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Gender Perceptions of Challenging Student Behavior and Teacher Stress

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Voorwoord

De Kenniskring Gedragsproblemen in de Onderwijspraktijk aan de Hogeschool van Utrecht bestaat uit ongeveer tien personen met als lector J.C. van der Wolf. Het lectoraat is opgericht in 2003 en heeft als taken het verrichten van vooral toegepast onderzoek en het helpen bij de ontwikkeling van curricula voor de onder de Faculteit Educatie vallende afdelingen.

Door de 'leden van het lectoraat' worden allerlei stukken, artikelen, plannen, nota's etc. geproduceerd die dan in verschillende kringen worden verspreid zodat niet altijd een goed beeld ontstaat van de activiteiten van de Kenniskring. Via deze KG-publicatiereeks wil de kenniskring een vaste groep geïnteresseerden in staat stellen om op de hoogte te blijven van de activiteiten. Verwacht mag worden dat de KG-publicatiereeks uit zeer verschillende, uiteenlopende stukken zal gaan bestaan.

Voor U ligt KG-publicatie nr.13.
U wordt van harte uitgenodigd om commentaar te leveren.

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nr.1 Everaert, H.A. en J.C. van der Wolf (2005).
Behaviorally Challenging Students and Teacher Stress.

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nr.2 Wolf, J.C. van der & J.M.F. Touw (2005).
Onderzoek naar zorg in het curriculum van de Theo Thijssen Academie.

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nr.3 Doorn, E.C. van (2005).
De Gedragingenlijst voor Leraren (Tweede onderzoeksrapport).

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nr.5 Enthoven, M. (2005).
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nr.8 Touw, J.M.F., J.T.E. van Beukering & H.A. Everaert (2005).
Teachers' Personal Constructs on Problem Behaviour (Paper presented at the annual meeting of the European Educational Research Association (EERA), Dublin, Ireland, September 7-10).

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nr. 11 Everaert, H. & A. van Peet (2006). Kwalitatief en kwantitatief onderzoek.

Nr. 12 Everaert, H.A. & J.C. van der Wolf (2006).
A Comparison of Stress and Burnout between Dutch General and Special Education Teachers. Paper presented at the annual meeting of the American Educational Research Association (AERA), San Francisco, USA, April 7-11, 2006.

Nr. 13 Everaert, H.A. & J.C. van der Wolf (2006). Gender Perceptions of Challenging Student Behavior and Teacher Stress.

Gender Perceptions of Challenging Student Behavior and Teacher Stress

Abstract

The present study focuses on the level of stress male and female teachers perceive when dealing with the most behaviorally challenging student in his or her classroom. To measure stress in Dutch elementary classrooms, a sample was drawn of 582 teachers. First, they rated the most challenging student in their classroom on six different behavioral components: Against the grain, Full of activity/Easily distractible, Needs a lot of attention/Week student, Easily upset, Failuresyndrome/Excessively perfectionist, and Aggressive/Hostile. Teachers then scored perceived stress as a result of this challenging behavior.

Two questions concerning gender relations in class rooms will be addressed. Do female and male teachers select the same type of behaviorally challenging students as the most challenging? And: do they perceive the same level of stress? Our data shows that female teachers do indeed report significantly more incidence of challenging behavior, but no evidence is found for differences between stress levels of male and female teachers.

Keywords:

feminization of education, behaviorally challenging students, teacher stress, self-efficacy, negative affect, class size.

