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# Promoting Work Well-being:

Professional Burnout & Occupational Stress

Edited by: Alexander-Stamatios Antoniou

VOLUME C



New research accomplishments and clinical experience has expanded the field of medical knowledge and represent an ongoing process. With this in mind, it is imperative that we make the appropriate changes as far as it concerns the course of action, in the treatment of our patients.

The content of this textbook reflects all the most recent knowledge and internationally accepted techniques as they are analyzed by experienced authors in the field, in each chapter.

Nevertheless, the authors and the editor acknowledge that every medical opinion is under the limitations of the time frame that this book was created, as well as possible mistakes that might have escaped their attention.

Readers of this textbook are encouraged to keep that in mind, while at the same time we hope that the information included will become a starting point for young colleagues or the more experienced ones, for new research projects, clinical trials or maybe an updated version of the book in the near future.

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### Promoting Work Well-being: Professional Burnout & Occupational Stress

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# Levels of occupational stressors and professional burnout experienced by greek teachers of special educational needs

Chapter

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#### Literature

According to the international literature, it has been established that teachers serve one of the most stressful professions. Cooper (1988), in his classification of several occupations in terms of the degree of stress that they cause on the employees, he indicated that, as far as the occupations of social welfare are concerned, teachers experience the highest levels of stress (in second place came the job of the social worker). The international concern with teacher stress and burnout stems from the mounting evidence that prolonged occupational stress can lead to both mental and physical ill-health and also a concern that this problem will impair the quality of teaching. Although much teacher stress research has been carried out since the late 70s, studies of stress in teachers of children with special educational needs occupy no prominent status in the general teacher stress literature.

According to the definition by Kyriacou (1978), stress is conceptualised as a response syndrome of negative affect that is developed when there are prolonged and increased pressures that cannot be controlled by the coping strategies that the individuals have. A classic model of stress and burnout of teachers that has been proposed by Kyriacou and Suttcliffe (1978), describes that stress results from the teachers' perception that a) demands were being forced upon them b) they are unable to or have difficulty in meeting these demands and c) failure to do so threatens their mental and or physical well being. The key element is the teachers' perception of threat (either this is self-imposed or imposed by others). Teacher burnout may be

defined as a syndrome resulting from prolonged teacher stress, characterised by physical, emotional and attitudinal exhaustion (Kyriacou, 1987).

High levels of occupational stress often lead to job dissatisfaction, absenteeism and work turnover. Response correlates of teacher stress may be psychological (anxiety, depression), physiological (headaches, tachycardia, hypertension, increased blood pressure) and/or behavioural (alcohol consumption, smoking, lifestyle, sleeping problems). The sources of stress most likely to be linked with those responses are poor career structure and low wages. In other words, the conditions of work rather than the experience of teaching seem to provide the stress factors which most strongly contribute to job dissatisfaction and intention to leave teaching (Kyriacou & Sutcliffe, 1979).

A vast number of studies exist in the relevant literature identifying the main job stressors facing teachers. The bulk of evidence points to specific factors that are responsible for high levels of psychological pressure for teachers, such as: high ratio between teacher-pupils, limited progress of pupils, heavy workload, role overload and role conflict, relationships with colleagues/poor working environment, insufficient salary, status, time/resource difficulties, professional recognition needs (Borg et al. 1991; Guglielmi & Tatrow, 1998; Kyriacou, 1987; Kyriacou & Sutcliffe, 1979; Laughlin, 1984; Manthei & Solman, 1988; Travers & Cooper, 1996).

There is also a number of studies (though fewer in number) focusing on specialist samples of teachers such as teachers in special schools, teachers of primary or secondary schools (Chaplain, 1995; Manthei & Solman, 1996), newly qualified teachers, heads of department or headteachers (Cooper & Kelly, 1993; Friedman, 1995). Children with special educational needs have been recognised as creating additional pressures for teachers (Galloway, 1985; Upton & Varma, 1996). The stressful effects of teaching pupils with various different special needs have been examined including the hearing impaired (Fraser, 1996; Luckner, 1989), children with severe difficulties (Sutton & Huberty, 1984; Ware, 1996) and reading difficulties (Carlile, 1985). Concerning the Special Educational Needs (SEN) teachers, the additional sources of stress refer to the individual learning, emotional and other needs of the children that may be accompanied from mental, physical and/or sensory impairments. In particular, research showed that work related variables were better predictors of commitment and job satisfaction (variables associated with retention). Examples include excessive paperwork requirements, increasing caseloads, low salaries, lack of administrative support, challenging student behaviours and lack of visible student progress (Cooley & Yovanoff, 1996).

