive behaviors. These researchers also found that disruptive behaviors increased more for males than for females in the transition from elementary to secondary school. Little (2005) reported that 66% of troublesome students were boys, a ratio of about two boys for each girl identified. These findings are consistent with a cross-cultural study that found that boys were over twice as likely as girls to require managerial interactions in Turkish classrooms and four times as likely in English classrooms (Türnüklü & Galton, 2001). Similar gender differences are also reflected in special education services. Research

indicates that approximately 70% of special education recipients are boys (Beaman, et al. 2006). Boys are about twice as likely as girls to be identified with learning disabilities and over three times more likely to be identified with serious emotional disturbances (Coutinho & Oswald, 2005).

Some researchers have also found that teachers rate the same behavior as more or less serious depending on whether it is exhibited by a girl or a boy (Borg, 1998; Borg & Falzon, 1993; Kokkinos et al., 2004). For example, being sensitive, crying and being easily disappointed have been rated by teachers as more serious if displayed by boys, whereas using profane language, being rude and disobeying teachers have been rated as more serious if they occur in girls (Kokkinos et al., 2004). Such findings suggest two possibilities: (1) teachers really observe more severe forms of behavior in primarily one gender, and/or (2) teachers are influenced by gender stereotyping when rating student behaviors. Additionally, some research suggests that gender disparities in learning disabilities tend to be exaggerated in school based referral processes when compared to other measurement and diagnostic procedures (Beaman, et al., 2006).

At least some of the disproportionate emphasis on boys' behavior problems might be due to the types of behaviors boys more often exhibit rather than their gender. For example, boys are more likely to exhibit externalizing behaviors and girls are more likely to exhibit internalizing behaviors (Henricsson & Rydell, 2004; Hoffman, Powlishta, & White, 2004). Externalizing behaviors, which are behaviors that tend to be focused outward toward other students or the teacher, may also be more likely to be considered problematic from a teacher's standpoint since these behaviors often disrupt the flow of instruction (Merrell, 2008). Conversely, internalizing behaviors, which are focused inwards, such as withdrawing from interactions with others, are less likely to be noticed by a teacher (Merrell, 2008). In a recent study on screening for behavior disorders, teachers were found more likely to use administrative interventions for students identified as exhibiting externalizing behaviors than for those with internalizing behaviors (Caldarella, Young, Richardson, Young, & Young, 2008).

However, the reasons why these gender differences in perceived behavior problems continue to be reported are still not fully understood (Beaman, et al., 2006). As mentioned, researchers have cited innate behavior differences associated with gender, social norms, and gender stereotyping as potential influences on teacher perceptions (Beaman, et al., 2006). Interactions between both teacher and student gender have also been examined in relation to teacher perceptions of behavior problems (Borg & Falzon, 1993; Kokkinos, et al., 2004), although this aspect has been less frequently addressed. It seems, however, that teacher gender is potentially a very important factor to consider when assessing perceptions of student behavior problems. The effects of student gender cannot be completely understood until potential interactions with teacher gender are more fully examined.

Perceptions of Behavior Problems and Teacher Gender

Some studies indicate that teachers' gender affects their judgments regarding the seriousness of student behavior problems (Borg, 1998). Others have found that the *interaction* of teacher and student gender may also affect teachers' perceptions of the seriousness of behavior problems (Borg & Falzon; 1993; Kokkinos, et al., 2004). However,

in a cross-cultural study of teacher perceptions in Germany and South Korea, Langfeldt (1992) found cultural influences on teacher perceptions of student behavior problems, but no influences of teacher or student gender. Langfeldt suggested that the absence of gender effects might have resulted from using principal components analysis which yielded three complex patterns of behavior (labeled Dissocial-Aggressive, Withdrawal, and Non-Conformist). He argued that gender influences might not be observable at this level of abstraction. In response, Borg and Falzon (1993) conducted a similar study, also using principal components analysis to extract three factors (which they labeled Withdrawal, Dissocial/Overtly Challenging, and Disruptive). In contrast to Langfeldt, Borg and Falzon found statistically significant main effects of (a) student gender on the Withdrawal and Disruptive factors, (b) teacher gender on the Dissocial/Overtly Challenging factor, and (c) a significant teacher gender by student gender interaction on the Withdrawal factor. These findings were explained partly in terms of cultural influences, and the authors suggested that cultural differences might also account for the contrasting findings of these two studies (Borg & Falzon, 1993).