Gender Perceptions of Challenging Student Behavior and Teacher Stress

Theoretical approach

Stress caused by student behavior is one of the main sources of psychological distress among teachers (Borg, 1990). With the influx of exceptional students into regular classrooms, as a result of / following inclusion and integration oriented policies, teachers in regular schools often incur new and additional duties for which they have received no or only limited formal training (Brophy, 1996; Palmer Wilson, Gutkin, Hagen, & Oats, 1998). Due to the students' problematic behavior and lower abilities, teachers also observe minimal pupil progress (Coladarci, 1992). Continual exposure to challenging behavior, both from pupils and their parents, can seriously deplete a teacher's emotional and physical resources, leading to self-doubt, loss of satisfaction from teaching, impulsivity, rigidity or feelings of anger and guilt (Coie & Koeppl, 1990; Van der Wolf & Defares, 1994). The attempt to provide the required services almost inevitably causes work overload and hence stress. In this respect, considerable strain is placed upon the coping resources of teachers (Borg, 1990; Boyle, Borg, Falzon, & Baglioni, 1995; Van der Wolf & Everaert, 2003). As a result teachers may react negatively and in an irritated manner to problem children. Children then may not receive the nurturing contact, attention and support they need. This in turn can result in problem-behavior (Baker, 1999).

Confrontation with deviant pupils often leads to a negative attitude, with attending frustration caused by the inability to give expression to these feelings. The basic cause of a negative attitude is that incidents in the classroom (unruly behavior, immature behavior or inadequate academic progress) become overwhelming. Incidents and conflict situations with a problem pupil, which in turn negatively affect the atmosphere in a class, cause feelings of anger and irritation in teachers. Naturally, this results in a negative, distancing attitude towards the problem pupil. Once this attitude has been established, the chances are that every successive confrontation (and in primary education there are many) will cause further stress and irritation (Lamude & Scudder, 1992; Lamude, Scudder, & Furno-Lamude, 1992). Teachers' stress is thus associated with interactional problems with students. Teachers are more likely to express personal feelings of anger toward disruptive students (Durivage, 1989). The negative patterns of interaction between teachers and students may contribute to increasing conflicts and lack of understanding, thus leading to unsatisfactory relationships.

Much has been written about the origins and consequences of teacher sense of self-efficacy (Tschannen-Moran, Woolfolk Hoy, & Hoy, 1998). Teacher efficacy has been defined as "the extent to which the teacher believes he or she has the capacity to affect student performance" (Bergman, McLaughlin, Bass, Pauly, & Zellman, 1977, p. 137). Self-efficacy affects the effort teachers invest in teaching, the goals they set, and their level of aspiration. Greater self-efficacy enables teachers to be less critical of students when they make errors (Ashton & Webb, 1986), to work longer with struggling students (Gibson & Dembo, 1984), and to be less inclined to refer difficult students to special education (Soodak & Podell, 1993).

Research on efficacy perceptions has shown that effort and persistence are greater in individuals who view themselves as competent or efficacious (Bandura, 1997). They believe that they are capable of performing a task successfully and thus earning the rewards that success brings. High levels of perceived teacher self-efficacy in general have been linked to a variety of positive outcomes.

Gibson and Dembo (1984) observed that teachers with a high perception of self-efficacy are more positive and responsive to students. They experience less stress (Greenwood, Olejnik, & Parkay, 1990). These results undoubtedly describe teachers who are more likely to promote positive classroom environments, which would result in better relationships with students.

Until recently, the classroom processes that differentiate small from large classes have proven remarkably intangible. Despite overabundant measuring, most of the findings have been negative (Slavin, 1990). No differences were found in pupil satisfaction or affective measures, and no differences were found for most teacher activities, subject emphasis, classroom atmosphere (Shapson, Wright, Eason, & Fitzgerald, 1980). When class size was changed, teachers did not alter the proportion of their time spent in interacting with the whole class, with groups, or with individual pupils. However, parents and teachers generally seem to hold the opinion that smaller classes are better than larger classes. Allan (1992) extended the starting-point of traditional class size research by studying teacher workload, feelings of stress and morale and the impact of student diversity. Teachers observed that students with Exceptional Educational Needs required extra attention and more preparation time if they are to be successful in the classroom. The STAR grade 4 follow-up demonstrated that students who had been in smaller classes were less disruptive than their peers in regular classes. The small Success Starts project documented that grade 1 disciplinary referrals dropped over successive years in small classes. Furthermore, Klein (1985) observed that even though class size did not change the degree of individualized instruction, the teacher did spend up to twice as much time per student in reduced size classes.