Teachers' stress and especially the SEN teachers' stress is likely to include medium or low levels of job satisfaction and high levels of turnover. Three measures have been widely employed as response correlates or indices of occupational stress generally:

job satisfaction, absenteism and intention to leave (Kyriacou & Sutcliffe, 1979). In a study carried out in 1996, it has been found that 80% of the headteachers of special schools of the sample, believed that the teaching profession was a very stressful occupation and more than 50% of the sample did not plan to continue this occupation in the future (Male & May, 1997). American studies have demonstrated the critical staff shortages in special education, due to declining enrollments in special education teacher preparation programmes in effect reducing the available supply of new teachers (Cooley & Yovanoff, 1996). On the other hand, the growing demand for special educators owing to the increasing population of children who require special educational needs services, contributes to the problem of the short supply.

Relevant research evidence derived from studies conducted in mainstream schools (primary and secondary) showed that for secondary school teachers the negative feelings, the area of school, the teachers' goals (occupational and financial) and the gender (women appeared more vulnerable than men) seemed to be associated with increased stress levels and psychosomatic symptoms (Papastylianou, 1998). Mainstream primary and secondary school teachers' burnout were compared with that of other professional groups (nurses, doctors, social workers, ergotherapists). According to the findings, secondary school teachers demonstrated quite high levels of emotional exhaustion but low levels of depersonalisation and high levels of personal accomplishment. In general, the author concluded the burnout ratings were lower than those reported in the US norms. Moreover, primary school teachers were a group with the lowest levels of professional burnout mainly due to the less demanding work at hand and the long holiday periods (Kantas, 1996). Regarding the special education sector, there is a lack of empirical studies carried out in Greece.

The aim of the study was to investigate the specific sources of stress experienced by Greek SEN teachers, the degree of professional burnout and the effects of variables such as gender, age, marital status and teaching experience on their burnout levels. The present study had the form of a pilot study which was the first stage of a large scale project with similar aims that was addressed to a representative sample of SEN across Greece.

# Method

# Sample

The sample was composed of 110 special teachers who worked in special classes and special schools in the area of Athens. 60.7% were males and 39.3% females. 50.5% of the sample were aged from 31 to 40 years, 19,8% ranged from 41 to 50

and 20.7% were over 50 years of age. In terms of marital status, the majority of teachers were married (83.9%) and had on average 18.4 years in teaching. 53.6% of the teachers were teaching more than 21 hours per week and the majority (66.7%) devoted 0-5 hours per week for preparation.

The breakdown of the sample can be found in Table 4.1.

#### Measures

#### Outcome variables

Occupational stressors: Pilot interviews were carried out among a small group of Greek SEN teachers, to generate items for a specific scale assessing the sources of stress particularly among SEN teachers, to be distributed to the above sample. The final scale consisted of 22 items which were accompanied by six-point Likert-type self-report rating scales ranging from "no stress at all" to "extreme stress" (1 to 6).

Professional Burnout: Burnout was assessed by the Maslach Burnout Inventory (version for teachers) developed by Maslach and Jackson (1981). This widely used scale consists of 22 statements that assess the three facets of professional burnout, as defined by the researchers: emotional exhaustion, depersonalisation and lack of personal accomplishment. The respondents identify how often they feel professional

Variable	Demographic Categories	N	%
Gender	Males	68	60.7%
	Females	42	39.3%
Age Groups	Up to 30 years	10	9%
	31 - 40 years	55	50.5%
	41 - 50 years	22	19.8%
	over 51	23	20.7%
Marital Status	Married	92	83.9%
	Single	18	16.1%
Teaching Experience	1 - 10 years	13	11.6%
	11 - 20 years	60	54.5%
	21 - 30 years	25	22.3%
	over 30	12	11.6%
Teaching Hours per week	1 - 10 hours	42	38.4%
	11 - 20 hours	14	13.0%
Personal Company of the Company of t	over 21 hours	36	32.6%
Preparation time per week	0 - 5 hours	73	66.7%
	6 - 10 hours	28	25.9%
	over 11	8	7.4%

burnout at a six-point Likert-type rating scale ranging from "never" (0) to "every day" (6). This scale has been employed in a considerable number of Greek and international studies that have investigated the professional burnout of a substantial number of occupations, such as civil servants, doctors and teachers in special and mainstream schools (Kantas, 1996).

