

Burnout Among Teachers

Students' and Teachers' Perceptions Compared

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ABSTRACT The aim of this study was to explore students' and teachers' perceptions of teacher burnout in relation to the occurrence of disruptive student classroom behaviour and the teachers' competence to cope with this kind of behaviour. First, the study shows that the Maslach Burnout Inventory, the Coping with Disruptive Behaviour Scale and the Perceived Disruptive Behaviour Scale could be adapted to students to report perceived burnout symptoms among their teachers, the occurrence of perceived disruptive student behaviour and the students' perception of their teachers' competence to cope with disruptive student behaviour. Second, students' perceptions do not differ according to their age. Third, we found that there was a significant difference between the perceptions of male and female students in respect of emotional exhaustion and depersonalization, but not in respect of personal accomplishment. Fourth, according to the students' perceptions, a considerable percentage of variance in each of the three burnout dimensions was explained by teachers' competence to cope with student disruptive behaviour and perceived disruptive student behaviour. Finally, with respect to the teachers' self-reports, it appeared that teachers' and students' reports differed significantly with respect to depersonalization, personal accomplishment and the competence to cope with disruptive student behaviour. The hierarchical regression analyses of the teachers' data showed that the competence to cope with disruptive student behaviour significantly contributed to depersonalization and personal accomplishment, whereas the teachers' age was significantly related with personal accomplishment.

Although the students' perceptions and the teachers' self-reports on the teachers' well-being differed on some dimensions, the students' information may contribute valid information on some aspects of teachers' mental health and classroom processes.

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School Psychology International Copyright © 2004 SAGE Publications (London, Thousand Oaks, CA and New Delhi), Vol. 25(2): 131–148.
DOI: 10.1177/0143034304043670

Introduction

Research reveals that burned out human service professionals, including teachers have had and perhaps are still having a hard time. Although the fit between them and their job has been disrupted (Galloway et al., 1986; Smith and Bourke, 1992), they continue their work, and by doing so, may well harm their own health and the well-being of their clients.

Students need mentally and physically fit adults who can guide them as they find their way in our world. Burned out teachers suffer from irritability (Huberman, 1993), and they are found to be responsible for student apathy (Jenkins and Calhoun, 1991). Teachers are known to continue working in spite of burnout symptoms (Dworkin, 1985; Hock, 1988) or reduced classroom management skills (Blase, 1984; Smith and Bourke, 1992).

As burned out teachers negatively affect themselves, their students, and the educational system (Hughes, 2001), it is necessary to develop and promote the use of instruments to accurately measure teacher burnout. As a complement to teachers' reports on their own health, their students could give valid information about them, thus helping to discover burnout among teachers at an earlier stage and making timely preventive or restorative intervention strategies possible. Teachers play such a valuable role in helping our children grow up that any opportunity to promote their physical and mental health should be seized.

Teacher burnout

According to the well-known definition of burnout (Maslach, 1976; Maslach and Jackson, 1981), burned out people suffer from emotional exhaustion, depersonalization and a reduced sense of personal accomplishment. Emotional exhaustion refers to feelings of being emotionally overextended and having depleted one's emotional resources. Depersonalization refers to a negative, callous and detached attitude towards the people one works with, i.e. patients, clients or students. Reduced personal accomplishment refers to someone's negative self-evaluation in relation to their job performance (Schaufeli et al., 1993).

Many studies on burnout stress a behavioural aspect of the syndrome while many others stress a mental aspect. Oranje (2001) divides studies on burnout into three categories. First, burnout is considered to be a coping problem (the interaction model), i.e. burnout stems from the negative outcome of an individual's judgment of their own abilities in relation to real or imagined stressors in their environment (Byrne, 1991; Cherniss, 1980; Eskridge and Coker, 1985).

Second, some studies view burnout as a state of both physical and mental exhaustion that strikes the individuals involved for a long time

in situations that exact a heavy emotional toll (Kremer-Hayon and Kurtz, 1985). This view is categorized as the response or physiological model.

Third, some studies take the view that it is the environment that produces stressors responsible for the onset of burnout. Examples of such environmental stressors are the social relationships of the teachers with students, colleagues and principals (Brouwers and Tomic, 1999; Feitler and Tokar, 1980), and the organizational working circumstances (Brenner et al., 1985; Burke and Richardsen, 1996; Van Dierendonck et al., 1998).