More recently, in a study involving student teachers, Kokkinos et al. (2004) reported no main effects of teacher gender on perceived seriousness of behaviors problems. However, one significant teacher gender by student gender interaction emerged. Specifically, male teachers rated temper tantrums as more serious when exhibited by male students. However, male and female teachers rated the same behavior as equally serious when exhibited by a female student.

Research in China

Research on teacher perceptions of student behavior problems is relatively recent in China. Although some findings are consistent with research in Western settings, some interesting differences have emerged (Ding et al., 2008; Shen et al., 2009). For example, teachers in China have reported somewhat lower frequencies of problem behaviors. In addition, Chinese teachers have consistently reported problems with non-attention or daydreaming as being the most frequent and troublesome behavior, whereas talking out of turn is more often ranked highest in studies outside of China (Ding et al., 2008; Beaman et al., 2007; Shen et al., 2009). Talking out of turn may be more typical of externalizing behavior problems, whereas non-attention might be more typical of internalizing behavior problems, especially in China where non-attention might result in part from a hesitancy to ask questions (Ding et al., 2008). To the extent that student gender influences whether students are more likely to exhibit internalizing or externalizing behaviors, it is possible that these apparent cultural differences might be partly accounted for by student gender. Furthermore, teacher gender by student gender interactions in relation to perceived behavior problems do not appear to have been examined in China.

Purpose of these Studies

The present studies were conducted to extend research on the relationship between teacher gender, student gender, and teacher perceptions of student behavior problems in Chinese elementary schools. The first study specifically examined teacher perceptions of the *frequency* of student behavior problems. The second study examined teacher

perceptions of the *seriousness* of various behavior problems when exhibited by a boy or a girl. Effects of student gender, teacher gender, and interactions were examined in both studies.

Study 1

Method

This first study was comprised of two phases. During Phase I, Chinese elementary school teachers were surveyed to aid in developing categories for student behavior problems and items for a teacher questionnaire. An expanded discussion of the methods used in Phase I can be found in Shen et al. (2009). During Phase II, a final version of the teacher questionnaire was distributed to a large sample of Chinese elementary school teachers, and their responses were analyzed.

Phase I: Development of Behavior Problem Categories and Questionnaire

Participants and setting. Two groups of teachers participated in this phase of the study. The first group included 18 Chinese elementary school teachers selected from six schools throughout three provinces (Beijing, Hubei, and Shandong) of China. These teachers were interviewed to aid in developing categories for behavior problems. Members of the second participant group were 38 Chinese teachers from one public elementary school in Beijing. These teachers assisted in developing the questionnaire.

Procedures and measures. The measures used in this study were created by conducting interviews with the initial group of 18 teachers regarding the most common types of behavior problems they perceived in their classrooms, including the specific behavioral characteristics associated with these problems. The interviews were recorded and then the content was sorted into 10 behavioral categories by two researchers (see Shen et al., 2009 for a complete description of these categories). Two "expert" teachers (who had participated in "expert" teacher training sessions and/or received provincial or national teaching awards) read the specific descriptions of the categories to insure that the most relevant categories were included and that the descriptions of these categories were clear and accurate. They also noted where their opinions differed, discussing these differences until they reached consensus, a procedure sometimes referred to as check coding (Miles & Huberman, 1994). Based on their suggestions, these 10 categories were then finalized to be used as part of the teacher questionnaire.

After the 10 behavior problem categories were established, the questionnaire items were developed. The questionnaire asked teachers to reference the ten categories when answering the questionnaire items. In this study items regarding the number of students displaying behavior problems, the behaviors which teachers found to be most difficult or troubling, and those they found to be most frequent were all adapted from Wheldall and Merrett (1988) to fit the Chinese context (i.e., wording of items). These items asked teachers to select the most frequent behavior problem among the 10 categories rather than reporting the frequency of occurrences over a specified time period. As noted by Ding et al. (2008), most researchers in this area have also used versions of the Wheldall and Merrett (1988) questionnaire adapted to their particular needs.

The questionnaires were then distributed to 38 teachers from the second participant group. These teachers reported the amount of time it took to complete the questionnaire and critiqued the presentation and wording of the items. Slight modifications were made according to their

suggestions. The final questionnaire, which was part of a larger study of Chinese teachers' perceptions, contained 14 items, though for this study only 5 items were examined because of their particular relevance to the research questions (see Appendix).