# Predictor variables

Personal and job demographics: SEN teachers were asked to fill in a detailed biographical questionnaire with information on gender, age, teaching experience, number of pupils in the classroom, hours for preparation and marking, thoughts of leaving the job, as well as recent changes in their smoking and drinking habits.

#### Results

# Sources of stress

Analysis showed that the SEN teachers of the sample presented high levels of stress, since they selected from 3 and above (3=moderate stress, 4=high levels of stress) at the 6-point scale of the questionnaire in the majority of the statements.

Table 4.2 (see Appendix) illustrates that the most important sources of stress refer to the little progress and the lack of interest from the part of the pupils. This may be expected since the teachers are responsible of children who have limited ability in comprehending the curriculum as well as other learning difficulties. Moreover, the progress of pupils is characterised by very small steps and regression to previous cognitive stages is often the case. Next in frequency was high workload. SEN teachers'

Table 4.2	The most important sources of stress (N=110)			
Rank Order	Sources of Stress	Mean	SD	
1	Lack of pupils' progress	3.59	1.34	
2	Limited pupils' interest	3.43	1.24	
3	Heavy workload	3.40	1.02	
4	Lack of help from the government	3.37	1.37	
5	Significant lack of resources & equipment	3.32	1.67	
6	Increased number of pupils	3.30	1.58	
7	Lack of support staff	3.29	1.40	
8	Facing "difficult" pupils	3.28	1.25	
9	Special attention to individual pupils	3.19	1.40	
10	Lack of cooperation with colleagues	3.12	1.35	

schedule can be very demanding especially when dealing with children with difficulties. Moreover, their job is full with minor jobs, such as spending time in paperwork and bureaucratic procedures. The fourth source is inadequate support from the government which is directly linked to the lack of resources and equipment as well as the large number of pupils in the class and the lack of support staff. Problems in relationships and collaboration with colleagues consist an additional source of stress for the SEN teachers.

Tables 4.3 and 4.4 present a break down of the descriptive results by gender. No statistically significant differences were detected regarding the sources of stress for males and females, but in general the means of males were lower than those of females. For male teachers the most important job stressors were associated with the pupils' progress and interest whilst for the women it was the problem pupils along with the problems with the resources.

As regards the effect that the biographical variables had on the stress levels of the teachers, statistical analysis showed that the older SEN teachers (over 41 years) presented statistically significant higher levels of stress in terms of "minor jobs unrelated with their job description"  $[F(3,107)=2.924,\ p<.05]$  "the lack of resources"  $[F(3,106)=4.494,\ p<.005]$  and "the integration of children with special needs in mainstream schools"  $[F(4,110)=3.104,\ p<.05]$ . In general, married teachers presented higher levels of stress but no statistically significant differences were observed apart from "the high number of pupils in class"  $[F(2,110)=.792,\ p<.05]$ . Finally, no significant differences were found in terms of "the teaching experience", that is teachers with fewer years in the profession did not report more stress.

Table 4.3	The most important sources of stress - male SEN teachers (N=68)		
Rank Order	Sources of Stress	Mean	SD
1	Lack of pupils' progress	3.65	1.30
2	Limited pupils' interest	3.43	1.03
3	Heavy workload	3,41	1.01
4	Special attention to individual pupils	3.23	1.30
5	Continuous responsibility for pupils	3.22	1.40
5	Increased number of pupils	3.22	1.56
6	Going with the curriculuma	3,19	1.41
7	Lack of help from the government	3.18	1.49
8	Significant lack of resources & equipment	3.15	1.74
9	Minor jobs unrelated with job description	3.12	1.19
10	Lack of cooperation with colleagues	3.07	1.33