In many developed Western countries, girls outperform boys in many achievement measures and indicators for well-being. Internationally a growing concern regarding boys and schooling is attracting increasing attention. One major class of explanations for these gaps involves the gender-based interactions between students and teachers (e.g., role model and Pygmalion effects). However, the evidence regarding whether these interactions actually matter is limited and contradictory (Ehrenberg, Goldhaber, & Brewer, 1995).

One of the explanations that has been offered as to why boys are under-achieving is the ‘feminization of primary schooling’ (Skelton, 2002). According to several researchers and policy-makers, the fact that the teaching profession has become ‘feminized’ has negative effects on the education of boys. Diefenbach and Klein (2002), for example, point in their highly respected study "Bringing boys back in" to a correlation between the overrepresentation of women in the teaching profession and the poorer performance of boys. Female teachers, they claim, are likely to value the behavior of boys and girls differently.

> *Female teachers dominate the school culture and possibly expect and reward the type of behaviour that girls are taught as part of their socialization process, and boys are not (to the same extent). In contrast, behavioral patterns which disrupt lessons and presumably also have a negative effect on performance in school are more commonly found in boys than in girls, and female teachers may find this behaviour more annoying than male teachers if they are basing their standards on their own gender-specific socialization. (Diefenbach & Klein, 2002, p. 943)*

Obviously, they go on to say, this theory would need to be further tested by other studies.
In a Greek study by Hopf & Hatzichristou (1999) several significant teacher gender differences were found in teachers' assessment of students' competence at different age groups. Various domains of children's self-concept were found to be different in classes taught by female and by male teachers. These findings indicate the need to use teacher gender as a relevant variable in future research. Dee (2005) in his research study focused both on how teachers subjectively relate to and evaluate their students and on how much their students learn objectively. Teachers' race, gender, and ethnicity, per se, are much more likely to influence teachers' subjective evaluations of their students than they are to influence how much the students objectively learn.

The employment of more male teachers is sometimes suggested as a way tot re-masculinize schools in order to make them more 'boys friendly', and thus to contribute to improving boys' schools performance. Mills, Martino, & Lingard (2004) hold the opinion that, in some cases, contributors to the discussion don't take into account complex matters of gender raised by feminism and the sociology of masculinities. They critize the primary argument given for the need for more male teachers: that is, that male teachers provide boys with much needed role models. What is more, the public debate has frequently ignored the fact that great differences in performance exist within each gender group, particularly among boys.

In this study we examine teachers' perceptions regarding the prevalence and seriousness of students' problem behavior. The focus will be on differences between female and male teachers with respect to the incidence of challenging student behavior and associated stress. Estimations of possible gender effects are controlled for child characteristics, self-efficacy, negative affect and class size.

Method

Sample and Procedures

The results in this article are based on 582 elementary schoolteachers (79% Female). The average of their years of teaching experience was 15 years. Teachers reported an average class size of 22 students. Participants were mostly recruited in the Dutch provinces of Noord-Holland, Zuid-Holland, Zeeland, Utrecht, Gelderland and Noord-Brabant.[i] The study was conducted in October-November 2004 with a response rate of 35%.

Participants in this study were initially 607 regular primary teachers in the Netherlands. Prior to analysis, variables were examined on missing values. Of the total sample, 25 respondents did not fill out the questionnaire to the end and were deleted from the sample. Missing Value Analysis (MVA) did not result in significant differences (α = .05) between the deleted respondents and those on which further analyses are based. In the questionnaire itself participants were repeatedly reminded to focus on one single student in their classroom.

During the analysis of the data in SPSS, two series of ANOVA-models were run. Because of highly inflated Type I errors when employing several models, only models with a p-value <.005 were taken into further consideration.[ii] The first series of models dealt with differences in problematic behavior and stress with gender of student as independent variable. The second series dealt with gender of teacher as independent variable. Unfortunately, in the second batch of models it was not opportune running ANCOVA models that included both gender of the teacher and years of teaching experience as covariate. The assumption of homogeneity of slopes was severely and repetitively violated. Pearson *r* product-moment correlations between the different scales measuring challenging behavior and perceived stress on the one hand and years of teaching experience was rather low. It varied between -.07 (Incidence of Against the grain) and -.15 (Perceived stress of Full of activity/Easily distractible). Apart from several between-subjects analysis of variances (ANOVA), we used six multiple regression models to explore the relationship between reported incidence and experienced stress in detail.