Phase II: Distribution of Questionnaires and Analysis

Participants and setting. The participants for the second phase of the study consisted of 527 Chinese elementary school teachers. Demographic information on these participating teachers is found in Table 1. Participating teachers were from 27 schools located throughout five provinces (Beijing, Hubei, Shanxi, Henan, and Shandong) of China. These five provinces differ in their economic development (i.e., rural versus urban) and school quality (i.e., key versus ordinary schools). There is a distinction between *key* and *ordinary* schools in China: Key schools are considered to be of higher quality, have higher percentages of expert teachers, and tend to be in more urban areas. Schools were selected from each of the provinces with a goal of including diversity in geographic area and school quality.

Table 1

Study 1 Phase II Participants' Demographics

Category	Number	Percentage
Gender		
Male	95	18.0
Female	432	82.0
Grade Taught		
1-2	171	32.4
3-4	178	33.8
5-6	178	33.8
Years teaching		
≤ 5	109	20.7
6-10	118	22.4
11-20	227	43.1
> 20	73	13.9
Expertise		
Expert	117	22.2
Ordinary	410	77.8
School Quality		
Key	230	44.1
Normal	292	55.9
Geographic area		
Rural	170	32.3
Urban	357	67.7

Note. $n = 527$.

Procedures and measures. The measure used in this second phase of the study was the questionnaire (see Appendix) with the ten behavior problem categories developed in Phase I. One of the researchers visited all participating schools and, with the support of the school principals, distributed the questionnaires to the teachers as part of regular teachers' meetings. Each of the school principals granted permission for the researchers to distribute the questionnaires, and teachers consented to participate. All questionnaires were completed anonymously and collected during the school visit. A researcher provided individual guidance and explanations to teachers when needed. Approximately 20 minutes were required to administer and collect the questionnaires from each school. A total of 550 questionnaires were distributed, and 527 (95.8%) were returned. Following completion of the questionnaires, the researchers provided teachers with information on teacher reflection and action research, as appreciation for participating in the study.

Data Analysis

Descriptive statistics (i.e., ranks and percentages) were used to report teachers' perceptions of student behavior problems. Paired sample t-tests were conducted to examine the differences between teachers' ratings of boys' and girls' behavior problems. Independent sample t-tests were used to examine differences between male and female teachers' ratings of student behavior problems. Chi-squared tests were conducted to determine if there

were differences in teachers' perceptions of the 10 problem behavior categories. Spearman's rank order correlation coefficients were conducted to determine relationships between boys' and girls' most frequent behavior problems, as well as male and female teachers' perceptions of students' most frequent behavior problems.

Results

Effects of Students' Gender

The results indicated that there were significant differences between the frequency of boys' and girls' behavior problems. Teachers in this study reported the total number of boys and girls who had behavior problems, as well as which students (boys or girls) displayed more troublesome behaviors from the first two items of the questionnaire. Teachers reported that an average of 15.5% of the students in their class usually have behavior problems. Of those students, boys (10.5%) typically displayed more behavior problems than girls (5.0%). When forced to choose between who displayed more troublesome behavior, 93.5% of teachers reported that boys' behavior problems were more troublesome.

Teachers were asked to report the most frequent behavior problems in the entire class, as well as the most frequent behavior problems for boys and girls separately for the last three items of the questionnaire. It should be noted that the teachers did not indicate the frequency of each of the 10 behavior problems, rather each teacher simply choose the most frequent behavior problem from the list of 10. Spearman rank order correlation coefficients between teachers' rankings of boys' and girls' most frequent behavior problems were not significant (r_s = .25, p = .49). These results suggest that teachers' perceptions of the most frequent behavior problems for boys were not similar to their perceptions of girls. Overactive behavior and talking out of turn (e.g. interrupting teachers and other students or talking without permission) was reported as the most frequent behavior problem for boys (see Table 2). In contrast, non-attention and withdrawal were reported as girls' most frequent behavior problems. Differences between rankings of boys' and girls' behavior problems were also found when examining male teachers (r_s = .41, p = .24) and female teachers (r_s = .23, p = .52) separately. When teachers were asked for the most frequent behavior problems without reference to student gender, non-attention was seen as the most frequent, while emotional disturbance was seen as the least frequent (Shen et al., 2009).