Table 4.4	The most important sources of stress - female SEN teachers (N=42)			
Rank Order	Sources of Stress	Mean	SD	
1	Facing "difficult" pupils	3.67	1.10	
2	Significant lack of resources & equipment	3.60	1.55	
3	Lack of support staff	3.55	1.47	
3	Lack of pupils' progress	3.55	1.42	
4	Limited pupils' interest	3.50	1.52	
5	Increased number of pupils	3.48	1.63	
6	Lack of cooperation with colleagues	3.43	1.50	
7	Continuous responsibility for pupils	3.40	1.43	
8	Heavy workload	3.38	1.06	
9	Few opportunities for promotion	3.37	1.48	
10	Special attention to individual pupils	3.35	1.19	

#### Professional burnout

The professional burnout of the sample is presented in Table 4.5 through its three components. The emotional exhaustion (EE) refers to the reduction of the emotions of the individual so that they cannot emotionally offer to the people who receive their services. Depersonalisation (DP) refers to the negative and sometimes cynical attitude with the receivers of their services. Lack of personal accomplishment (PA) means the tendency of the individual to evaluate negatively himself, especially in terms of his work and the receivers of his services and also a general feeling of sadness and disappointment in terms of the effect of his work (Kantas, 1995).

As far as the relationship of the professional burnout with the independent variables is concerned, according to the findings (Table 4.6), men presented statistically significant higher levels of EE than women although there weren't any significant differences in the other components.

Moreover, statistically significant differences were found between the three age groups. According to Figure 1, as age increases the feeling of personal accomplishment decreases [F(4, 110) = 2.465, p < .05].

Table 4.5 Mean scores, standard deviations and burnout ratings			
Subscale	Mean	SD	Stress rating
Emotional Exhaustion	26.67	9.42	high
Depersonalisation	10.84	7.62	average
Low Personal Accomplishment	39.3 <sup>-</sup>	6.87	low

Subscale	Males M(SD)	Females M(SD)	F	Sig.
Emotional Exhaustion	28.08(9.78)	24.29(8.57)	4.53	p<.05
Depersonalisation	11.12(7.41)	10.20(7.9)	.23	NS
Low Personal Accomplishment	40.13(6.54)	38.27(7.28)	1.33	NS

In terms of marital status, married teachers had significantly lower mean scores in the scale of personal accomplishment  $[F(3,110)=4.231,\ p<.01)$ . Finally, statistically significant differences were detected in relation to the years of teaching. As years of teaching experience increased, the levels of EE increased  $[F(3,110)=2.999,\ p<.05]$  and the PA decreased  $[F(3,110)=3.447,\ p<.05]$  (Figure 2, Figure 3).

The levels of professional burnout of Greek SEN teachers are compared with international studies and the results are illustrated in Table 4.7. According to the comparisons of the means of the MBI scale, the norms and the results of a recent British study, it is demonstrated that a) the EE of Greek SEN teachers was high similar to the British study, b) the degree of depersonalisation was moderate, similar to the

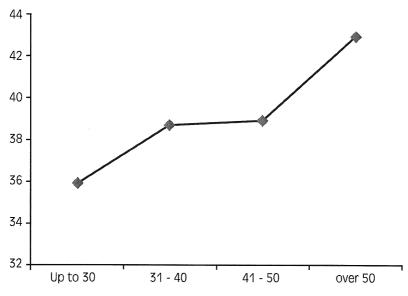


Figure 4.1 Lack of Personal Accomplishment in terms of age.

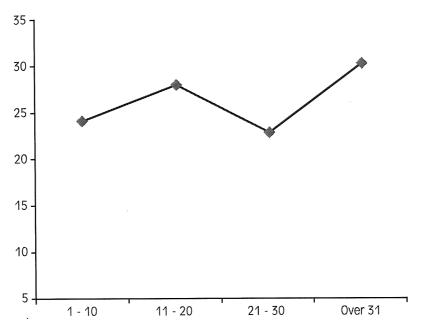


Figure 4.2 Emotional Exhaustion in terms of teaching experience.

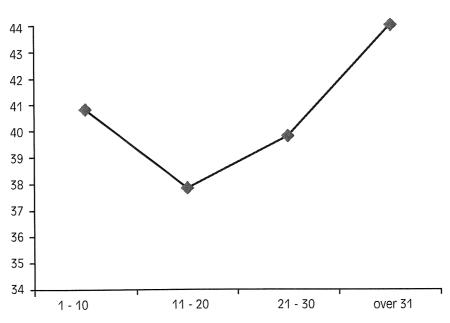


Figure 4.3 Lack of Personal Accomplishment and years of teaching experience.