Human service workers appear to run a great risk of falling victim to the burnout syndrome (Freudenberger, 1975). Teachers, in particular, experience many stressful events in their careers (Burke et al., 1996). Although Selye (1976) divided stress into eustress (stress positively influencing behaviour) and distress (stress negatively influencing behaviour), work stress is usually associated with the negative aspects of someone's professional career.

It is, however, a serious problem that so far, teacher burnout studies have lacked a firm theoretical basis and that proof of causal relationships between environmental stressors and individual health consequences is almost entirely lacking. Guglielmi and Tatrow (1998) posit that burnout research lacks a theoretical framework that unifies and guides empirical research in this area. To meet one of their most essential objections, we drew from self-efficacy theory when composing our questionnaire on teacher competence in order to measure domain specific teacher classroom behaviour, because in some studies self-efficacy theory has appeared to be a promising conceptual framework for studying teacher burnout (Brouwers and Tomic, 2000; Evers et al., 2002).

Guglielmi and Tatrow's (1998) second objection to many burnout studies concerns how valid data are collected about the phenomenon. Generally speaking, self-report questionnaires and self-reported information to medical doctors and/or psychologists provide the proof that someone suffers from burnout to a certain degree. Because of the many negative consequences accompanying burnout, it is important to improve the assessment of its incidence.

The Maslach Burnout Inventory (MBI) is often the only instrument used as a questionnaire to assess self-reported teacher burnout. However, such an instrument may be adapted to enable the clients to report perceived symptoms of burnout among their human service workers. In the educational domain, Tatar and Yahav (1999) were the first to apply a shortened version of the MBI in this way; they had students fill out the items on this instrument to report perceived symptoms of burnout among their teachers.

Tatar and Yahav (1999) used an adapted version of the MBI (14 items), divided into three sections. In their study, they asked secondary school pupils ($N = 297$), but not their teachers, to score the items describing potential characteristics of burned out teachers. Their findings show that pupils' perceptions of the occurrence of burnout among their teachers can supply researchers with reliable data. The study stresses the importance of the pupils' views in analysing burnout among teachers, which will ultimately lead to a better understanding of the role of pupil behaviour in the origin of teacher burnout.

Our study focuses on a relatively unexplored topic, viz. the students and their teachers filled out the same questionnaires on teacher burnout related to student disruptive behaviour and the teachers' competence to cope with this kind of behaviour.

We focused our attention on disruptive behaviour as various studies have found significant correlations between disruptive student behaviour, the teachers' competence to cope with this behaviour and burnout among teachers (Blase, 1982; Brouwers and Tomic, 1999, Byrne, 1991), thereby relating also to one of the theoretical approaches to burnout, i.e. environmental theory.

In contrast to the respondents in Tatar and Yahav's study, our students all attended vocational training. We also focused on teachers (grade teachers, i.e. teachers who were mentors and student advisers of a specific group of students) who worked closely with their students. The literature supports our assumptions that pupils and students have sensible views on their classroom environment (Batten, 1988; Hofstein et al., 1980; Levine and Donitsa-Schmidt, 1996; Raviv et al., 1990), on school discipline (Haroun and O'Hanlon, 1997; Scarlett, 1988), and finally on teachers as persons (Jules and Kutnick, 1997; Tatar, 1998).

Our study on teacher burnout also investigated whether there were age-related and gender-related differences between the students' perceptions of teacher burnout (Haroun and O'Hanlon, 1997; Jules and Kutnick, 1997; Tatar, 1998).

In sum, the present study examines various issues. First, it examines whether the MBI, the CDBS and the PDBS can be turned into reliable instruments enabling our student population to report on the psychosocial well-being of their grade teachers. Second, it examines the perceived degree on the three dimensions of burnout based on the students' scores on the adapted MBI-questionnaire. Third, it examines the degree of disruptive student classroom behaviour as perceived by the students themselves. Fourth, in line with this, the study aims to measure the teachers' perceived competence to cope with disruptive student classroom behaviour. Fifth, it aims to answer the question whether the students' age and gender are significantly related to (1) the perceived dimensions of burnout among grade teachers, (2) dis-

ruptive student classroom behaviour as perceived by the students and (3) the perceived teachers' competence to cope with disruptive student classroom behaviour. Finally, the scores of the students are compared with the teachers' scores on the same three questionnaires in order to provide some measure of the validity of the students' perceptions.

