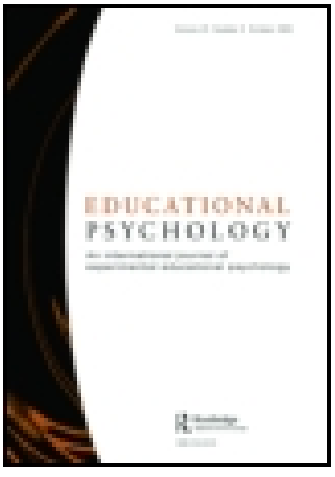

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Stress and psychological distress among trainee secondary teachers in England

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The relationships between stress and psychological distress were investigated among a cohort of trainee secondary school teachers in England. Specifically, the study examined the structure of a Teacher Stress Scale and its relationship to mental health as measured by the 12-item General Health Questionnaire. Three factors were identified: behaviour management, workload, and lack of support. Differences were identified between men and women in respect of stressors and psychological distress. Stress attributed to pupils' disruptive behaviour and stress attributed to perceived occupational stress were found to be significant predictors of psychological distress. The findings are discussed in relation to the degree to which trainees are prepared for the challenges they are likely to experience as teachers.

Keywords: stress; psychological distress; disruptive behaviour

The attrition of trainee, novice, and experienced teachers is a widespread problem in the UK. Kyriacou and Kunc (in press) reported: "In England, about 40% of those who embark on a training course (on all routes) never become teachers, and of those who do become teachers, about 40% are not teaching 5 years later" (p. 1). At the same time the number of secondary teachers taking early retirement has increased by 93% over the last seven years; many blame this on the stress resulting from managing pupil behaviour and successive government initiatives (Henry, 2007; Kyriacou & Coulthard, 2000).

The study of teacher stress has a long history. It has become a research topic with worldwide interest (Kyriacou, 2001). However, stress among trainee teachers is less well researched, perhaps in part because, as Murray-Harvey et al. (2000) suggested, it is viewed as a normal part of teacher development and therefore accepted as a natural element of the transition from novice to qualified teacher.

Teaching has consistently been ranked as a high stress occupation (Beer & Beer, 1992; Borg, Riding, & Falzon, 1991; Johnson et al., 2005; Travers & Cooper, 1996), with 33–37% of teachers frequently reporting being very or extremely stressed as a result of factors intrinsic to their work (Borg, 1990; Borg & Riding, 1991; Boyle, Borg, Falzon, & Baglioni 1995; Chan & Hui, 1995; Kyriacou, 1987, 2001). The most frequently reported factors include pupils' disruptive behaviour, workload, school ethos, and lack of support from colleagues and/or managers (Durham, 1992; Johnstone, 1989, 1993a, 1993b; Timperley & Robinson, 2000; Travers & Cooper, 1996; Wilson, 2002).

Studies of trainees have reported the same stress factors (Kyriacou & Stephens, 1999), which is perhaps unsurprising given the high levels of stress reported by teachers with whom trainees train. As Wooton (1993) pointed out, trainees placed in schools with teachers who are stressed

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also become stressed. Furthermore, given that the most powerful predictor of retention among trainee teachers was how much pleasure they anticipated they would get from the job (Wilhelm, Dewhurst-Savellis, & Parker, 2000), the reality of teaching during training often results in their optimism being dampened (Veenman, 1984).

The most stressful component of teacher training is the practicum (Kyriacou & Stephens, 1999; Macdonald, 1993) and within the practicum managing pupil behaviour has been reported as the most stressful element (Mastrilli & Sardo-Brown, 2002; Veenman, 1984). Disruptive pupils also generate high levels of stress for qualified teachers (Hart, 1987; Head, Hill, & McGuire, 1996; Zeidner, 1988); they are a risk factor in determining acute psychological distress (Finlay-Jones, 1986) and a serious deterrent to trainees joining the profession (Priyadharshini & Robinson-Point, 2003). While there is a popular belief that coping with disruptive pupils improves with experience, a number of studies have found that the stress associated with disruptive behaviour did not decrease as the practicum progressed (Burn, Hagger, Mutton, & Everton, 2003; Capel, 1997; Elkerton, 1984; Silvernail & Costello, 1983). This may well contribute to the attrition of trainees during training, and of those who leave teaching within a few years (Smithers & Robinson, 2000).