	Antoniou & Polychroni (1999)	Norms MBI (1986)	Male & May (1997) (MLD)
	N = 112	N = 4,163	N = 40
Emotional Exhaustion	26.7 (high)	21.2 (moderate)	29.50 (high)
Depersona-lisation	10.8 (moderate)	11.0 (moderate)	6.30 (low)
Lack of Personal Accompli-shment	39.3 (low)	33.5 (moderate)	27.96 (high)

norms but higher than the levels of the British teachers and c) the lack of personal accomplishment of the Greek SEN teachers was lower than both than the norms and the British study.

# Predictors of professional burnout

To investigate which of the independent variables best predicted the levels of professional burnout, stepwise multiple regression analysis was performed using the biographical data (gender, teaching experience, marital status, intention to leave e.t.c.) and the sources of stress as independent variables and the three types of professional burnout as dependent variables.

#### Emotional Exhaustion

Four factors best predicted EE for the whole sample of Greek SEN teachers.

The analysis showed that issues such as the effect that the SEN teacher occupation had on their personal life, appraisal matters, integration of pupils with special

**Table 4.8** Multiple regression analysis of demographic factors and job stressors against emotional exhaustion

#### Prediction of Emotional Exhaustion

- 1. Effect on personal life
- 2. Assessment from headteachers
- 3. Integration
- 4. Continuous responsibility for pupils

R2 = .315

Total F (1, 105) = 11.631, p < .01

needs in the mainstream schools and the continuous responsibility for pupils are all positively related with high levels of EE. These variables predicted 31.5 of the total variance in this DV.

# Personal Accomplishment

As far as PA is concerned (Table 4.9), the first in order of significance predictor was the respect that the SEN teacher received in society for his work. In other words, when teachers felt that their job was recognised from the society, they felt accomplished in their work. Being responsible for the children was secondly important for the feeling of accomplishment in their work.

A similar pattern emerged for the prediction of depersonalisation. It seems that the place that the teaching profession holds in society and the esteem that teachers enjoy are significantly related to low levels of depersonalisation.

## Discussion

The present study aimed to provide quantitative data relating to sources of stress and burnout in teachers of children with special educational needs. This research demonstrated that the Greek SEN teachers experienced moderate to high levels of stress. The most important stressors referred to the difficulties of teaching pupils with impairments due to limited progress, and low interest in the curriculum. In terms of their professional burnout, Greek SEN teachers had low levels of personal accomplishment, moderate to high emotional exhaustion and moderate levels of depersonalisation. Whilst generalised claims for stress and burnout may not be unequivocally justified in this research, there is nevertheless evidence for high levels.

There are a number of observations that can be made based on the findings of

**Table 4.9** Multiple regression analysis of demographic factors and job stressors against Personal Accomplishment

Prediction of Personal Accomplishment

- 1. Respect from society
- 2. Responsibility for pupils
- 3. Hours for preparation
- 4. Marital status

R2 = .256

Total F (4, 101) = 8.356, p < .01

**Table 4.10** Multiple regression analysis of demographic factors and job stressors against Depersonalisation

Prediction of depersonalisation

- 1. Respect from society
- 2. Lack of resources
- 3. Assessment by superiors
- 4. Insufficient time for pupils
- 5. Responsibility for students

R2 = .54

Total F (5, 105) = 23.78, p < .01

this research. In accordance to the research hypothesis, the levels of stress appeared increased for the sample of SEN teachers. Firstly, there appear to be three main categories of job stressors, "handling the difficult children", "work overload/lack of time" and "lack of support from government". As regards to the first stressor, children with difficulties sometimes exhibit a variety of behaviours which are likely to produce negative effects among their carers and teachers. The frustration that the teachers feel when they are not able to make a tangible impact on the situation of these children may lead to low self-esteem and eventually to burnout.

Other problems can include challenging and difficult behaviour, and fewer opportunities for stimulation and feedback to the teachers because of the reduced intellectual challenges provided by the curriculum. Workload (measured in the demographic fctors by hours teaching per week), may be judged to be high for the sample, when 32 percent indicated that they spent over 21 hours per week for teaching and an extra 16 hours per week preparing, marking and formal and informal assessing.