Methods

Participants

Students. We took a random sample consisting of 25 percent of the classes, i.e. 17 out of 69 (thereby leading to 411 out of 1782 students who participated in our study) at a Regional Training Centre (RTC) in the southern part of the Netherlands. Students in their late teens and early twenties attend vocational training at an RTC. Our sample was divided into 159 female students (38.7 percent) and 252 male students (61.3 percent). Their mean age was 18.3 years (SD = 2.43), ranging from 16 to 23 years of age. The total number of teachers working with them was 73 (58 male and 15 female teachers).

Teachers. We asked all 73 teachers of the same RTC to participate in our study. The number of respondents was 41 (56.2 percent), nine female and 32 male teachers. The respondents' mean age was 49.07 years (SD = 6.21), ranging from 34 to 65. The mean number of years of experience was 22 (SD = 7.80), and the mean number of years they had been employed at this school was 16.76 (SD = 6.73). The mean number of students per class was 24.56 (SD = 2.85), and the mean number of lessons per week was 25.70 (SD = 8.68).

Instruments

Our *student respondents* were asked to fill out three questionnaires that were all adapted in part from existing instruments in order to comment on their perceptions of their teachers' levels of burnout.

Burnout. The Dutch version of the Maslach Burnout Inventory for teachers (MBI_NL_Ed; Schaufeli and Van Horn, 1995) was used to measure burnout. The instrument consists of 20 items, and is divided into three sub-scales: (1) emotional exhaustion (eight items, maximum score is 48); (2) depersonalization (five items, maximum score is 30) and (3) personal accomplishment (seven items, maximum score is 42). The students could indicate their perceptions on a seven-point scale, from 'never' to 'always'.

Based on their students' perceptions, teachers will be seen as suffer-

ing from burnout when the scores on emotional exhaustion and depersonalization are high, and when the scores on personal accomplishment are low. The wording of the items was adapted so that the students' perceptions could be reported. Examples of items indicating emotional exhaustion are: 'At the end of the working day my grade teacher feels empty' and 'My grade teacher feels tired when (s)he gets up in the morning, facing a new working day again'. Examples of depersonalization items are: 'My grade teacher has the feeling that (s)he treats some students in an impersonal way' and 'My grade teacher doesn't really care what will become of his/her students'. Examples of items indicating personal accomplishment are: 'When my grade teacher has finished instruction, (s)he looks back on it full of satisfaction' and 'My grade teacher has the feeling (s)he achieves many things of great value in this job'.

The three-factor structure of the Dutch version of the Maslach Burnout Inventory for teachers has been validated in confirmatory factor analysis (Schaufeli et al., 1994). Cronbach's alpha for emotional exhaustion was 0.86, for personal accomplishment and depersonalization 0.72.

Teacher competence. The second questionnaire (Coping with Disruptive Behaviour Scale, CDBS; 12 items, maximum score is 60) consisted of an adapted version of the Self-efficacy Scale for Classroom Management and Discipline from Emmer and Hickman (1991). This instrument, scored by means of a six-point scale, was used to measure the perceived teachers' competence to cope with disruptive student classroom behaviour. Examples of the CDBS are 'When my grade teacher is speaking, (s)he is hardly ever interrupted by the students' and 'My grade teacher knows how to restore order when a student disturbs his/her lesson'. Cronbach's alpha was 0.94 for questionnaire 2.

Disruptive behaviour. The third questionnaire (Perceived Disruptive Behaviour Scale, PDBS; five items, maximum score is 25), measuring the perceived occurrence of disruptive student classroom behaviour, consisted of an adapted version of the Order and Organization subscale of the Classroom Environment Scale from Moos and Trickett (1974). The students scored the items on a six-point scale, from 'strongly agree' to 'strongly disagree'. Examples of the items in PDBS are 'Sometimes it is too noisy in my grade teacher's classroom' and 'There are quite a few students disrupting my grade teacher's lessons'. Cronbach's alpha was 0.86 for questionnaire 3.

Both questionnaire 2 and 3 had first been translated into Dutch and were later adapted to our purposes. So as not to deviate from the original intentions of the authors of the questionnaires, we asked an

independent translator to turn our Dutch translations back into English. Our teacher respondents filled out the three burnout questionnaires in their original form.