The effect of stress on the psychological health of teachers has attracted researchers' interest (Beer & Beer, 1992; Johnstone, 1993b; Kyriacou & Sutcliffe, 1978). Stress is believed to contribute to physical illness, absence, and early retirement from the profession. Punch and Tuettmann (1990) listed a range of associated physical symptoms ranging from rashes to cardiovascular disease, behavioural changes such as deterioration of relationships and work performance, and psychological reactions such as anxiety, confused thinking, feeling inadequate, panic, and phobias. While depression is the most common outcome of teacher stress, other problems include chronic fatigue and burnout (Betoret, 2006; Friedman & Farber, 1995; Russell, Altmaier, & Van Velzen, 1987; Shirom, 1997). The relationship between teacher stress and psychological distress is complex (Chan, 2002), as it encompasses such a wide range of symptoms. Nonetheless, psychological distress does provide some measure of mental health but is not synonymous with it – mentally healthy people are not immune from anxiety and depression.

Very high levels of psychological distress have been recorded among teachers. Punch and Tuettman (1990) found that levels of psychological distress among secondary teachers were twice that of the general population. More recently Johnson et al. (2005) compared the psychological health of 26 different professions, and found teaching to be one of the six most stressful occupations. Differences between the psychological health of male and female teachers have also been identified. Kovess-Masféty, Rios-Seidel, and Sevilla-Dedieu (2007) found that female teachers consistently scored higher on psychological distress than male teachers. Using the Hopkins Symptom Checklist (HSC), which measures anxiety, distress, and depression, they found the largest differences in the secondary school sector, where male teachers scored lower (more healthy) and female teachers scored higher (less healthy) than teachers elsewhere. In their study of correlates of psychological distress among secondary school teachers, Punch and Tuettmann (1990) found that while work-related stress factors only accounted for a small amount of variance in psychological distress, 'much more can be accounted for among female teachers than among males' (p. 379) which, they felt, may result from the former investing more of themselves in teaching and thus putting themselves at higher risk. Punch and Tuettmann suggested that environmental aspects of teaching are more important in generating and ameliorating psychological distress among female than male teachers and urged researchers to investigate these differences further.

Government concerns about the preparation of teachers led to major changes to initial teacher training in England and Wales during the 1990s – changes which have continued to the present day. These changes have included the introduction of a competence-based framework for initial

training and the move of substantive amounts of responsibility for training from university departments into schools (Department for Education and Employment, 1998; Training and Development Agency for Schools, 2006). As a result, trainees now spend 24 weeks of their 36-week course on school-based training – the rationale being that more time spent training in schools will better prepare them to cope with the demands of teaching.

The relative lack of research into stress and psychological distress among UK trainee teachers is perhaps surprising, given the numbers who reportedly never commence teaching, who leave very early in their careers, or who go on to potentially add to the high levels of teachers who report being stressed or experiencing mental health issues. As Kyriacou (2001) argued, there will always be a need to research teacher stress, in particular the relationship between stress from excessive demands such as workload and disruptive pupils and concerns about self-image. The present study addresses some of the less well-researched areas and adds to the literature on teacher stress.

The main aim of the present study was to examine the nature and levels of stress and psychological distress reported by a cohort of trainee secondary school teachers, in the light of successive changes to initial teacher training in England. The most notable change has been the transfer of substantive amounts of responsibility for training from higher education institutions to schools, a move intended to prepare trainees to cope better with the demands of classrooms, in particular managing pupil behaviour.

Method

Participants

A cohort of 343 full-time trainee teachers taking a secondary (11–19) postgraduate certificate in education (PGCE) was invited to take part in the study. For their practicum, trainees spend 120 days of their one-year course in partnership schools where they are supervised by a mentor and supported by a professional tutor. While on the practicum, the school provides in-house training in respect of curriculum issues and classroom behaviour management, and trainees gradually increase their teaching load to around 66%. In all, 268 questionnaires were returned, which represented a high response rate (78%). Of the trainees participating 190 were women (71%) and 78 were men (29%), which accurately reflected the proportions of the full cohort. Ages ranged from 22 to 51 ($M = 26.4$, $SD = 5.04$) and most respondents were under 30 years of age (81%). Most trainees had a first degree in arts or humanities (80%); the remainder had science or maths degrees. The majority (62%) had worked prior to joining the course, with occupations ranging from scientist to ski instructor, and most (78%) reported that they planned to remain in the teaching profession in excess of 10 years.

Measures

The first section of the questionnaire requested demographic information regarding sex, age, subject of first degree, and career intentions.

