Students' perceptions of the incidence of burn-out among their teachers

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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.*, 1981; Smith and Bourke, 1992), they continue their work, and, by doing so, harm their own health and the well-being of their clients.

Students need mentally and physically fit grown-ups 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 burn-out 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 try and more accurately predict teacher burn-out. As a complement to teachers' reports on their own health, their students could give valid information about them, thus helping to discover burn-out 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 burn-out

According to the well-known definition of burn-out (Maslach, 1976; Maslach and Jackson, 1981), burned-out people suffer from emotional exhaustion, depersonalisation, and a reduced sense of personal accomplishment. Emotional exhaustion refers to feelings of being emotionally overextended and having depleted one's emotional resources. Depersonalisation 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 his job performance (Schaufeli *et al.*, 1993).

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

Second, some studies view burn-out 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 categorised as the response or physiological model.

Third, the basic principle of some studies is the view that it is the environment that produces stressors responsible for the onset of burn-out. 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 organisational working circumstances (Brenner *et al.*, 1985; Burke and Richardsen, 1996; Van Dierendonck *et al.*, 1998).

Although burn-out symptoms also occur among blue-collar workers, it is the category of human service workers who appear to run the greatest risk of falling victim to the burn-out syndrome (Freudenberger, 1975). Teachers in particular experience many stressful events in their careers (Burke *et al.*, 1996).

It is, however, a serious problem that, so far, teacher burn-out 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 burn-out research lacks a theoretical framework that unifies and guides empirical research on burn-out. To meet one of their most essential objections, we started from the self-efficacy theory when composing the questionnaire on teacher competence in order to measure domain-specific teacher classroom behaviour. In some studies the self-efficacy theory appeared to be a promising conceptual framework for studying teacher burn-out (Brouwers, 2000; Evers *et al.*, 2002).

Guglielmi and Tatrow's (1998) second objection to many burn-out studies is related to how valid data are collected about the phenomenon. Generally speaking, self-report questionnaires and self-reported information to medical doctors and/or psychologists form the quintessential proof that someone suffers from burn-out to a certain degree. Because of the many negative consequences accompanying burn-out, it is a matter of great importance to improve the assessment of its incidence. That is why we adapted self-report questionnaires so as to enable students to score the items.

The Maslach Burnout Inventory (MBI) is more often than not the only instrument used as a questionnaire to assess self-reported teacher burn-out. However, an instrument may be adapted in such a way that it enables the clients to report perceived symptoms of burn-out among their human service workers. In the educational domain, Tatar and Yahav (1999) were the first to apply a shortened version of the MBI as an instrument; they had students

fill in the items on this instrument to report perceived symptoms of burn-out among their teachers.

For all we know, the complete MBI has never been used to assess clients' perceptions of burn-out among their human service workers. However, using a specific instrument to reflect the views of both professional and client is not uncommon. For instance, Hendriks *et al*. (1999) used the Five Factor Personality Inventory as a self-report questionnaire and as a questionnaire to estimate the personality characteristics of others. Furthermore, owing to their intensive daily contact with their teachers, students are in a prime position to assess symptoms of teacher burn-out.

The present study focuses on a relatively unexplored topic, i.e. students' views on teacher burn-out related to their own disruptive behaviour and the teachers' competence to cope with this kind of behaviour. We concentrated on disruptive behaviour for various studies found significant correlations between disruptive student behaviour, teachers' competence to cope with such behaviour, and burn-out among teachers (Blase, 1982; Brouwers and Tomic, 1999; Byrne, 1991). Moreover, in the case at issue, the relationship between teachers and students fits in with the interaction approach to burn-out.

In contrast to the respondents in Tatar and Yahav's study (1999), our students all attended vocational training. We also focused on teachers who work closely (grade teachers, i.e. teachers who are mentor and student adviser of a specific group of students) with their students, so it goes without saying that these 'clients' are good judges of their educators. The literature supports our assumption. Pupils and students have sensible views on their classroom environment (Batten, 1988; Hofstein *et al*., 1980; Levine *et al*., 1996; Raviv *et al*., 1990), on school discipline (Haroun and O'Hanlon, 1997; Scarlett, 1988), and finally on teachers as persons (Tatar, 1998; Jules and Kutnick, 1997).

Aims

The present study examines various issues. First, it examines whether the Maslach Burnout Inventory, the Coping with Disruptive Behaviour Scale (CDBS), and the Perceived Disruptive Behaviour Scale (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 burn-out 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 perceived grade teachers' competence to cope with disruptive student classroom behaviour. Finally, it aims to answer the question whether the students' age and gender are significantly related to (1) the perceived dimensions of burn-out among grade teachers, (2) disruptive student classroom behaviour as perceived by the students, and (3) the perceived grade teachers' competence to cope with disruptive student classroom behaviour.

