

The Role of Classroom Management Efficacy in Predicting Teacher Burnout

Yalçın Özdemir

Abstract—The purpose of this study was to examine to what extent classroom management efficacy, marital status, gender, and teaching experience predict burnout among primary school teachers. Participants of this study were 523 (345 female, 178 male) teachers who completed inventories. The results of multiple regression analysis indicated that three dimensions of teacher burnout (Emotional Exhaustion, Depersonalization, Personal Accomplishment) were affected differently from four predictor variables. Findings indicated that for the emotional exhaustion, classroom management efficacy, marital status and teaching experience; for depersonalization dimension, classroom management efficacy and marital status and finally for the personal accomplishment dimension, classroom management efficacy, gender, and teaching experience were significant predictors.

Keywords—Classroom management efficacy, teacher burnout.

I. INTRODUCTION

THE concept of burnout that was emerged in the early 1970's has been defined in various ways. For example, Gold and Bachelor [1] defined burnout as "a function of the many stresses felt by individuals in both their social life and their work experiences" (p.546). Edelwich and Brodsky [2] defined burnout as a progressive loss of idealism, energy, purpose and concern as a result of work. Burnout has also been defined as "a syndrome of emotional exhaustion, depersonalization, and reduced accomplishment which is a special risk for individuals who work with other people in some capacity" [3] p.347. When teachers are concerned burnout was experienced as feelings of powerlessness in attempt to educate students and make school pleasant for students, lack of enthusiasm to prepare lessons, difficulty in motivating themselves to come to work, loss of energy, loss of memory and lack of interest in the subject [4].

Teachers compared to other professionals, such as mental and physical health professionals, appear to be at high risk of burnout. Support for this assumption comes from the research studies. A study carried out in Europe for example, indicated that 60- 70 % of the teachers are under frequent stress and approximately 30 % of the teachers have symptoms of burnout [5].

Research findings indicated that burnout has negative impact on physical as well as psychological health. For

instance, Archibault, Azouz, Colf, Julian, Latham and White [6] found significant correlations between levels of emotional exhaustion, personal accomplishment, and symptoms of stress-related illness. As well as its damaging effects on the physical and emotional functioning, teacher burnout also affects teaching [7], commitment to teaching profession [8] and leads to negative interpretation of student behavior [9].

A. Causes of Teacher Burnout

Several personal and situational variables have been regarded as potential critical factors in burnout. Personal factors include: demographic characteristics, psychological traits, and motivational factors [10].

With respect to demographic characteristics, research findings indicated that younger teachers report higher levels of burnout than do older teachers [11]. Similarly, burnout is found to be less likely for teachers with very little and quite extensive (more than twenty four years) experience [12] and teachers at risk for burnout were those at a certain age level (33-44) [8]. Furthermore, there are some studies indicating depersonalization does not differ as a function of teaching experience [1]. Regarding gender male teachers found to be more burned out than female teachers [12]- [13] and also had higher scores than women on emotional exhaustion and depersonalization dimensions of burnout [14] - [15] - [16] - [11] - [17] - [18]. However, several researchers did not find significant relationship between gender and three measures of burnout [19] - [1]. With respect to marriage, married people found to have lower emotional exhaustion and depersonalization scores than single or divorced people [18] - [20]. But there are some studies [1] - [8] reporting no statistically significant relationship between burnout and marital status of teachers. Because research findings related to demographic characteristics have been inconsistent these demographic factors were included in this study.

In terms of general personality factors, burnout is less likely with teachers who are achievement oriented, avoid extremes of competitiveness [12], have internal locus of control [21] - [12], strong purpose in their professional and personal lives [22] - [12], have sense of humor, and hardiness [23] - [12] - [24], have high self-esteem [25], high self-confidence [26], professional self-efficacy and positive self concept [27] - [12] - [17].