Effects of Teachers' Gender

Few results indicated differences between male and female teachers in regards to their perceptions of the frequency of behavior problems. Male (M = 16.7%, SD = 13.6%) and female (M = 15.3% SD = 12.2%) teachers reported similar percentages of their students as typically having behavior problems [t (499) = 1.03, p = .31]. Male and female teachers also reported similar behavior problems as the most frequent (r_s = .95, p < .01), with the exception being that male teachers reported talking out of turn (χ^2=11.87, p < .01) and uncooperative behavior (χ^2=5.97, p < .05) as occurring more frequently.

When separating male and female teacher ratings by student gender, similar results were found. The chi-squared test for male and female teachers' ratings of boys' most frequent behavior problems was not significant (χ^2=11.64, p = .24), and the Spearman's rho correlation between male and female teachers' rating for boys' was significant (r_s = .92, p < .01).

These results indicate that male and female teachers reported boys' most frequent behavior problems similarly. Similar results were also found for male and female teacher ratings of girls' most frequent behavior problems (χ^2=11.63, p = .24; r_s = .93, p < .01).

Table 2

Rank and Percentage of the Most Frequent Behavior Problems by Student Gender

	Boys		Girls	
Category	Rank	Percentage	Rank	Percentage
Overactive behavior	1	45.2	6	3.8
Talking out of turn	2	22.4	3	12.9
Non-attention	3	14.2	1	51.2
Laughing at others	4	6.1	7	2.3
Disruptive behavior	5	5.7	10	0.2
Uncooperative behavior	6	2.3	4	7.0
Not following the task	7	1.7	5	4.2
Non-compliance	8	1.3	T8	0.9
Withdrawal	9	0.8	2	16.1
Emotional disturbance	10	0.2	T8	0.9

Note. T indicates a tie in rank.

Study 2

Method

Participants

Two hundred seventeen teachers from four provinces (Beijing, Henan, Hubei, and Shanxi) of China participated in the second study. This sample of teachers was separate from the sample of teachers in the first study. Although some of the same schools were used to collect data, the survey in the second study was administered at a different time. Demographic information on these 217 teachers is found in Table 3.

Measures

The format of the questionnaire used in the second study was similar to that used in other research (Borg, 1989; Kokkinos, et al., 2004). Teachers were asked to indicate how serious they thought behavior problems would be if displayed by one of their students. The survey listed the 10 behavior problems categories used in Study 1. The seriousness of each of these behavior problems was rated by teachers using a 5-point Likert scale ranging from *not at all serious* to *extremely serious*. Each respondent rated each behavior problem twice on separate forms, once as pertaining to a boy and once as pertaining to a girl. These forms were presented in different orders to avoid order effects.

Table 3

Study 2 Participants' Demographics

Category	Number	Percentage
Gender		
Male	48	22.1
Female	169	77.9
Grade Taught*		
1-2	69	31.8
3-4	71	32.7
5-6	76	35.0
Years teaching*		
< 5	34	15.7
6-10	53	24.4
11-20	92	42.4
> 20	37	17.1
Expertise		
Expert	52	24.0
Ordinary	165	76.0
School Quality*		
Key	116	53.5
Normal	100	46.1
Geographic area		
Rural	59	27.2
Urban	158	72.8

Note. n = 217.

* Contains 1 missing data point that contributes to 0.5% of the total responses.

Procedure

One of the researchers visited all participating schools and, with the support of the school principals, distributed the questionnaires as part of regular teachers' meetings. Each of the school principals granted permission for the researchers to distribute the questionnaires, and teachers consented to participate. The researcher provided individual guidance and explanations to teachers when needed. All questionnaires were completed and collected during the school visit. It took approximately 20 minutes to administer and collect the questionnaires from each school. A total of 240 questionnaires were distributed, and 217 (90.4%) were returned.

Data Analysis

Means and standard deviations were calculated for teachers' ratings of the seriousness of student behavior problems. Spearman's rank order correlation coefficients were conducted to determine the relationships of teacher rankings of the seriousness of students' behavior problems across both student and teacher gender. The 10 problem behavior categories were analyzed using principle components exploratory factor analysis with subsequent varimax rotation. Analysis of variance (ANOVA) was used, along with Tukey's HSD post-hoc tests, to determine differences between ratings of the seriousness of the resulting problem behavior factors. These factors were then analyzed to examine student and teacher gender main effects and interactions using a mixed-model multivariate analysis of variance (MANOVA).