Method

Participants

We took a random sample consisting of 25 per cent of the classes, i.e. seventeen out of sixty-nine (which number indicates that 411 out of 1,782 students participated in our study) at a Regional Training Centre (RTC) in the south 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 per cent) and 252 male students (61.3 per cent). Their mean age was 18.3 years (SD = 2.43), ranging from sixteen to twenty-three years of age. As the mean age of all students ($n = 1782$) was 18.5 (SD = 2.23), there was no significant difference between our sample and the total school population, t (2.191) = 1.52, $p = 0.13$. The total number of teachers working with them was seventy-three (fifty-eight male and fifteen female teachers).

Instruments

Our respondents were asked to fill in three questionnaires that were all adapted (in part) from existing instruments.

Burn-out. The Dutch version of the Maslach Burnout Inventory for teachers (MBI-NL-Ed, Schaufeli and Van Horn, 1995) was used to measure burn-out. The instrument consists of twenty items, and is divided into three sub-scales: (1) emotional exhaustion (eight items) (2) depersonalisation (five items) and (3) personal accomplishment (seven items). The students could score on a seven-point scale, from 'never' to 'always'. Based on their students' perceptions, teachers will suffer from burn-out when the scores on emotional exhaustion and depersonalisation are high, and when the scores on personal accomplishment are low. The wording of the items has been adapted in such a way 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 he gets up in the morning, facing a new working day again'. Examples of depersonalisation items are: 'My grade teacher has the feeling that he treats some students in an impersonal way' and 'My grade teacher doesn't really care what will become of his students'. Examples of items indicating personal accomplishment are: 'When my grade teacher has finished instruction he looks back on it with satisfaction' and 'My grade teacher has the feeling 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 depersonalisation 0.72.

Teacher competence. The second questionnaire (Coping with Disruptive Behaviour Scale, twelve items) consisted of an adapted version of the Self-efficacy Scale for Classroom Management and Discipline from Emmer and

Hickman (1991). This instrument 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 he is hardly ever interrupted by the students' and 'My grade teacher knows how to restore order when a student disturbs his lesson'. Cronbach's alpha was 0.94 for questionnaire 2.

Disruptive behaviour. The third questionnaire (Perceived Disruptive Behaviour Scale, five items), measuring the perceived occurrence of disruptive student classroom behaviour, consisted of an adapted version of the Order and Organisation sub-scale of the Classroom Environment Scale of 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 questionnaire 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. It was probably the most reliable way to have our instruments reflect the English meaning as accurately as possible.

Results

Table 1 shows the means, the standard deviations and the internal consistency of the three burn-out dimensions of the MBI, the CDBS, and the PDBS. Besides the scores of the total sample, the separate scores of male and female students, eta squared and the correlations between the variables are presented. The results show that the reliability coefficients of our questionnaires range from 0.72 to 94, which is sufficient according to Nunnally and Bernstein's criterion (1994). According to the students' perception, the teachers' mean score on emotional exhaustion is 13.37, on depersonalisation 7.42, and on personal accomplishment 21.86. The standard scores on the MBI-Nl (i.e. the MBI validated for Dutch teachers, Schaufeli *et al.*, 1994) are 16.5, 6.0 and 29.87 respectively.

Because the current study involved more than one test, we adjusted the alpha level downward to consider chance capitalisation (Sankoh *et al.*, 1997; Tabachnik and Fidell, 1996). There is a significant difference between the perceptions of male and female students in respect of emotional exhaustion and depersonalisation among their grade teachers. The mean score of male students on symptoms of emotional exhaustion is significantly higher than the mean score of female students: $t(409) = 2.82$, $p < 0.01$. Male students differ significantly from their female counterparts in reporting a higher mean score on depersonalisation: $t(409) = 4.18$, $p < 0.01$. There are no differences between male and female students in respect of personal accomplishment:

Table I Internal consistencies, means and standard deviations of students' perception of the three burn-out dimensions

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 Depersonalisation	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 Cope with disruptive 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*

* $p < 0.05$. ** $p < 0.01$. *** $p < 0.001$.

t (409) = 1.48, *p* > 0.05. The magnitude of the differences in the mean scores were small. The etas squared are 0.02, 0.04, and 0.01 respectively.