Apart from individual factors several situational factors that influence burnout have also been found. Situational factors

Y. Özdemir is Ph.D. student in the Educational Psychology Department, University of Ankara, Ankara, Turkey (e-mail: yalcinozd@yahoo.com).

that are found to be most strongly correlated with teacher burnout are student misbehaviors [15], tensions within the school, lack of recognition and support for work [24], and lack of material resources for accomplishing one's job, role conflicts (being caught between contradictory expectations), overburdening of roles [24] - [26], and nonparticipation [23].

As several authors indicated [28] - [15], overall classroom climate and student discipline problems were cited as among the most powerful factors that contribute to teacher burnout. Because, as the quality of the classroom climate gets worse, teachers can become emotionally exhausted, develop negative attitudes toward their students and their job, and accomplish few educational goals for their students. Therefore, Leiter [29] underlined the necessity of investigating how teachers perceive themselves in the area of classroom management and noted that Bandura's self-efficacy theory is a useful framework for understanding burnout in educational settings. Similarly other researchers [30]- [31] explained the role of self-efficacy in burnout.

B. Self – Efficacy and Teacher Burnout

Self-efficacy is defined by Bandura [32] "as a cognitive process in which one construct beliefs regarding one's abilities to organize and execute courses of action required to produce given accomplishment". Bandura [32] proposed that individuals who perceive themselves as capable tend to attempt and successfully execute tasks or activities. Bandura [32] stated that people with high efficacy beliefs persisted with the task in the face of difficulty and achieved higher results with lower levels of stress. Self-efficacy makes a difference in how people feel that is a low sense of self-efficacy is associated with depression, anxiety, and helplessness.

The relationship between teacher efficacy beliefs and teacher burnout has been indicated by several researchers. For example, Schmitz and Schwarzer [33] found negative relationship between self-efficacy and burnout. Chwalisz, Altmair, and Russel [34] indicated that teachers who score low in self-efficacy reported a higher degree of burnout than their counterparts who score high in self-efficacy. Evers, Brouwers & Tomic [31] found self-efficacy beliefs of teachers were significantly and negatively related to the depersonalization and emotional exhaustion dimensions of burnout, and significantly positively related to the personal accomplishment dimension of burnout.

C. Classroom Management Efficacy and Teacher Burnout

Teachers' sense of efficacy also appears to be related to the teachers' classroom management and instructional strategies [35]. Henson [36] examined the relationships between teacher efficacy and classroom beliefs about control. Results indicated that more efficacious teachers use positive strategies for classroom management.

Emmer and Hickman [37] proposed that rather than regarding teachers as high or low in overall teaching efficacy,

it may be more valuable to examine their efficacy in critical sub areas such as classroom management. Recent research about perceived self-efficacy in classroom management also indicated a relationship between classroom management efficacy and three dimensions of burnout and supported the earlier studies thorough revealing that teachers who consider themselves less competent in classroom management report high levels of burnout [38].

D. Background of Teacher Burnout in Turkey

In 2006–2007 education year total numbers of teachers (preschool, kindergarten, elementary school, middle school, secondary school, and special education teachers) were 679,880 in Turkey [39]. Because of employment problems most of these teachers continuing teaching until retirement although they experience some problems. For example, results of some studies emphasized that Turkish teachers' mental health are getting worse, and these teacher carry their problems into their works [40] - [41]. As a result of another study 65 % Turkish teachers think that teaching profession has low societal recognition and three-quarters of teachers (75 percent) were not happy with the educational system [42]. It could be concluded that the teachers in Turkey have occupational problems and it should not be neglected.