Measures

To measure the interaction between teacher and student, teachers had to think of the most behaviorally challenging student in the ongoing school year, an idea originally put forward by Greene, Abidin, and Kmetz (1997). Apart from some general classroom variables, each teacher reported demographic characteristics of the particular student he had in mind (i.e., gender, age, ethnicity, DSM-IV-RT diagnosis, and family situation at home).

Teachers were asked to score 22 items, spread **over** 6 different scales, to cover the student's challenging behavior and perceived stress: (1) Against the grain, (2) Full of activity/Easily distractible, (3) Needs a lot of attention/Week student, (4) Easily upset, (5) Failure syndrome/Excessively perfectionist, and (6) Aggressive/Hostile (Everaert, 2003). We want to state explicitly that every item had to be rated twice: once for incidence and once for perceived stress. The scoring dimension ranged on a 5-point Likert scale from 0 (*doesn't happen at all*) to 4 (*happens a lot*) for incidence. Perceived stress anchors varied from 0 (*not stressful at all*) to 4 (*very stressful*).[iii] Coefficient alpha reliability for six scales measuring the incidence of problematic behavior ranged from .70 (Easily upset) to .81 (Needs a lot of attention/Week student). For scales tapping perceived stress Cronbach's alpha was even higher and ranged from .72 (Failure syndrome/Excessively perfectionist) to .85 (Full of activity/Easily distractible). In Table 1 two exemplary items of every scale are presented.

Table 1

Exemplary Items of Scales Used to Measure Incidence and Perceived Stress of Behaviorally Challenging Students

Scales	***Items***
Against the grain	Seeks conflicts with teachers purposely
	Goes against the rules deliberately
Full of activity/Easily distractible	Wanders around the classroom more than most others
	Much more active than others
Needs a lot of attention/Weak student	Work always gives him of her a great deal of trouble
	Everything has to be predicted
Easily upset	Gets upset easily over smallest things
	Cries more often or has more stress than other pupils
Failure syndrome/Excessively perfectionist	Is generally not at all pleased with the final results
	Hands in work giving remarks such as; it will be wrong anyway
Aggressive/Hostile	Can be very destructive
	Often damages other pupils things

Whereas teachers had to think of one particular student while filling out items dealing with behaviorally challenging students, the remainder of the questionnaire dealt with self-efficacy and negative affect. Seven items were included to measure self-efficacy in relationship building and behavioral management. Using a 7-point scale from 1 (*not true at all*) to 7 (*very true*) participants responded to statements like “I can build a good relationship with even the most difficult student”, “I have positive characteristics that are very helpful when there is a problem with a student”, and “I can successfully handle the situation when one of the students gets disruptive or oppositional”. Cronbach’s coefficient alpha for the seven items of the self-efficacy scale was .80. The following three items were used to measure teacher's negative affect: “I have difficulty controlling my emotions when there is a conflict with students”, “I feel angry when a student repeatedly does not follow my advice”, and “students hurt my feelings by intentionally not following my directions”. Cronbach’s alpha for this scale was relatively low with .61. Scales self-efficacy and negative affect were both developed by Yoon (2002).

From the above line-up of items and scales, it is clear we used different Likert dimensions. The reason for this is found in the possibility to compare our results with data gathered by other scholars; a matter endorsed by APA guidelines that "the essence of the scientific method involves observations that can be repeated and verified by others" (APA, 2001, p.348). No respondent made any comment that the questionnaire was confusing due to the use of varying Likert scoring dimensions.