Teacher Stress Scale

The self-report stress scale used in the present study was based on an earlier instrument developed and used by Freeman (1986) and Chaplain and Freeman (1994) to investigate teacher stress. Items on the original scale were grounded (Glasser & Straus, 1967) in the phenomenological accounts of stressful events in the lives of secondary teachers obtained using open interview techniques. Minor modifications were made to the original questionnaire to make it fit for use with trainees, for example by adding 'being observed and assessed' to the list of items. It was then piloted with

a group of 25 trainees, not involved in the main study, to check validity, and further minor changes were made to the questions.

Participants were asked to rate 23 specific items (listed in Table 3 below) in response to the question: 'How stressful have you found …' Items included lesson planning, attitude/behaviour of teachers/senior management, lack of recognition, and controlling pupil behaviour. Rating was on a five-point Likert type scale (extremely stressful = 5, very stressful = 4, moderately stressful = 3, mildly stressful = 2, not at all stressful = 1). A total score was calculated by adding the individual responses and a high score indicated greater stress.

Two general questions were also added. The first assessed perceived occupational stress and asked, 'How stressful do you consider the job of a secondary teacher to be?' The second (practicum stress) asked participants to give an overall rating of their practicum experience: 'Overall, how stressful have you found your professional placement?' The two questions were included to differentiate trainees' personal experience of the practicum from how stressful they perceived the job of a teacher to be based on their observations – the latter providing them with some insight into what they might experience when they take up employment as teachers. Both questions were scored in the same way as the individual scale items.

A final question asked: 'What do you consider is the most stressful aspect of teaching?' It invited respondents to add any additional open comments about stress and stressors they had experienced. The open question was included to provide participants with the opportunity to elaborate on items on the scale, or add items not included on the scale, which were emotionally significant to them.

Psychological distress

An abbreviated version of the General Health Questionnaire (GHQ-12; Goldberg, 1978) was used to measure psychological distress. The GHQ-12 is widely recognized as a reliable well-being screening instrument. Participants indicate whether they have recently experienced abnormal thoughts, feelings, or behaviour (e.g., problems sleeping, decreasing confidence, feeling constantly under strain). The emphasis is on changes in condition, rather than an absolute level of the problem. Respondents compare their present state with their normal situation; responses range from 'better than usual [or much more than usual]' to 'much less than usual' and 'much less capable'. The 12 items are balanced: half load positively and half load negatively. There are four scoring systems available: Likert, modified Likert, GHQ, and CGHQ. On the Likert scale, used in the present study, each item is rated on a four-point scale (0–3), with the most positive responses scored as 0 and most negative responses scored as 3. The maximum score was therefore 36 and a high score indicates high levels of dissatisfaction with current mental state.

Procedure

Participants voluntarily completed the self-report questionnaires immediately after they finished their final practicum. Administration of the questionnaires took place in academic subject groups. It took approximately 20 minutes to complete the questionnaires. All participants were guaranteed confidentiality. The collected questionnaires were coded and entered into SPSS version 14. The data were checked for consistency and, as a result, six questionnaires were removed from the sample, leaving 262 for processing.

The open comments were content analysed as follows. First, a coding frame was devised to describe their thematic content. The codes were then applied to all the comments. A second coder was then employed to test the reliability of assigning codes independently, and interrater reliability was good (Cohen's $\kappa = .80$).

Results

Perceived occupational and practicum stress

Scores on these two general stress questions were positively correlated (r = .52, p < .001). Almost half of the sample (46%) considered teaching as a profession to be very or extremely stressful, whereas 38% considered their practicum to have been very or extremely stressful. The only significant demographic difference found was between male and female trainees' responses to the question 'In general, how stressful do you consider the job of a secondary teacher to be?' Women perceived the job to be more stressful than did the men (see Table 1). While no significant interactions were found for sex × age, there was an interesting pattern of scores for perceived occupational stress: scores for the youngest male and female trainees were almost identical, whereas there was a visible distance between the two sexes in the other two age groups (see Figure 1).

Teacher Stress Scale

Scores on the 23 items were added to give a total stress score for the scale, and thus the potential scoring range was 23–115. Although women (M = 56.4, SD = 14.3) scored more highly than men (M = 55.1, SD = 12.0), the difference failed to reach significance (t[260] = .621, p = .535). Furthermore, while total stress scores increased with age (< 25 years: M = 55.3, SD = 13.7; 25–30 years: M = 55.9, SD = 14.6; > 30 years: M = 58.6, SD = 11.8) these differences failed to reach significance (F[2,260] = 0.777, p = .46).