Kyriacou [43] stated poor pupil motivation in school performance, undisciplined behaviour of pupils, poor career opportunities; low income and shortage of teaching equipment, poor facilities and large classes; time pressures and short deadlines; low societal recognition of profession; conflicts with colleagues and supervisors; rapid changes in curricular demands and adaptation of scholastic programs to changes in a rapidly changing society as the main sources of stress for teachers. All of these are important stress factors also affecting Turkish teachers. It is no wonder many experience a form of burnout at some point in their careers. For example, Cemaloğlu and Şahin [44] showed that crowded classrooms, not appreciated by superiors and decreased moral satisfaction affect burnout levels of Turkish Teachers negatively. Because teachers who exhibit characteristics of being burned out are not effective in the classroom it is vital to search causes of burnout among Turkish teachers.

In Turkey, several factors that lead to teacher burnout such as age, gender, marital status, teaching experience, education level, school type, job satisfaction, locus of control, coping strategies, social support, job performance, role conflict, and socio economic level of the school have been studied as the causes of burnout [45] - [46] - [13]. However, insipite of the growing interest in the literature about relationship between teacher burnout and classroom management efficacy, no research study in Turkey has investigated the effect of this variable and joint effects of some demographic variables with this variable on teacher burnout. Besides, there is a limited number of research in Turkey about burnout among secondary school teachers [47].

In conclusion, burnout as an important phenomenon influences the mental and physical health of teachers as well

as the quality of education, instruction and interpersonal relations between student and teachers. As indicated earlier, several individual and situational variables are potentially critical factors in teacher burnout [10]. In order to understand the burnout phenomenon in education and prevent negative consequences caused by burnout as suggested by Farber [8] it is vital to investigate the causes of teacher burnout. Thus the present study aimed to investigate how well perceived self-efficacy in classroom management, marital status, gender and experience predict dimensions of teacher burnout (emotional exhaustion, depersonalization, personal accomplishment) among primary school teachers.

II. METHOD

A. Participants

A total of 700 teachers from fifty primary public schools were asked to fill out measures. Of the 700 teachers, 523 teachers (345 females, 178 males) completed the measures. Return rate was 75 %. The mean age of teachers was 38.15 (SD=6.95). Sixty six percent were women and 34 % were men. Eighty three percent were married and remaining 17 % were single. In addition, teachers' mean years of experience was 13.77 (SD=7.60). The participants were selected from only Çankaya province which serves low class to middle class SES in order to control the SES levels of students which is expected to contribute to teacher burnout. In these schools majority of students come from middle-class homes. These schools better performing schools within the public system. In addition, secondary school teachers were selected because burnout is found to be prevalent in secondary school teachers [14].

B. Measures

Demographic data form

Demographic data were obtained from author constructed form included questions about gender, experience and marital status.

Maslach Burnout Inventory (MBI)

In this study burnout was assessed with the Turkish version of the Maslach Burnout Inventory [17]. Similar to the original version of the inventory [48] the Turkish version also contains three subscales (emotional exhaustion, depersonalization and personal accomplishment) and 22 items. MBI yields three separate scores for each subscales; the higher the score on the emotional exhaustion and depersonalization subscales, the higher the level of burnout. The personal accomplishment subscale was scored in the opposite direction so that the lower the score, the higher the level of burnout. Chronbach's alphas representing the internal consistency of the sub-scales were 0.83 (Emotional exhaustion) 0.71 (Depersonalization) and 0.72 (Personal accomplishment). Test-retest reliability for emotional exhaustion is .83, for depersonalization is .72, and for personal accomplishment is .67 [17]. In the present study, internal consistency of teacher version of MBI was estimated

by Chronbach's alpha. The reliability coefficients for subscales were as follows .81 for emotional exhaustion; .66 for depersonalization; .77 for personal accomplishment. These result indicated that MBI has high internal consistency.