Results

Descriptive Statistics

Teachers in this study rated emotional disturbance and disruptive behaviors as the most serious, while non-attention and talking out of turn behaviors were rated as the least serious (see Table 4). Teacher ratings were then assigned ranks, separately for boys and girls, by order of perceived seriousness. Rankings for boys and girls were significantly correlated (r_s = 0.87, $p < .01$), suggesting that the types of behavior problems considered most serious for boys tended to also be considered the most serious for girls. Correlations between male and female teacher rankings were also significant ($r_s = 0.73$, $p < .05$). These analyses suggested no gender effects were present in the rank order of perceived seriousness.

Factor Analysis

Factor analysis was used to group the 10 problem behavior categories into meaningful factors and to examine the effects of teachers' perceptions at the factorial level of abstraction. As demonstrated in prior research, gender effects tend to be more meaningful and more easily interpreted if found within patterns of behaviors rather than in individual behaviors (Borg & Falzon, 1993; Kokkinos et al., 2004; Langfeldt, 1992). Factor analysis was conducted on the 10 problem behavior categories while collapsing student gender, which helps eliminate possible variance due to gender (Kokkinos et al., 2004). Results indicated a three factor solution accounting for 62.7% of the variance, with all factors having an eigenvalue over one. The resulting factor loadings and Cronbach's alpha are shown in Table 5.

Table 4

Means of Teachers' Perceptions of Behavior Problem Seriousness

Category	M	SD
Emotional disturbance	3.40	1.31
Disruptive behavior	3.31	1.07
Not following the task	3.19	1.05
Uncooperative behavior	3.11	1.06
Laughing at others	3.00	1.10
Withdrawal	2.97	1.06
Overactive behavior	2.93	1.03
Non-compliance	2.92	1.22
Talking out of turn	2.80	1.03
Non-attention	2.73	1.04

Factor one, which contained four aggressive or defiant behaviors, was labeled Disruptive. Items loading on factor two were a combination of overactive and inattentive behaviors, and the factor was labeled Inattentive/Overactive. While non-attention loaded high on both factors two and three, this category was considered part of factor two because of the higher loading, as well as theoretical support of behavior problems associated with attention-deficit hyperactive disorder (ADHD; American Psychiatric Association, 2000). Factor three, which contained reserved or non-participatory behaviors, was labeled Withdrawn. Previous research has supported similar factors of disruptive and withdrawn behaviors (Borg & Falzon, 1993; Kokkinos et al., 2004).

ANOVA results indicated a significant difference between the three behavioral factors [$F(2,648) = 8.91$, $p < .001$]. Tukey's HSD post-hoc tests indicated that the Disruptive ($M = 3.15$, $SD = 0.94$) and Withdrawn ($M = 3.09$, $SD = 0.85$) factors were perceived as more serious than the Inattentive/Overactive ($M = 2.82$, $SD = 0.84$) factor. Contrasts were significant at the $p < .01$ level.

Table 5

Factor Loadings of Teachers' Ratings of Behavior Problem Seriousness

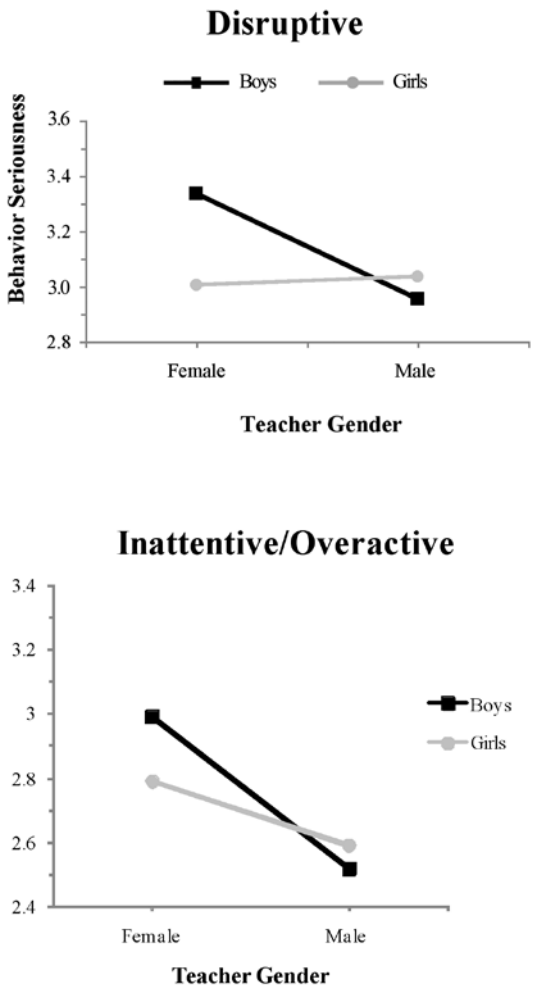
Category	Factor I α = .77	Factor II α = .68	Factor III α = .67
Emotional disturbance	.80		
Disruptive behavior	.72		
Non-compliance	.69		
Laughing at others	.64		
Talking out of turn		.82	
Overactive behavior		.75	
Non-attention		.56	.53
Withdrawal			.82
Uncooperative behavior			.57
Not following the task			.55