The third stressor was lack of support from the government. Resources in schools are often meagre or non-existent (library resourced with current literature for both staf and pupils, specific equipment used for different disabilities, resource bank etc). Moreover, the need for support staff in the classroom to facilitate the workload of the teacher is paramount, given the great deal of effort in terms of organisation, curriculum planning and methods of teaching required by them. No differences were reported in terms of levels of stress between men and women.

Burnout is related to a number of maladaptive coping mechanisms such as aloofness, feelings of weariness expressed by willingness to disengage and reduce the intensity of contact the individual has with the recipients of his/her services, self-dissatisfaction, discontent (Friedman, 1995). Emotional exhaustion is a key aspect of the burnout syndrome and individuals experiencing a high level of it consider that they are

no longer able to give themselves at a psychological level. The indication is that the teachers of this sample are emotionally exhausted and overextended by their work.

Other studies have shown that these characteristics are higher when compared to teachers of ordinary schools mainly due to the complex needs of children in special settings (Cohen, 1995). Females reported significantly higher levels of emotional exhaustion. However, due to the smaller number of female teachers in the study and the fact that other studies have not shown consistent differences in gender related to stress (Kyriacou, 1987), this finding should be regarded with caution.

The second component of burnout, depersonalisation, can lead teachers to adopt negative and cynical attitudes towards their pupils and to view them as "deserving" of their problems. In our study, teachers have moderate depersonalisation, similar to one British study with SEN teachers but higher that the norms. In terms of feelings of reduced personal acomplishment, according to Maslach and Jackson's definition (1986) this suggests possible feelings of unhappiness and a tendency to evaluate oneself negatively, particularly with regard to one's work. According to the results of our study, it appeared that — despite the high levels of stress — the Greek SEN teachers seemed not to have lost their sense of self-efficacy, competence and achievement.

The third main observation from this research is the importance of the factors predicting professional burnout for Greek SEN teachers. It is worth noting that the Greek sample directly linked the respect their profession enjoyed by society with feelings of depersonalisation and personal accomplishment. Teaching in general and teaching children with difficulties in particular are not regarded as professions holding a high social status in society as compared with other occupations. This may lead to frustration and feelings of low self-worth, and low morale. That may be reflected in a reluctance to work and inability to be related to the receivers of their services (i.e. children).

As far as emotional exhaustion is concerned this is predicted by the interference of the job on the individual's life. This is expected, especially to the nature of teaching children with difficulties. For some teachers, adjusting to working with pupils who have complex disabilities, affects their emotional adjustment. Those who have social support available (listening, professional support, emotional support) are less likely to experience burnout.

Changes in educational legislation in Greece which have affected teachers of children with special educational needs have been profound during the past fifteen years. Since 1985, when the law for the equal needs of children with special educational needs was passed, there has been a consistent effort to include children and ca-

ter for their needs alongside other children. For this reason the practice of special classes, which is in fact a method of withdrawal, was introduced and the number has expanded to more than 700 today across Greece.

In addition, integration of children with difficulties into the mainstream classroom is still implemented. These developents have to be viewed in a wider context of change for SEN teachers who often find that they have not had any specific training for this challenging role, given the wide-ranging functions that they are expected to fulfill. Added to this is the critical nature to many of these functions (e.g. working with parents, colaborating with mainstream teachers) which can explain the feelings of stress and burnout that the SEN teachers feel in their careers and the complaints that they express in terms of the insufficient help from the government.

In the stress literature as a whole, the importance of individual variables is stressed, acting as mediators in the relationship between stress and illness. Personality traits, demographic characteristics, the ability to establish and maintain suportive social networks, and the ability to cope have all been recognised as key mediators moderators of the stressor's impact on the individual.

The importance of this study lies in its contribution to the understanding of occupational stress and professional burnout in SEN teachers. Naturally, additional studies involving more items expressing the specific sources of stress and other methods of data collection such as personal interviews with the teachers and observations of the SEN teachers in their work settings are desirable to further establish the concepts of stress and burnout in special education teaching. It is envisaged that the second stage of this research investigating the coping mechanisms that the teachers employ in order to deal with stress and burnout currently under way, will help to this end. The identification of these factors which lead to stress will help to form suggestions and propositions for the most effective stress intervention. It is believed that the results of this pilot study will be the first stage of a more systematic investigation of this significant problem.