Results

Students' perceptions

The means, standard deviations and internal consistencies of the three burnout dimensions of the MBI, the CDBS and the PDBS as perceived by the students are presented in Table 1. Besides the scores of the total sample, the separate scores of male and female students, eta squared and the correlation coefficients between the variables are presented. The results show that the reliability coefficients of our questionnaires range from 0.72 to 0.94, which is sufficient according to Nunnally and Bernstein's criterion (1994).

According to the students' perceptions, the teachers' mean score on emotional exhaustion was 13.37 (SD = 8.39), on depersonalization 7.42 (SD = 5.19) and on personal accomplishment 21.86 (SD = 7.90).

Norm numbers

The scores on emotional exhaustion, depersonalization and personal accomplishment from the sample used to estimate norm numbers of the MBI for Dutch teachers (MBI_NL_Le, Schaufeli and Van Horn, 1995) were 16.50 (SD = 9.84), 6.00 (SD = 5.21) and 29.87 (SD = 7.46), respectively. It means that the students perceived their teachers display fewer symptoms of emotional exhaustion, $t(915) = 5.95$, $p < 0.001$, and more symptoms of depersonalization, $t(792) = 4.60$, $p < 0.001$, moreover, they had significant lower opinions on the teachers' personal accomplishment, $t(749) = 17.37$, $p < 0.001$, compared to the norm scores of the MBI_NL_Le.

Student gender

Because the current study involved more than one test, we adjusted the alpha level downward to consider chance capitalization (Sankoh et al., 1997; Tabachnik and Fidell, 1996). There was a significant difference between the perceptions of male and female students in respect of emotional exhaustion and depersonalization among their grade teachers (Table 1). The mean score of male students' perceptions of symptoms of emotional exhaustion was significantly higher than the mean score of female students: $t(409) = 2.82$, $p < 0.01$. Male students significantly differed from their female counterparts by reporting a higher mean score on depersonalization: $t(409) = 4.18$, $p < 0.01$. There were no differences between male and female students in respect of personal

Table 1. Internal consistencies, means, standard deviations of students' perception of the three burnout dimensions, competence coping with disruptive student behaviour, perceived student disruptive behaviour and correlation coefficients

Variables	α	All students N = 411		Male students N = 252		Female students N = 159		η^2	1	2	3	4	5
		M	SD	M	SD	M	SD						
1. Student age	-	18.17	1.22	18.10	1.21	18.30	1.24	-					
2. Emotional exhaustion	0.88	13.37	8.39	14.29**	8.81	11.91	7.48	0.02	-0.06	-			
3. Depersonalization	0.72	7.42	5.19	8.25***	5.29	6.10	4.74	0.04	-0.13*	0.75*	-		
4. Personal accomplishment	0.83	21.86	7.90	21.40	7.89	22.59	7.88	0.01	0.03	-0.63*	-0.59*	-	
5. Competence to cope with disruptive student behaviour	0.94	34.44	13.38	33.46	13.78	35.99	12.61	0.01	0.04	-0.65*	-0.57*	0.67*	-
6. Perceived disruptive student behaviour	0.86	11.08	6.22	10.61	6.02	11.82	6.47	0.01	0.00	-0.43*	-0.37*	0.54*	0.76*

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

accomplishment: $t(409) = 1.48, p > 0.05$. The magnitude of the differences in the mean scores were small. Eta's squared were 0.02, 0.04, and 0.01, respectively.

According to the students' perceptions (Table 1), the teachers' mean score on competence to cope with disruptive student behaviour was 34.44, and on the occurrence of perceived disruptive student behaviour 11.08. No significant difference was found between male and female students in respect of the perceived teachers' coping skills: $t(409) = 1.92, p > 0.05$. Finally, the results also showed that there was no significant difference between male and female students' scores as far as perceived disruptive student behaviour was concerned: $t(409) = 1.98, p > 0.05$. The magnitude of the differences in the mean scores were very small; both eta's squared are 0.01.

No significant differences were found between the scores of students of different ages (16–21) in any of the five categories.