Individual scale items

A maximum score of 5 indicated that an item had been extremely stressful. Means ranged from 1.7 to 3.13 with standard deviations ranging from .868 to 1.297. A correlation matrix of all items

Table 1. Mean scores for perceived occupational stress and practicum stress by sex and age.

		Perceived occupational stress		Practicum stress	
	N	*M*	*SD*	*M*	*SD*
Whole sample	262	3.45	0.74	3.30	0.93
Sex					
Men	76	3.26	0.80	3.29	0.93
Women	186	3.53	0.71	3.30	0.93
F		5.39		0.00	
Partial η^2		0.03		0.00	
p		0.02		0.96	
Age					
< 25 years	120	3.45	.76	3.21	.94
25–30 years	92	3.47	.70	3.37	.88
> 30 years	50	3.31	.75	3.36	1.01
F		0.63		0.74	
Partial η^2		0.01		0.01	
p		0.53		0.48	

Note. Mean scores are based on a five-point scale (1–5); a high score indicates a high level of stress.
Partial η^2 is an alternative form of η^2 and indicates the contribution of each factor, taken as if it were the only variable, so that it is not masked by other more powerful variables (Pierce, Block, & Aguinis, 2004).

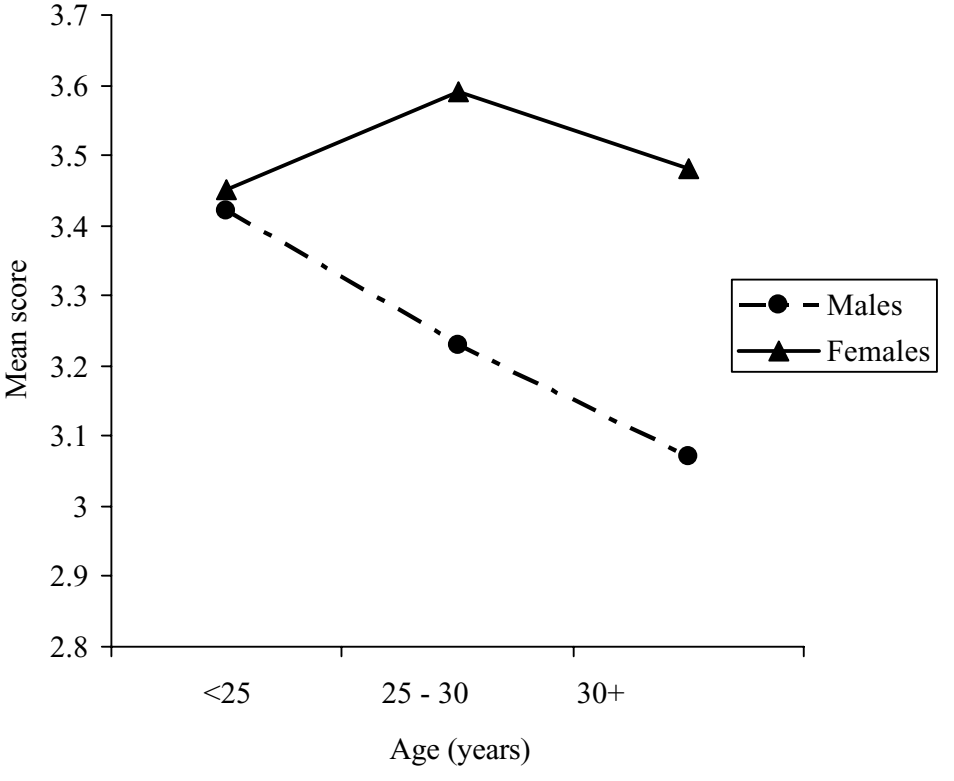

Figure 1. Mean scores (sex × age) for responses to the question 'How stressful do you consider the job of a secondary teacher to be?'

consisted of all positive correlations, and all items correlated positively and significantly with both perceived occupational and practicum stress (see Table 2). The scale had high internal consistency (Cronbach's $\alpha = .90$).

To determine any underlying structure, all 23 items were included in a principal components analysis. All items loaded positively on the first factor (see Table 2) and accounted for 32% of the total variance in the unrotated solution. The factor structures were identified using a scree plot (Cattell, 1966) and Monte Carlo PCA for parallel analysis (Watkins, 2000). A three-factor model was found to be the best solution (eigenvalues 7.40, 2.04, and 1.90 respectively) and rotated orthogonally using varimax accounted for 25%, 14%, and 13% of the variance respectively. Items with significant loadings above .4 were used as a basis for explaining the three factors (see Table 3): these were labelled behaviour management, workload, and lack of support. Differences between the means for the three subscales reached significance (Wilks' λ F [2,261] = 40.33, $p < .001$, partial $\eta^2 = .27$).