#### References

- Borg, M., Riding, R., & Falzon, J. (1991). Stress in teaching: a study of occupational stress and its determinants, job satisfaction and career commitment among primary schoolteachers. *Educational Psychology*, 11, 59-75.
- Carlile, C. (1985). Reading teacher burnout: the supervisor can help. *Journal of Reading*, 28, 590-593.
- Chaplain, R. (1995). Stress and job satisfaction: a study of English primary school teachers. *Educational Psychology*, *15*(4), 473-489.
- Cooley, E., & Yovanoff, P. (1996). Supporting professional-at-risk: evaluating interventions to reduce burnout and improve retention of special educators. *Exceptional Children*, 62(4), 336-355.

- cooper, C., & Kelly, M. (1993). Occupational stress in head teachers: a antional UK study. *British Journal of Educational Psychology*, 63, 130-143.
- Daniels, H., & Norwich, B. (1997). Supporting teachers of children with special needs in ordinary schools. In G. Upton, & V. Varma (Eds.), *Stresses in Special Educational Needs Teachers*. England: Arena.
- Dewe, P. J. (1986). An investigation into the cause and consequences of tecaher stress. New Zealand Journal of Educational Studies, 21(2), 145-157.
- Eloff, I., Engelbrecht, P., & Swart, E. (2000, July). Stress areas and coping skills of South African teachers in the implementation of inclusive education. Paper presented at ISEC, Manchester, UK.
- Fraser, B. (1996). Hearing Impairment. In G. Upton & V. Varma. *Stresses in special educational needs teachers*. England: Arena.
- Friedman, I. (1995). School principal burnout: the concept and its components. *Journal of Organisational Behavior*, 16, 191-198.
- Galloway, D. (1985). Schools, pupils and special educational needs. Beckenham: Croom Helm.
- Gold, Y., & Roth, R. (1993). *Teachers managing stress and preventing burnout: the professional health solution*. London: The Falmer Press.
- Guglielmi, R., & Tatrow, K. (1998). Occupational stress, burnout, and health in teachers: a methodological and theoretical analysis. *Review of educational Research*, 68(1), 61-99.
- Kantas, A. (1996) The occupational burnout syndrome of teachers and health profession employees. *Psychology* (Psichologia in Greek), 3(3), 71-85.
- Kyriacou, C. (1987). Teacher stress and burnout: an international review. *Educational Research*, 29(2), 146-152.
- Kyriacou, C., & Sutcliffe, J. (1979). Teacher stress and satisfaction. *Educational Research*, 21(2), 89-96
- Kyriacou, C., & Suttcliffe, J. (1978). A model of teacher stress. Educational Studies, 4, 1-6.
- Luckner, J. (1989). Suggestions for dealing with stress. *Perspectives of the Hearing Impaired*, 7, 20-22.
- Male, D. B., & May, D. (1997). Stress, burnout and Workload in teachers of children with Special Educational Needs. *British Journal of Special Education*, 24(3), 133-140.
- Manthei, R., & Solman, R. (1988). Teacher stress and negative outcomes in Canterbury State Schools. *New Zealand Journal of Educational Studies*, 23, 145-163.
- Manthei, R., Gilmore, A., Tuck, B., & Adair, V. (1996). Teacher stress in intermediate schools. *Educational Research*, 38(1), 3-19.
- Papastylianou, D. (1997). The stress of teachers of comprehensive schools. In F. Anagnostopoulos, A. Kosmogianni & V. Messini. *Contemporary Psychology* (in Greek). Greece: Ellinika Grammata.
- Singh, K., & Billingsley, B. (1996). Intent to stay in teaching: teachers of students with emotional disorders versus other special educators. *Remedial and Special Education*, 17(1), 37-47.
- Sutton, G., & Huberty, T. (1984). An evaluation of teacher stress and satisfaction. *Education, 105,* 189-192.
- Travers, C., & Cooper, C. (1996). *Teachers under pressure: stress in the teaching profession*. London: Routledge.
- Ware, J. (1996). Multiple disabilities. In G. Upton & V. Varma. *Stresses in special educational needs teachers*. England: Arena.