Results

As expected, 86% of the 582 teachers had a boy in mind when asked to think of a behaviorally challenging student. About 72% of these students are being raised in a nuclear family, while 19% is a member of a one-parent household headed by the mother. With respect to ethnicity, a fourth of the students has at least one parent who was not originally born in the Netherlands. Measured on the first of January 2004, the average age of students in regular elementary schools was 8 years old. We also asked teachers to indicate whether a psychiatrist or psychologist had diagnosed the pupil. This was the case for 17% of the students. Attention-Deficit/Hyperactivity Disorder and PDDNOS were the two most frequently mentioned DSM-IV-RT diagnoses. No differences were found between male and female teachers in selecting the most challenging student with respect to gender ($\chi^2(1, N = 575) = 0.34$, $p = .56$), household situation ($\chi^2(1, N = 570) = 0.06$, $p = .81$), ethnicity ($\chi^2(1, N = 552) = 1.07$, $p = .30$), and DSM-IV_RT diagnoses ($\chi^2(1, N = 551) = 1.67$, $p = .20$).

Table 2
Means, Standard Deviation, Alpha Reliabilities for Behaviorally Challenging Students (N = 582)

	Incidence				Perceived Stress			
Scale	*M*	*SD*	*Alpha reliabilities*	*Number of items*	*M*	*SD*	*Alpha reliabilities*	*Number of items*
Against the grain	1.8	1.0	.79	4	1.5	1.0	.82	4
Full of activity/Easily distractible	2.7	0.9	.80	4	1.7	1.0	.85	4
Needs a lot of attention/Weak student	1.6	1.1	.81	4	0.9	0.8	.82	4
Easily upset	2.2	0.9	.70	4	1.3	0.8	.76	4
Failure syndrome/Excessively perfectionist	1.1	1.0	.76	3	0.6	0.7	.72	3
Aggressive/Hostile	1.1	1.1	.80	3	1.0	1.1	.82	3

In Table 2 means and standard errors of incidence and stress of challenging behavior are reported. On average, perceived stress associated with the displayed behavior of the student is lower than the incidence of the behavior itself. The highest level of stress is generated by Full of activity/Easily distractible students (1.7), closely followed by Against the grain (1.5). While aggressive/hostile behavior does not occur that often, it must be noted that the level of stress is almost just as high (1.0), as the incidence (1.1). It may be concluded that the perceived stress is highly dependent on the kind of challenging behavior itself. Pearson *r* product-moment correlations between the incidence and stress of challenging behavior are high and vary from .62 (Failure syndrome/Excessively perfectionist) to .83 (Aggressive/Hostile).

Twelve ANOVA-models were run to examine whether the gender of the student controlled for ethnicity, family situation at home, and DSM-IV-RT diagnoses might explain variance in challenging behavior or variance in related teacher stress. As already said, because of highly inflated Type I errors when employing several models, only statistics with a p-value <.005 were taken into further consideration. Only with respect to incidence of Full of activity/Easily distractible do schoolteachers distinguish between boys and girls. Leaving aside all other child characteristics, the effect of student gender with respect to incidence of Full of activity/Easily distractible still differs significantly from zero ($F(1, 577) = 8.43$, $p < .005$). Teachers scored boys ($M = 2.8$, $SD = 0.9$) higher than girls ($M = 2.5$, $SD = 1.0$). Similar results are found for perceived stress of Full of activity/Easily distractible $F(1, 577) = 6.13$, $p < .01$). As expected, teachers perceive more stress dealing with an overactive boy ($M = 1.7$, $SD = 1.0$) than with an overactive girl ($M = 1.5$, $SD = 0.8$). However, effect sizes for both incidence ($\eta^2 = .01$) and perceived stress of

Full of activity/Easily distractible (η^2 = .01) are very low. Therefore, this study can hardly be said to offer strong evidence supporting the view that teachers distinguish between boys and girls when dealing with and evaluating the most challenging student in their classroom.

The next step was to study whether teacher gender played a role in working with different types of problematic student behavior. Again, several between-subjects analysis of variances (ANOVA) were performed on different scales. In total, twelve models were run with challenging student behavior and perceived stress as dependent variables. With respect to challenging student behavior and perceived stress, female teachers score higher than their male counterparts. That is, female teachers report more challenging behavior and more stress as a result of this behavior. With a maximum p-value of .005 for significance, means of female teachers for the incidence of challenging behavior differ significantly from the means of male teacher with respect to Against the grain, Full of activity/Easily distractible, Easily upset, and Aggressive/Hostile. An overview of the results is presented in Table 3.