Repeated measures multiple analysis of variance was used to examine demographic differences, with the three factors as dependent variables and sex and age as independent variables. However, no differences reached significance, either as main effects or interactions.

General Health Questionnaire

The women's mean score ($M = 12.6$, $SD = 6.4$) was significantly higher than the men's ($M = 10.8$, $SD = 5.9$; t[260] = 1.99, $p < .05$), indicating increased dissatisfaction with current mental status

Table 2. Teacher Stress Scale means, standard deviations, correlations with occupational and practicum stress, and loadings on first unrotated factor.

Item	Item	*M*	*SD*	Correlation with practicum stress	Correlation with occupational stress	Loading on first unrotated factor
5	Controlling pupil behaviour	3.13	1.08	.31***	.23**	.699
6	Pupils with behaviour problems	3.13	1.10	.31***	.23**	.718
4	Lesson planning	2.74	1.01	.44***	.41**	.565
1	Feeling good about yourself as a teacher	2.67	1.16	.46***	.35**	.512
11	Motivating disinterested pupils	2.63	0.98	.28***	.27**	.615
19	Loud/noisy pupils	2.58	1.01	.22***	.21**	.646
3	Assessing pupil performance	2.58	0.98	.35***	.36**	.645
2	Administrative tasks	2.58	1.04	.31***	.47**	.654
7	Mixed ability teaching	2.55	1.05	.30***	.34**	.598
23	Pupil apathy	2.54	1.09	.33***	.36**	.744
14	Lack of recognition of effort	2.53	1.29	.37***	.19**	.523
13	Feeling in control of class	2.52	1.06	.36***	.32**	.749
9	Raising pupils' achievements	2.49	0.91	.31***	.27**	.599
12	Pupils' attitudes towards school	2.46	1.06	.37***	.26**	.718
22	Pupil aggression	2.43	1.21	.25***	.14*	.709
8	Teaching pupils with SEN	2.39	0.97	.20**	.31**	.661
21	Having teaching observed/assessed	2.32	1.15	.24***	.26**	.649
15	Attitude/behaviour of senior management	2.23	1.28	.28***	.08	.680
10	Keeping records	2.20	0.98	.26***	.34**	.674
16	Attitude/behaviour of other teachers in your department	2.20	1.29	.35***	.09	.619
18	Maintaining positive rapport with pupils	1.72	0.87	.30***	.21**	.630
17	Attitude/behaviour of teachers in other departments	1.70	1.01	.15*	.05	.637
20	Attitude of parents	1.70	0.93	.16*	.12	.577

*$p < .02$; **$p < .01$; ***$p < .001$.

Table 3. Teacher Stress Scale – varimax rotated solution.

Item	Component		
	1	2	3
Feeling in control of class	**.77**	.13	.16
Controlling pupil behaviour	**.76**	.10	.05
Pupils with behaviour problems	**.76**	.18	.01
Loud/noisy pupils	**.73**	.01	.12
Pupil aggression	**.64**	.09	.28
Motivating disinterested pupils	**.63**	.29	.07
Pupil apathy	**.62**	.24	.21
Maintaining positive rapport with pupils	**.61**	.01	.22
Pupils' attitudes towards school	**.60**	.16	.28
Mixed ability teaching	**.53**	.40	.01
Teaching pupils with SEN	**.50**	.32	01
Feeling good about yourself as a teacher	**.44**	.29	.09
Having teaching observed/assessed	**.33**	.27	.16
Assessing pupil performance	.16	**.76**	.11
Keeping records	.01	**.74**	.17
Administrative tasks	.03	**.71**	.20
Lesson planning	.29	**.60**	.06
Raising pupils' achievements	.32	**.46**	.20
Attitude/behaviour of senior management	.14	.09	**.77**
Attitude/behaviour of teachers in other departments	.03	.10	**.77**
Attitude/behaviour of other teachers in your department	.13	.09	**.73**
Lack of recognition of effort	.24	.12	**.63**
Attitude of parents	.35	.13	**.40**

Note. Items in bold indicate loadings > 0.4.

in female trainees; however, the magnitude of the differences between the two means was small ($\eta^2 = .02$). Differences between the three age groups failed to reach significance at $\alpha = .05$. These findings are consistent with various validation studies of the GHQ – that is, significant differences between sexes but not between age groups (Goldberg & Williams, 1988). While Pevalin (2000) reported a number of studies which demonstrated a gradual rise in GHQ scores with age (up to 60 years), in the present study this trend was only observed among the women. Indeed, the men in the over 30 group had the lowest score of all groups measured.