Note. Only loadings over 0.50 are shown.

Group Differences

Mixed-model MANOVA was conducted for each of the three behavioral factors, with student gender as the within-subjects factor and teacher gender as the between-subjects factor. The teacher ratings of the behaviors that loaded on each of the respective three factors served as the dependant variables. The Disruptive factor had a significant interaction between teacher gender and student gender [Wilks' Lambda = 0.96, $F(1,211) = 8.98$, $p < .05$], indicating that male teachers rated boys and girls similarly, but that female teachers rated these behaviors as more serious in boys than in girls (see Figure 1). The Inattentive/Overactive factor had a significant main effect for teacher gender [$F(1,210) = 6.10$, $p < .05$] and a significant teacher gender and student gender interaction [Wilks' Lambda = 0.98, $F(1,210) = 4.29$, $p < .05$]. Specifically, female teachers rated inattentive/overactive behaviors as more serious than did male teachers. For the interaction effect, male and female teachers rated the opposite gender students' behaviors as more serious. Analyses for the Withdrawn factor did not yield any significant main effects or interactions.

Figure 1. Teacher gender and student gender means for Disruptive and Inattentive/ overactive factors



Discussion

The purpose of these studies was to investigate Chinese elementary teachers' perceptions of the frequency and seriousness of students' behavior problems as well as teacher and student gender effects on these perceptions. Results from Study 1 indicated that teacher rankings of the frequency of behavior problems differed by student gender. The two most frequent behavior problems for boys were overactivity, followed by talking out of turn, whereas the most frequent behavior problems for girls were non-attention and withdrawal, in that order. Given the descriptions of these behaviors, the two most frequent behaviors listed for boys are more consistent with externalizing type behaviors, while the two most frequent problematic behaviors for girls are more consistent with internalizing type behaviors (Merrell, 2008). This finding is similar to research in the West indicating that boys are more likely to exhibit externalizing behaviors and girls more likely to exhibit internalizing behaviors (Henricsson & Rydell, 2004; Hoffman, Powlishta, & White, 2004). It is interesting to note the apparent similarities between student behavior problems in China as compared to the West. These findings suggest that the focus of interventions be more on internalizing problems for girls, and externalizing problems for boys, though it is also important to be aware of differences which can occur in individual students.

In addition to gender effects associated with teachers' perceptions of the frequency of student behavior problems, cultural factors also seemed to affect these perceptions. The finding of non-attention as the most frequent classroom behavior problem is somewhat distinctive to China, in that studies outside of China have typically found that talking out of turn is the most frequent behavior problem (Beaman et al., 2007; Ding et al., 2008). It is interesting to note that both male and female teachers rated boys as having more behavior problems than girls, and yet both male and female teachers also reported that non-attention—not the most frequent behavior problem for boys—was the most common behavior problem overall. This finding can be partially accounted for by the high percentage of teachers rating girls' non-attention as most frequent, along with the fact that boys were

also ranked relatively high for non-attention. These findings suggest that cultural differences may be influencing teacher perceptions and that Chinese teachers could benefit from strategies to improve student attention in the classroom.

Study 1 results confirm existing findings from the Chinese context. For example, teachers reported that 15.5% of the class usually has behavior problems, which was similar to the 15% percent reported by Leung and Ho (2001) in Hong Kong elementary schools. Leung and Ho (2001) also reported that 93% of the teachers nominated a boy as having the most troublesome behaviors, similar to the 93.5% of teachers in the current study that reported boys' behavior problems were more troublesome than girls'. Ding et al. (2008) also found that daydreaming was the most frequent behavior problem, which is similar to non-attention found in this study.