Table 3
Means for Behaviorally Challenging Students by Teacher Gender (N = 577)

	Incidence				Perceived Stress			
Scale	*Female*	*Male*	*F*(1, 577)	η^2	*Female*	*Male*	*F*(1, 576)	η^2
Against the grain	1.9	1.6	8.59**	.02	1.5	1.3	3.56	.01
Full of activity/Easily distractible	2.8	2.4	19.29***	.03	1.8	1.5	7.77**	.01
Needs a lot of attention/Weak student	1.6	1.4	4.74*	.01	0.9	0.8	1.01	.00
Easily upset	2.2	1.9	10.45**	.02	1.3	1.1	4.94*	.01
Failure syndrome/Excessively perfectionist	1.2	1.0	4.8*	.01	0.6	0.5	3.61	.01
Aggressive/Hostile	1.2	0.8	15.22***	.03	1.1	0.7	10.55**	.02

Note. *p<.05. p**<.01. *** p<.001.

Except for consistent differences in mean scores between male and female teachers, also the ranking of scores among female and male teachers is rather similar. For female teachers Full of activity/Easily distractible is on top with a mean of 2.8. This kind of challenging behavior has also the highest mean score among male teachers (*M* = 2.4). Levels of perceived stress of Full of activity/Easily distractible are also highest among females (*M* = 1.8) and males (*M* = 1.5). At the bottom it is Failure syndrome/Excessively perfectionist with mean incidence scores for female and male teachers of 1.2 and 1.0. Perceived stress affirms the low ranking of this scale with means of 0.6 and 0.5, respectively. However, mean scores of Aggression/Hostile seem to obscure the general picture. Another conclusion can be based upon Table 3. It turns out that the relationship between incidence and concomitant stress is the same for female and male teachers. For instance, the ratio of perceived stress to incidence of Against the grain is for women .79 (1.5/.1.9), while men score a ratio of .81 (1.3/1.6). This similarity holds for other scales as well. To give a second example, ratios of Aggressive/Hostile are both for female (.92) and male (.88) teachers very similar.

In order to study the effect of gender, six regression models were formulated with perceived stress as dependent and incident behavior as independent variable. The focus is on the effect of gender controlled for the influence of self-efficacy, negative affect and class size. Table 4 shows the most important results of these analyses.

Table 4

Summary for Regression Analyses for Variables Predicting Perceived Stress (N = 540)

Variable	*B*	*SE B*	*β*
Perceived stress of Against the grain[a]			
Constant	0.31	0.26	
Incidence of Against the grain	0.81	0.03	0.78***
Teacher gender	0.02	0.07	0.01
Self-efficacy	-0.12	0.03	-0.09***
Negative affect	0.12	0.02	0.14***
Class size	0.00	0.00	-0.02
Perceived stress of Full of activity/Easily distractible[b]			
Constant	0.15	0.32	
Incidence of Full of activity/Easily distractible	0.65	0.03	0.63***
Teacher gender	-0.06	0.08	-0.02
Self-efficacy	-0.09	0.04	-0.08*
Negative affect	0.16	0.03	0.21***
Class size	-0.01	0.01	-0.04
Perceived stress of Needs a lot of attention/Weak student[c]			
Constant	0.07	0.26	
Incidence of Needs a lot of attention/Weak student	0.51	0.02	0.66***
Teacher gender	0.01	0.06	0.01
Self-efficacy	-0.09	0.03	-0.09**
Negative affect	0.11	0.02	0.16***
Class size	0.00	0.00	0.02
Perceived stress of Easily upset[d]			
Constant	0.18	0.26	
Incidence of Easily upset	0.62	0.03	0.69***
Teacher gender	-0.03	0.06	-0.01
Self-efficacy	-0.11	0.03	-0.11***
Negative affect	0.11	0.02	0.16***
Class size	0.00	0.00	0.00
Perceived stress of Failure syndrome/Excessively perfectionist[e]			
Constant	0.13	0.23	
Incidence of Failure syndrome/Excessively perfectionist	0.42	0.02	0.60***
Teacher gender	-0.05	0.06	-0.03
Self-efficacy	-0.03	0.03	-0.03
Negative affect	0.07	0.02	0.12***
Class size	0.00	0.00	-0.02
Perceived stress of Aggressive/Hostile[f]			
Constant	0.07	0.26	
Incidence of Aggressive/Hostile	0.86	0.03	0.82***
Teacher gender	-0.02	0.06	-0.01
Self-efficacy	-0.08	0.03	-0.06*
Negative affect	0.09	0.02	0.10***
Class size	0.01	0.00	0.03