The zero order correlation matrix for the three stress factors and perceived occupational stress with GHQ-12 scores is shown in Table 4. All stress factors positively correlated with scores on the GHQ-12 in the expected direction and reached statistical significance at the $\alpha = .01$ level. The correlations between the three stress variables and psychological distress for the whole sample were of medium strength (Cohen, 1988).

To investigate which of the independent variables best predicted level of psychological distress, a multiple regression analysis was carried out using psychological distress scores as the dependent variable and the three stress factors and perceived occupational stress as predictors (see Table 5). In relation to the whole sample, 16% of the variance in psychological distress scores is explained by the stress variables. There was a difference between sexes – among the men, the stress variables accounted for 18% but among women they accounted for

Table 4. Correlations between stress factors and GHQ-12 scores for the whole sample, and for male and female trainees.

				Correlation with psychological distress			
Stress factor	*M* (*SD*)	Cronbach's α	No. of items	Whole sample *N* = 262	Men *n* = 76	Women *n* = 186	*z*
Behaviour management	2.55 (.69)	.89	13	.31**	.28*	.32**	.29
Workload	2.52 (.70)	.75	5	.25**	.25*	.25**	0
Lack of support	2.10 (.83)	.75	5	.25**	.14	.28**	.91
Perceived occupational stress	3.45 (.74)		1	.33**	.41**	.28**	1.05

Note. Stress rated on five-point scale; a high mean value indicates a higher level of stress.
*$p < .05$; **$p < .01$.

15% of variance, with behaviour management and perceived occupational stress reaching significance in respect of R^2 change.

Open question

Responses to the open question 'What did you find most stressful about your placement?' were content analysed and categorized, and comparisons were made between the sexes. Of the 253 responses, 63 were from men and 190 from women. Comments ranged from simple phrases and sentences to accounts covering two sides of A4; women provided the more detailed accounts. The content analysis generated four categories: managing pupil behaviour; administration, planning, and lack of time; negative attitude of mentors, teachers, and senior management team (SMT); and self-worth and personal agency. Representative comments, along with their relative frequencies within each of the four groups, are reported below in rank order.

Managing pupil behaviour

Most open comments were placed in this category and there were almost equal proportions of men (40%) and women (38%) referring to stress resulting from difficulties in managing pupils' behaviour. However, men made more comments about having to manage pupils with behaviour difficulties or 'disorders' ('pupils with behaviour problems who struggle to conform to teachers'

Table 5. Multiple regression results for the prediction of psychological distress (GHQ-12) using the three stress factors (behaviour management, workload, and lack of support) and perceived occupational stress.

		R^2 change	
Stress variable	Whole sample	Men	Women
Behaviour management	.09***	.08*	.10***
Workload	.01	.02	.01
Lack of support	.01	.00	.02
Perceived occupational stress	.05***	.08*	.03***
R^2	.16***	.18*	.15***

$N = 262$; *$p < .05$; ***$p < .001$.

requests'; 'challenging behaviour from pupils inappropriately placed in mainstream classrooms'). In contrast, most comments from women related to low-level disruption ('always chattering'; 'out of their seats') or managing the whole class ('getting them to be quiet for long enough so I can teach'; 'answering back when I ask them to be quiet'). Female trainees also reported more threats of physical aggression from pupils ('I had to operate in a situation where I had to face the fear of physical threats of violence towards me by students'; 'one boy threatened to hit me on more than one occasion').

Administration, planning, and time management

Roughly equal proportions of men (32%) and women (33%) trainees commented on administration, planning, and time management as stressors. Most comments reflected concerns about having to spend too much time 'planning lessons' and/or 'juggling multiple demands from Faculty and school' and/or 'unnecessary amounts of paperwork'. However, the pressure of coping with excessive amounts of paperwork is a familiar, rather than novel, complaint reported by inexperienced and experienced teachers alike.