Teachers' perceptions

The means, standard deviations and internal consistencies of the three burnout dimensions of the MBI, the CDBS and the PDBS as reported by the teachers are presented in Table 2. Besides the scores of the total sample, the separate scores of male and female teachers, eta squared and the correlations between the variables are presented. The results show that only Cronbach's Alpha of the depersonalization subscale did not meet Nunnally and Bernstein's (1994) criterion of 0.70. The teachers' mean scores on emotional exhaustion, depersonalization and personal accomplishment were 12.85 (SD = 6.20), 5.17 (SD = 2.88) and 28.44 (SD = 5.34), respectively. The competence to cope with disruptive student behaviour was 44.87 (SD = 5.15) and the perceived level of disruptive student behaviour was 11.19 (SD = 4.14). Male teachers scored significantly higher on emotional exhaustion than their female counterparts, $t(18) = 2.42, p < 0.05$.

Differences between students and teachers

The teachers' scores on the MBI, CDBS and PDBS questionnaires (Table 3), sometimes significantly differed from the students' perceptions. The results show that there were no differences between teachers and students concerning the mean scores on emotional exhaustion, $t(55) = 0.49, p > 0.05$. On the depersonalization subscale the students' mean scores were higher than the teachers' mean scores, $t(69) = 4.35, p < 0.001$. And on the dimension personal accomplishment, we found that the teachers' mean scores were higher than the students' mean scores, $t(59) = 7.15, p < 0.001$. In comparison with their students, the teachers' mean scores were higher on the competence coping with disruptive behaviour, $t(107) = 10.02, p < 0.001$. There were no

Table 2 Internal consistencies, means, standard deviations of teachers' perception of the three burnout dimensions, competence coping with disruptive student behavior, perceived student disruptive behaviour, eta squared and correlation coefficients

Variables	α	All students N = 41			Male students N = 32			Female students N = 9										
		M	SD	η^2	M	SD	η^2	M	SD	η^2								
1. Teacher age	-	49.07	6.21	50.06	6.09	45.55	5.59	0.10	-	-								
2. Teaching experience	-	22.00	7.80	22.50	7.97	20.22	7.31	0.02	0.62**	-								
3. Teaching experience current school	-	16.75	6.73	16.53	7.15	17.55	5.22	0.00	0.59**	-								
4. Mean number of students in class	-	24.56	2.85	24.53	3.06	24.66	2.06	0.00	-0.13	0.24								
5. Mean number of lessons per week	-	25.70	8.68	25.51	8.38	26.33	10.16	0.00	0.33*	0.38*								
6. Emotional exhaustion	0.83	12.85	6.20	13.84*	6.31	9.33	4.47	0.09	-0.08	0.25	0.23	-0.03	0.07	-				
7. Depersonalization	0.61	5.17	2.88	5.31	2.99	4.66	2.55	0.01	0.00	0.00	0.00	0.02	-0.01	0.38*	-			
8. Personal accomplishment	0.74	28.44	5.34	28.09	4.89	29.66	6.89	0.02	-0.31*	-0.19	-0.05	0.29	-0.01	-0.54**	-0.24	-		
9. Competence cope with student disruptive behaviour	0.86	44.87	5.15	44.51	4.72	46.11	6.60	0.03	0.07	0.02	0.13	0.21	0.11	-0.27	-0.35*	0.42**	-	
10. Perceived disruptive student behaviour	0.77	11.19	4.14	11.12	4.26	11.44	3.87	0.09	-0.13	0.00	0.10	0.10	-0.02	0.31	0.11	-0.24	-0.52**	-

* $p < 0.05$, ** $p < 0.01$

Table 3 *Difference in perceptions between teachers and students concerning the three burnout dimensions, the competence to cope with disruptive student behaviour and perceived disruptive student behaviour*

	<i>Students</i> N = 411		<i>Teachers</i> N = 41	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Emotional exhaustion	13.37	8.39	12.85	6.20
Depersonalization	7.42*	5.19	5.17	2.88
Personal accomplishment	21.86	7.90	28.43*	5.33
Competence to cope with disruptive behaviour	34.44	13.38	44.87*	5.15
Perceived disruptive behaviour	11.08	6.22	11.19	4.14

* $p < 0.001$

differences between the mean scores of teachers and students concerning experienced disruptive student behaviour, $t(59) = 0.15$, $p > 0.05$.

Regression analyses

The results of a hierarchical regression analysis of the students' and teachers' (in bold) data in order to examine to what extent the variables 'competence to cope with disruptive student behaviour' and 'perceived student behaviour' would explain the three dimensions of burnout are presented in Table 4. In doing so, the variables gender and age were controlled for statistically. With each burnout dimension as the dependent variable, these control variables were first added to the regression equation (step 1), followed by the independent variables, i.e. the competence to cope with disruptive student behaviour, and perceived disruptive student behaviour (step 2).