Study 2, which focused on the perceived seriousness of student behavior problems, found that emotional disturbance was rated as the most serious, while non-attention was seen as the least serious. The teacher seriousness rankings in Study 2 had an inverse relationship with the teacher frequency rankings in Study 1, in that the more serious behavior problems (e.g., emotional disturbance), tended to be perceived as less frequent, and the more frequent behavior problems (e.g., non-attention) tended to be perceived as less serious. This relationship was also found in a study by Beaman et al. (2007) using different problem behavior categories. This suggests that while a behavior may not be very frequent it can be a source of concern which still requires attention by school personnel.

The results of Study 2 generally support the findings of Borg and Falzon (1993), in that teacher and student gender effects were present when analyzing the problem behavior factors. Specifically, interaction effects were found for the Disruptive and Inattention/Overactive factors, both of which contained more externalizing type behaviors. For both of these interactions teachers seemed to rate behavior problems less seriously when it was exhibited by students of their own gender: Male teachers perceived boys' behavior problems as less serious, while similar alignment was true for female teachers' perceptions of girls. It was interesting to note that, in contrast to the findings of Borg and Falzon, this interaction was not present for the Withdrawn factor, which consisted of more internalizing type behaviors.

It seems that teachers displayed some gender bias in their perceptions of students' behavior problems that were disruptive in nature. Kokkinos et al. (2004) also found that teachers displayed gender stereotyping when rating students' externalizing type behaviors, but few other studies have explored gender bias in teacher perceptions of behavior problems in other cultures. Studies in the U.S. have shown that teachers display some gender biases in relation to giving boys more managerial classroom tasks/ positions, leniency towards aggression, criticism and punishment, and opportunities to answer questions than girls (Altermatt, Jovanovic, & Perry, 1998; Serbin, O'Leary, Kent, & Tonick, 1973; Stake & Katz, 1982). Others have argued that student behaviors and performance are manifested differently with male and female teachers (Beller & Gafni, 1996; Licht, Stader, & Swenson, 1989; Van Acker, Grant, & Henry, 1996). Further research could investigate the possibility of such effects being attributed to actual teacher bias or to teacher gender eliciting different behaviors from students. In the meantime, the results of the current

study suggest the value of soliciting information from both male and female teachers when trying to assess the emotional or behavioral status of students.

Limitations

Although some comparisons can be drawn between these studies and similar research in the West, a true cross-cultural study would be informative. Specifically, these studies contained behavioral categories derived from interviews in China that might not retain the same meaning in another culture. Although some of the behavioral categories used were similar to those used in other research, the question of whether these categories are similar across cultures requires further exploration.

The disparate number of male and female teacher participants could also potentially influence the findings associated with teacher gender. However, differences in the number of male and female teacher participants reflect proportions in the wider population of school teachers and thus are not likely attributable to sampling bias. If gender effects in these studies are attributable to disparate numbers of male and female participants, similar effects in the wider population of school teachers are likely attributable to the same cause.

Conclusion

The results of these studies can be compared with the findings from previous research (Borg & Falzon, 1993; Ding et al., 2008, Kokkinos et al., 2004; Wheldall & Merrett, 1988). It appears that (1) the most frequent type of student behavior problems in China differs from the most frequent in the West, (2) the most frequent type of behavior problems in China differs for boys and girls, (3) teacher gender and student gender interactions influence teachers' perception of the seriousness of behavior problems, and (4) an inverse relationship exists between the frequency of behavior problems and their perceived seriousness. These findings support the idea that an exploration of gender influences along with cultural factors might be required for a more complete understanding of students' classroom behavior problems.

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Appendix

Study 1 Questionnaire Items

1. How many students usually have behavior problems in your class?
   How many of them are boys?
   How many of them are girls?
2. Are the boys' or girls' behavior problems more troublesome in your class?
   (a) boys' problems
   (b) girls' problems
3. What is the most frequent behavior problem in your class? Please choose from the list of 10 provided.
4. What is the most frequent behavior problem for boys? Please choose from the list of 10 provided.
5. What is the most frequent behavior problem for girls? Please choose from the list of 10 provided.

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