Note. [a]R^2 = .67. [b]R^2 = .47. [c]R^2 = .49. [d]R^2 = .54. [e]R^2 = .40. [f]R^2 = .71. *p<.05. p**<.01. *** p<.001.

For every type of challenging behavior a very strong positive relation between incidence and perceived stress is found. The standardized slopes vary from .60 for Failure syndrome/Excessively perfectionist behavior to .82 for Aggressive/Hostile behavior. Obviously, these betas contribute enormously to the magnitude of the reported effect sizes presented at the bottom of Table 4. Also in accordance with theory, self-efficacy and negative affect have in most cases significant effects upon perceived stress. High self-efficacy lowers feelings of stress, while negative affect in most cases enlarges these feelings. Class size bears no influence on the level of experienced stress, which is not very strange considering we measured incidence and

perceived stress of one student instead of stress caused by a group of students. However, the main conclusion based upon Table 4 is that the level of perceived stress is not influenced by teacher gender. The results of Tables 3 and 4 combined mean that female teachers do significantly report more challenging behavior; but that, after taking into account the reported incidence of the behavior concerned, there are no differences in experience of stress between male and female teachers.

Discussion

In this study no strong evidence was found for the implicit claim made by some researchers (cf. Hopf & Hatzichristou, 1999; Diefenbach and Klein, 2002 & Skelton, 2002) that female teachers have an unfavourable effect on boys' functioning. Neither with respect to selecting challenging boys or girls, nor regarding experienced stress when dealing with these students, did we find differences between male and female teachers. Female teachers report more problem behavior than male teachers, but it levels out when perceived stress is brought into the picture. Our results seem to echo at least part of a conclusion brought forward by Dee (2005): teachers' gender is likely to influence teachers' subjective evaluations of student behavior. Dee (2005) reported no negative effects on student achievement. Given the important role (of coping with) stress in relations between teachers and students, we also do not expect any bad effects for boys dealing with female teachers. The same holds true for male teachers dealing with challenging girls.

Two limitations of this study need special attention. The work of Hopf & Hatzichristou (1999), Diefenbach and Klein,(2002), and Skelton (2002) is generally based upon student behaviour or (lack of) student achievement. Our data emphasize the perspective of the teacher. We did not sample students' point of view, nor did we use students' reading or math achievement scores. The fact that our study deals with 'exceptional' students instead of classes of 20 to 30 students also may cast some doubt on the possibility to generalize our conclusion.

Given the role played by psychological teacher characteristics like negative affect and self-efficacy in dealing with challenging student behavior, we propose guidance programs that aim at reducing this kind of problems.

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Notes

[i] *Several students of the University of Professional Education of Utrecht participated in collecting the data: Arjanneke Brandsma, Sabine Bax, Menno van Es, Petra den Hollander, Frits van Hout, Gea Hoving, Gerbert Sipman, Lindy Slingerland, Albert Sluiter, Ingrid Muurman, Gerda Pool en Wil Vlam. We appreciate their efforts in sampling the respondents.*

[ii] *Because* $1-(.995)^{12} \approx .95$, *we choose p-values* $\leq .005$ *as limit.*

[iii] *Greene, Abidin, and Kmetz (1997) formulated the shining idea to think only of the most behaviorally challenging student while rating the items. We feel indebted to them. The reason to change the scoring dimension from 1 to 5 into 0 to 4 is based on another study held also held in October 2003 (Everaert and Van der Wolf, 2006).*