The results of the hierarchical regression analyses of the *students'* data show that the variable competence to cope with disruptive student behaviour added in step 2 was a significant predictor of the burnout dimensions emotional exhaustion ($\beta = -0.75$, $p < 0.001$), depersonalization ($\beta = -0.68$, $p < 0.001$) and personal accomplishment ($\beta = 0.62$, $p < 0.001$). Perceived disruptive student behaviour was significantly related to both emotional exhaustion ($\beta = 0.15$, $p < 0.05$) and depersonalization ($\beta = 0.16$, $p < 0.01$). The total of the variance explained of the predicting variables in steps 1 and 2 was 43 percent for emotional exhaustion, 38 percent for depersonalization and 46 percent for personal accomplishment.

We also found that emotional exhaustion was significantly related to student gender, but not to student age. Furthermore, it is an interest-

Table 4 Results of regression analyses for the predicting variables on emotional exhaustion, depersonalization and personal accomplishment

Predictor variables	Emotional exhaustion			Depersonalization			Personal accomplishment					
	B	Std. Error	β	ΔR^2	B	Std. Error	β	ΔR^2	B	Std. Error	β	ΔR^2
Step 1				0.09				0.01				0.10
Teacher gender	-4.27	2.40	-0.30	0.02*	-0.24	1.16	-0.04	0.06***	-0.50	1.93	-0.04	0.01
Student gender	-1.39	0.65	-0.08*		-1.57	0.42	-0.15***		0.15	0.60	0.01	
Teacher age	0.00	0.16	-0.04		0.00	0.08	0.01		-0.31	0.13	-0.37*	
Student age	-0.21	0.26	-0.03		-0.40	0.17	-0.10*		0.00	0.24	0.00	
Step 2				0.11				0.13				0.20*
Competence to cope				0.41***				0.32***				0.45***
with student disruptive behaviour	-0.11	0.22	-0.09		-0.23	0.11	-0.40*		0.43	0.18	0.41*	
Competence to cope with student disruptive behaviour	-0.47	0.04	-0.75***		-0.26	0.02	-0.68***		0.37	0.03	0.62***	
Perceived student disruptive behaviour	0.41	0.27	0.27		0.00	0.13	-0.10		0.00	0.22	-0.06	
Perceived student disruptive behaviour	0.20	0.08	0.15*		0.14	0.05	0.16**		0.00	0.07	0.07	
Overall F for equation				2.19				1.36				3.68*
				77.49***				60.41***				85.60***

* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$; Bold refers to regression analysis for teachers

ing finding that of all the dependent variables depersonalization shows the most significant relationship with the independent variables.

The results of the hierarchical regression analyses of the teachers' data (Table 4) revealed that the independent variable competence to cope with disruptive student behaviour was significantly related to depersonalization ($\beta = -0.40, p < 0.05$) and to personal accomplishment ($\beta = 0.41, p < 0.05$). We also found that the teachers' age was a significant predictor of the burnout dimension personal accomplishment ($\beta = -0.37, p < 0.05$).

Discussion

This study is different from many other studies on burnout, because the questionnaires used to provide us with information on a specific group of teachers have been completed by both teachers and their students. Moreover, our study is embedded in social cognitive theory, in particular self-efficacy theory, which claims to elucidate someone's domain specific behaviour (Bandura, 1997). In our case, the teachers' competence to cope with classroom behaviour was measured with the questionnaire CDBS, which complies with the criteria advised in some studies (Brouwers and Tomic, 2000; Forsyth and Cary, 1998) in order to obtain accurate self-efficacy scores.

It was our first aim to examine whether the MBI and the two other self-report instruments (CDBS and PDBS) could be adapted to students to report perceived burnout symptoms among their teachers. The reliability of the adapted questionnaires was 0.72 and higher, a noteworthy result. It may be concluded that the questionnaires can be used in this way by students to report on their teachers' well-being.

Second, we also examined the students' perceptions of the level of burnout among their grade teachers, the occurrence of perceived disruptive student behaviour, and the students' perception of their teachers' competence to cope with this kind of behaviour. In comparison with other studies on teacher burnout, our study not only presents the students' perceptions of their grade teachers, but it is also distinctive in having a large number of respondents reporting about a specific group of teachers working in the same social and organizational setting. The variables that often influence burnout research findings, i.e. type of school, number of students taught (Burke and Greenglass, 1989), and grade level taught (Haroun and O'Hanlon, 1997) were homogeneous in our study, and may have added to the validity of our results.