Negative attitude of mentors, teachers, and senior management

In contrast to the two previous categories, male and female trainees viewed lack of support from mentors, teachers and managers differently. While 19% of men found this area stressful, only 15% of women felt likewise. For some trainees, getting a supportive or 'good' mentor was fortuitous. The following quote from a female trainee summarizes the spirit of such comments: 'My friend had a lovely mentor, very dedicated and caring. Mine hardly spoke to me and when he did it was always critical, no balancing of positive and negative, just negative.' In other contexts it was teachers other than the mentor who seemed unsupportive: 'With one exception, they [the other teachers] were very unhelpful almost obstructive in some cases' (male trainee). The attitude of the SMT also caused concern for some trainees, for example through acting 'unprofessionally … walking into my classroom and disciplining a student then walking out without saying a word to me!' Others felt that the SMT had unrealistic expectations of what trainee teachers should be expected to do, such as 'covering classes at the drop of a hat which meant teaching lessons for which I was unprepared'. Alternatively, some found the SMT to be invisible, 'taking no interest in my presence in their school'.

Self-worth and personal agency

This area produced the biggest difference between the sexes, with 8% of men and 14% of women making comments of this kind. Most of the self-critical comments were made by female trainees. These included an unrealistic desire always to deliver the perfect lesson, whereby failure to do so would reduce self-image ('convincing myself that I can teach'; 'struggling to get my teaching right every time'; 'I always come out of lessons worried that they weren't good enough.'). Others related to general self-doubt ('feeling inadequate in teaching and managing a class'; 'I have high expectations of myself which I am not achieving and now I am doubting my abilities … I am beginning to wonder if teaching is really for me').

Discussion

The findings of the present study extend previous research into the relationship between trainee teacher stress and distress. Experiencing high levels of stress, caused by disruptive pupils, high workload, and feeling unsupported during the practicum, may well lead to trainees becoming

demotivated, suffering ill health, decide not to teach, or leaving teaching prematurely. The present findings have practical implications for those concerned with the training of secondary school teachers.

Overall, 38% of the trainees in this study felt that their teaching experience had been very or extremely stressful, a percentage which almost matches the highest figure reported by practicing teachers (37%) in a number of studies (Borg, 1990; Borg & Riding, 1991; Boyle et al., 1995; Chan & Hui, 1995; Kyriacou, 1987, 2001). At the same time, almost half the cohort (46%) thought that the job of a secondary teacher was very or extremely stressful, based on their observations in school. This finding that almost half of the cohort anticipate that life will be very or extremely stressful when they commence teaching should be of concern, especially given that the level of pleasure trainees anticipate when they become teachers best predicts retention (Wilhelm et al., 2000).

Women in the present study scored significantly higher than men on the GHQ-12, a finding consistent other studies (Goldberg & Williams, 1988; Pevalin, 2000). Of particular relevance to the present study, Kovess-Masféty et al. (2007) reported differences in the levels of mental health of teachers across teaching phases. Interestingly, female secondary teachers scored higher on psychological distress than male and female teachers in any other teaching phase. In contrast, secondary male teachers scored lowest of all teaching groups (distress measured using the Hopkins Symptom Checklist, a measure which correlates [$r = .78$] with the GHQ-12; Goldberg, Rickels, & Downing, 1976).

With regard to understanding the nature of trainee teacher stress, three factors were identified: behaviour management, workload, and lack of support. These factors are recognizable as characteristic of stressors intrinsic to teaching in the research literature (e.g., Borg et al., 1991; Durham, 1992; Galloway, Ball, Blomfield, & Seyd, 1982; Kyriacou, 2001; Kyriacou & Stephens, 1999). Two of the factors are concerned with interpersonal relationships and the third with administrative demands, a distinction that has different implications for training – since the latter is potentially easier to quantify and address. Hereafter, discussion will focus on the two interpersonal factors.

Although in the present study all three factors were correlated with psychological distress, the salience of managing pupil behaviour is evident both in the stress scale scores and in the open comments; it is the only factor to make a unique contribution to the prediction of psychological distress. The open questions in the present study shed further light on qualitative differences between male and female trainees with regard to behaviour management. While men made more references to stress resulting from dealing with pupils who have behaviour difficulties, women made more reference to threats of physical aggression being directed at them, a feature Kovess-Masféty et al. (2007) also noted in their study.

Stress related to managing pupil behaviour among trainee teachers is certainly not a new phenomenon. Merrett and Wheldall (1992) highlighted a large body of research that identified the 'grave anxieties' of trainees about behaviour management. They added that, despite a national UK study of discipline in schools (*Elton Report*, 1989) having recommended training student teachers in group management skills, there remained no adequate provision of practical training in this area. The UK government now requires trainees to spend almost all of their PGCE year in partnership schools, who take the 'leading responsibility for training students to … manage classes (Department for Education, 1992, para. 14) – an approach which Anderson (1995) and Tomlinson (1995) suggest has the potential for more effective teacher training. As a result more time is now spent in schools than in higher education institutions (HEI) than ever but, one might ask, has this change resulted in better-equipped trainees?