Questionnaire 2 explored students' perceptions of the teachers' competence to cope with disruptive student behaviour, and questionnaire 3 investigated students' perceptions of the occurrence of disruptive student classroom behaviour. According to the students, the teachers' mean score on competence to cope with disruptive student behaviour is 34.44, and on the occurrence of perceived disruptive student behaviour 11.08. There is no significant difference between male and female students in respect of the teachers' coping skills: *t* (409) = 1.92, *p* > 0.05. Finally, the results also show that there is no significant difference between male and female students' scores as far as disruptive student behaviour is concerned: *t* (409) = 1.98, *p* > 0.05. The magnitude of the differences in the mean scores was very small; both etas squared are 0.01.

Table 2 shows students' perceptions of the incidence of perceived burn-out dimensions among their classroom teachers and perceived disruptive behaviour of their fellow students. The separate scores of six student age categories are presented. We omitted the ages twenty-two and twenty-three in the analyses because there were too few students of these ages (two and one respectively). A multivariate analysis of variance was performed in order to assess the effect of age categories on the three perceived burn-out dimensions and perceived disruptive student behaviour. To check for normality, linearity, univariate and multivariate outliers, homogeneity of variance–covariance matrices, and multicollinearity, preliminary assumption testing was conducted. We did not observe serious violations. We obtained a Wilk's lambda value of 0.929, with a significance value of 0.238 suggesting that separate student age categories do not characterise teachers differently in terms of burn-out dimensions and disruptive behaviour.

A hierarchical regression analysis was carried out in order to examine to what extent the teachers' competence to cope with disruptive student behaviour, and perceived disruptive student behaviour, would explain the teachers' burn-out level. In doing so, the variables student gender, teacher gender, and student age were controlled for statistically. With each burn-out 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 – see Table 3 – show that the variable competence to cope with disruptive student behaviour added in step 2 is a significant predictor of the burn-out dimensions emotional exhaustion (β – 0.75, *p* < 0.001), depersonalisation (β – 0.69, *p* < 0.001) and personal accomplishment (β 0.62, *p* < 0.001). Perceived disruptive student behaviour is significantly related to both emotional exhaustion (β 0.13, *p* < 0.05) and depersonalisation (β 0.14, p < 0.05). The total of the variance explained of the predicting variables in steps 1 and 2 was 44 per cent for emotional exhaustion, 40 per cent for depersonalisation and 46 per cent for personal accomplishment.

Table 2 Students' Perceptions of the incidence of burn-out dimensions and disruptive behaviour among their teachers: separate scores of six student age categories

Student age	n	Emotional exhaustion		Deperson-alisation		Personal accomplish-ment		Cope with disruptive behaviour		Perceived disruptive behaviour	
		M	SD	M	SD	M	SD	M	SD	M	SD
16	23	16.2	10.3	9.2	6.1	18.1	6.3	27.5	14.7	9.3	6.6
17	111	13.5	8.8	8.0	5.6	22.3	8.2	35.3	14.7	11.1	6.9
18	126	13.7	8.8	7.4	5.2	22.1	7.9	34.4	14.0	11.4	5.9
19	91	12.3	7.0	6.9	4.9	22.1	8.0	36.0	11.1	11.6	6.1
20	47	12.6	7.5	6.6	4.1	21.7	7.6	33.2	10.8	10.4	5.3
21	10	16.4	9.4	6.3	3.4	19.6	6.9	30.3	14.0	8.4	5.3
Total	411	13.4	8.4	7.4	5.2	21.9	7.9	34.4	13.4	11.1	6.2

Table 3 Results of Regression analysis for the predicting variables on emotional exhaustion, depersonalisation, and personal accomplishment

Predictor variables	Emotional exhaustion				Depersonalisation				Personal accomplishment			
	B	Std error	β	ΔR^2	B	Std error	β	ΔR^2	B	Std error	β	ΔR^2
Step 1				0.02*				0.06***				0.01
Student gender	-1.03	0.66	-0.06		-1.20	0.43	-0.11**		-0.01	0.62	0.00	
Teacher gender	-1.93	0.80	-0.09*		-1.83	0.52	-0.14***		0.92	0.74	0.05	
Student age	-0.15	0.26	-0.02		-0.35	0.17	-0.08*		0.00	0.25	0.00	
Step 2				0.42***				0.34**				0.45***
Cope with disruptive behaviour	-0.47	0.04	-0.75***		-0.27	0.02	-0.69***		0.37	0.03	0.62***	
Perceived student disruptive behaviour	0.18	0.08	0.13*		0.12	0.05	0.14*		0.00	0.07	0.08	
Overall F for equation				62.75***				51.40***				67.98***

* $p < 0.05$. ** $p < 0.01$. *** $p < 0.001$.