The present study was conducted among vocational students in their late teens and early twenties at a Regional Training Centre, which may offer an explanation for the students' and teachers' reported low level of

emotional exhaustion in comparison with some other studies that derived their results from self-report questionnaires (Byrne, 1991; Evers et al., 2001; Evers et al., 2002). On the other hand, the students reported significantly higher levels of depersonalization and lower levels of personal accomplishment than their teachers did, which means that they perceived their teachers to be nearer to burnout than the teachers themselves did.

Third, we did not find any significant age-related differences in the students' scores. In the literature, results sometimes do show differences between younger (12-year-old) and older (19-year-old) students in respect of school discipline (Haroun and O'Hanlon, 1997). The older students in Haroun and O'Hanlon's study have a more balanced judgment on the necessity of school discipline and good student behaviour, which is in accordance with the serious and balanced way our respondents approached the questions raised in this study. However, the greater age homogeneity of our students in comparison with the pupils in Haroun and O'Hanlon's study (1997) may explain the absence of significant differences between the younger and older respondents.

Fourth, we examined whether the students' gender played a role in our results. We found significant differences between the reports of male and female students in respect of emotional exhaustion and depersonalization. Male students more frequently reported perceived symptoms of emotional exhaustion and depersonalization. Interestingly, these results coincide with the results of the teachers' self-reports in Burke et al. (1996), indicating that male teachers have significantly higher scores on these two burnout dimensions. There was no difference between male and female respondents' perceptions of the teachers' level of personal accomplishment.

According to Jules and Kutnick (1997), female students appear to be more sensitive to classroom-related problems, which may be due to the female students' greater expectations of good interpersonal relationships. Our study, however, showed that female students did not report significantly more student disruptive behaviour than their male counterparts.

Fifth, supplementary to Tatar and Yahav (1999), we incorporated the variables disruptive student behaviour and the teachers' competence to cope with it in this study. These variables are found to be related to teacher burnout (Brouwers and Tomic, 1998, 1999; Burke et al., 1996; Friedman, 1995; Hock, 1988; Lamude et al., 1992). The hierarchical regression analyses reveal that the students' reported perceptions on disruptive classroom behaviour are significantly related to emotional exhaustion and depersonalization, but not to personal accomplishment. The results also showed that the teachers' competence to cope with disruptive student behaviour was significantly

related to each dimension of burnout. The teachers' data showed that they judge themselves to be sufficiently competent in dealing with disruptive student behaviour, which was supported by their high level of personal accomplishment. The positive self-perceptions of the teachers in respect of their competence are in accordance with the findings of a recent study on the dimensions of burnout (Van Dierendonck et al., 2001), revealing that personal accomplishment, which is significantly related to someone's competence (Brouwers and Tomic, 1998, 1999; Evers et al., 2001), may be a decisive factor in the teachers' strategies for coping with job stressors. Van Dierendonck et al. (2001) found that when the level of personal accomplishment had decreased, emotional exhaustion and depersonalization significantly increased. Students and teachers diverged in their views on personal accomplishment (students 21.86; teachers 28.44) and the competence to cope with disruptive student behaviour (students 34.44; teachers 44.87). Teachers in our study frequently meet with disruptive student behaviour, but because of their perceived competence to cope with it, they scored relatively high on personal accomplishment, and relatively low on depersonalization and emotional exhaustion.

This study is one of the few attempts to have students report on perceived symptoms of burnout among their teachers. It shows that there is a striking difference in perception between the students and the teachers with respect to depersonalization, personal accomplishment and the competence to cope with disruptive student behaviour.

The teachers' positive views on their classroom performances was not supported by the opinions of their students. Perhaps teachers could use this information to at least consider self-examination about their relation to the students.

Finally, like Batten (1988), we embrace the idea that pupils and students can help clarify and understand the process of teaching. Educating young people is not a unilateral, but an interactional process involving teachers and students. The participants' views of this process, their interests and worries should be given equal attention in study programs and everyday school-life, for education can only thrive in an environment of mutual respect and interests, in an environment that is not troubled by conflicts or harassment.

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