Based on the present study, one might question the efficacy of increased time spent in school as a means of improving trainees' ability to cope, particularly with disruptive behaviour. While

the present study focused on a single cohort, the findings here are in keeping with successive surveys of newly qualified teachers (NQTs) by the UK Training and Development Agency for Schools (TDA), in which NQTs highlighted inadequacies in the teaching of behaviour management techniques during their training (TDA, 2005). Interestingly, despite these survey findings the TDA make the claim in their recent guidance on training standards (TDA, 2006) that 'The teaching profession has never been in better shape' (p. 2). The levels of stress and psychological distress reported by trainees in this and other recent studies of teacher stress, including their own surveys, along with rates of teacher attrition, might lead one to ask how 'better shape' is being measured.

In the present study, lack of support was found to correlate significantly with occupational stress, but only in the case of female trainees. Official support in school is provided by the trainee's mentor; the trainee's relationship with the mentor can be pivotal in determining the overall success of the placement. The degree to which mentors were perceived as supportive in this study was variable, with some trainees having to rely on other teachers, sometimes in other departments, for instrumental and emotional support. Murray-Harvey et al. (2000) argue that support from a supervising teacher has two functions, first as principal coping strategy and second, paradoxically, as a potential stressor, because of the supervisor's role in assessing trainee performance. Having one's teaching observed and assessed can be a distraction; however, having it observed by someone whom you feel does not value or respect you, as was the case for some of the trainees in the present study, could severely disrupt an individual's teaching performance and threaten their self-image.

The female trainees in this study made substantially more references to threats to their self-image, particularly if lessons were perceived as not being excellent, than did male trainees. Forlin (2001) also found that female teachers reported greater stress from threats to their perceived professional competence than their male counterparts. In the present study, the central role of the mentor relationship and perceived levels of support were clearly salient to many trainees, as indicated in the teacher stress scale and in their open comments. Merrett and Wheldall's (1992) observation – that the chances of a trainee finding him/herself in a welcoming school, with supportive teachers, cooperative pupils, and a skilled, well informed, and appropriately experienced mentor were uncertain – would appear as relevant today as it was then. Getting the trainee–environment fit right and monitoring the quality of mentoring would seem an essential feature of ensuring better quality training. The reality is that positive trainee–mentor relationships are often down to luck and are marred by personality conflicts (Merrett & Wheldall, 1992; Tickle, 1994).

There are a number of limitations to the present study. Using self-report measures in a cross-sectional study can bias responses, since sociocultural factors may influence what teachers consciously appraise and report as stressful. Hiebert and Farber (1984) urged caution in drawing conclusions about the intrinsic nature of stress in teaching, arguing that the publicity given to teacher stress has the potential to generate a self-fulfilling prophecy, redefining everyday 'normal hassles' as chronic inherent stressors. However, the present findings are fairly consistent with previous research using different methodologies over a long period of time. The cohort design meant that the sample was not random and hence cannot claim to be representative of the UK population of trainee secondary teachers nor of different modes of training, and hence caution must be used in attempting to generalize the findings. There is a need to conduct studies with samples representative of other types to teacher training to determine their impact on trainee well-being.

The conclusions of the present study are that changes are needed to the structure and content of initial teacher training in at least three areas. First, more comprehensive training in behaviour management techniques is needed, including providing trainees with greater knowledge and understanding of pupil behaviour and behaviour difficulties. Group management techniques

should be taught to trainees, such as positive behaviour management, cognitive-behavioural approaches, microteaching of interpersonal skills, group problem-solving, managing the classroom environment, and, for some individuals, clinical supervision. Such approaches are established, tested, effective, and available. While the HEI may provide the most suitable venue for such training, it would also be productive to involve schools in producing a coordinated package to ensure that all trainees receive a balanced input. Second, training is needed in stress management techniques, again involving both schools and HEI to promote shared understanding. Third, more efforts should be made to match trainees to placement schools, mentors, and optimal types of support, which, although a difficult challenge given the numbers of trainees involved, is certainly worthy of further attention. The question is whether those responsible for decision-making in teacher education are prepared to invest in them.

In sum, the findings of the present paper add to the broader literature on stress and distress among trainee teachers and highlight demographic differences. The levels of stress and distress identified suggest we should be concerned about the mental health and preparedness of trainees to teach. The degree to which high levels of stress will be sustained during their careers is not measured in the present paper. However, the consistent reporting of high levels of stress and distress among experienced teachers would suggest it seems quite possible.

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