We also found that emotional exhaustion is significantly related to teacher gender, but not to the age or gender of the responding students. Furthermore, it is an interesting finding that of all the dependent variables depersonalisation shows the most significant relationship with the independent variables. This dimension of burn-out is, for instance, significantly related to student age.

Discussion

This study is different from many other studies on burn-out because the questionnaires used to provide us with information on a specific group of teachers have been completed by their clients, i.e. the 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 CDBS questionnaire, which complies with the criteria advised in some studies (Brouwers, 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 (the CDBS and PDBS) could be adapted to students reporting perceived burn-out symptoms among their teachers. The reliability of the questionnaires was 0.72 or higher, a noteworthy result. In respect of the data acquired, it can be concluded that students' perceptions of their teachers' well-being and classroom behaviour may be looked upon as a source of valuable information.

Second, we also examined the students' perceptions of the level of burn-out 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 burn-out, our study not only presents the students' perceptions of their grade teachers but is also distinctive in having a large number of respondents reporting about a specific group of teachers working in the same social and organisational setting. The variables that often influence burn-out 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 of the low levels of burn-out symptoms among teachers as perceived by their students in comparison with some other studies that derived their results from self-report questionnaires (Byrne, 1991; Evers *et al.*, 2001, 2002).

According to Scarlett (1988: 174) 'the curriculum can be an important determinant of behaviour'. As our respondents attend practical training programmes, preparing them for specific jobs, they may be (1) extra-motivated during the lessons, which in turn may increase (2) their positive attitude

towards education and teachers, factors that positively influence teachers, as well. The educational setting described above may very well explain the relatively low perceived scores on the various dimensions of burn-out among the grade teachers.

Third, we did not find any significant age-related differences in the respondents' scores. In the literature, results sometimes do show differences between younger (twelve-year-old) and older (nineteen-year-old) pupils in respect of e.g. school discipline (Haroun and O'Hanlon, 1997). The older students in Haroun and Hanlon's study have a more balanced judgement 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 depersonalisation. Male students appeared to more frequently report perceived symptoms of emotional exhaustion and depersonalisation. 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 burn-out 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 personal relationships. Our study, however, shows 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 burn-out (Brouwers and Tomic, 1998, 1999; Burke *et al.*, 1996; Friedman, 1995; Hock, 1988; Lamude *et al.*, 1992). The students' reported perceptions on disruptive classroom behaviour are significantly related to the three dimensions of teacher burn-out. The results also show that grade teachers' competence to cope with disruptive student behaviour is significantly related to each dimension of burn-out. This is quite an interesting finding. According to a recent study of the dimensions of burn-out (Van Dierendonck *et al.*, 2001), 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 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 depersonalisation significantly increased. Teachers in our study frequently meet with disruptive student behaviour, but because of their perceived competence to cope with

it they score relatively high on personal accomplishment, and relatively low on depersonalisation and emotional exhaustion.

This study is one of the few attempts to have students report on perceived symptoms of burn-out among their teachers. It can be concluded that the perceived level of burn-out among the classroom teachers is rather low. This may be so because the student population at this RTC has left the difficult adolescent years behind, and because of the large minority of female students: both factors are known to contribute to positive teacher–student relations (Levine *et al*., 1996). Positive social relations with students are conducive to a positive classroom climate, which appears to be one of the important factors in the prevention of the burn-out dimension emotional exhaustion (Byrne, 1994; Miller, 1999). If students report positively about the grade teachers' behaviour and about favourable and constructive social interactions with them, it may be concluded that at least two prerequisites of teacher well-being have been met. In connection with this, our results confirmed the findings of various authors who found that disruptive student behaviour appears to be a significant contributor to depersonalisation, one of the conspicuous dimensions of teacher burn-out (Brouwers and Tomic, 1998, 1999; Friedman, 1995; Punch and Tuettemann, 1990; Tatar and Yahav, 1999).

Burn-out among teachers cannot be denied, but many of the monographs published on measuring the symptoms and preventing its onset lack a firm theoretical basis. With the help of a comprehensive theory such as the self-efficacy theory, burn-out researchers would not have to reinvent the theoretical wheel once again; instead they could depart from a common starting point in their investigations. Furthermore, support should be found for a multifaceted method of measuring burn-out symptoms among teachers. According to Farber (2000) there are at least three types of teacher burn-out, so it would be advisable to measure burn-out among homogeneous groups of teachers working at e.g. one institution or in one subject. The suggestions made above will make it easier for physicians and psychologists to decide which kind of burn-out a teacher is suffering from, and which specific measures can be taken to prevent the onset, development, or aggravation of burn-out symptoms.

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 programmes and everyday school life, for education can thrive only in an environment of mutual respect and interests, in an environment that is not troubled by conflicts or harassment.

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