TABLE I
THE BIVARIATE AND PARTIAL CORRELATIONS OF THE PREDICTORS WITH
MBI DIMENSIONS

	Emotional Exhaustion		Depersonalization		Personal Accomplishment	
Predictors	r	rp	r	rp	r	rp
Classroom Management Efficacy	-.36*	-.36*	-.38**	-.38**	.52***	.52***
Marital Status	.14*	.14*	-.18**	-.18**	.04	.03
Gender	.007	-.001	-.04	-.06	-.08	-.09
Experience	.034	.117	-.01	.06	.16***	.09

*p<.01, **p<.01, ***p<.01

TABLE II
MEANS AND STANDARD DEVIATIONS OF BURNOUT SUB-SCALES AS A
FUNCTION OF MARITAL STATUS AND GENDER

	Emotional Exhaustion		Depersonalization		Personal Accomplishment	
Predictors	M	SD	M	SD	M	SD
Marital Status						
Single	22.60	5.96	9.05	3.34	31.70	4.12
Married	20.31	5.89	7.68	2.64	32.12	4.20
Gender						
Female	20.71	6.00	7.81	2.77	31.79	4.19
Male	20.62	5.87	8.08	2.88	32.56	4.15

Teacher Efficacy in Classroom Management and Discipline Inventory

Teacher Efficacy in Classroom Management and Discipline scale which was originally developed by Emmer and Hickman [36] have three subscales; Classroom Management and Discipline, External Influence, and Personal Teaching Efficacy.

The Emmer and Hickman questionnaire was adapted to Turkish by Yerin Güneri, Bulut and Özdemir [39]. Similar to the original English version, Turkish version of the scale has three subscales. The first subscale is Classroom Management and Discipline contains 24 items. The second subscale is External influence and includes 19 items. The third subscale Teaching Efficacy consists of 11 items.

In the present study, Classroom Management and Discipline Efficacy subscale of Teacher Efficacy in Classroom Management and Discipline Inventory was used to gather data on classroom management efficacy as proposed by Yerin Güneri, Bulut and Özdemir [39]. This scale includes 24 items measured on a 5-point likert scale ranging from strongly agree/ to strongly disagree. Internal consistency estimates of reliability were computed for the Classroom Management and Discipline Efficacy Scale: Cronbach alpha values indicated satisfactory reliability .90 [49].

C. Procedure

The procedure in the present study was completed in several consecutive steps. First, the letter that explains the

purpose of the study, demographic data sheet and measures were given in an envelope to assistant principals of the schools. Second, administrators gave measures to teachers and asked them to return them in a sealed envelope in duration of one week to the same office. Third, the teachers completed the questionnaires without indicating their names or other identifying details and then returned them in a sealed envelope to the school administration.

III. RESULTS AND DISCUSSION

In this study, multiple regression analyses were used to evaluate four sets of predictor variables (perceived self-efficacy in classroom management, marital status, gender, and experience) upon the three criterion variables: emotional exhaustion, depersonalization, and personal accomplishment. The four sets of predictor variables were treated as unordered sets, thus the goal of the study was to examine predictive power of each set of predictors, incremental power of each sets of predictors and predictive validity of all sets in combination. Among the independent variable sets; gender, marital status were dummy coded into two (i.e. k-1) variables prior to their entry. Other sets of independent variables: experience, and classroom management efficacy were quantitative variables.

The first multiple regression with classroom management efficacy, marital status, gender and experience as predictors of emotional exhaustion was significant, $R^2 = .16$, *adjusted* $R^2 = .15$, $F(1, 517) = 24.87$, $p < .001$. When testing the contribution of each independent variable above the other three variables in the model, perceived classroom management efficacy $R^2 \text{ change} = .13$, $F(1, 520) = 79.09$ $p < .001$; marital status $R^2 \text{ change} = .02$, $F(1, 519) = 10.75$ $p < .001$ and experience $R^2 \text{ change} = .01$ $F(1, 517) = 7.23$ $p < .007$ contributed significantly to the prediction of the emotional exhaustion. However, gender did not predict significantly above the other three variables, $R^2 \text{ change} = .00$, $F(1, 518) = .00$ $p < .989$.

Based on these results it seemed clear that, perceived efficacy in classroom management, marital status and experience were significant predictors of the emotional exhaustion dimension of teacher burnout. However given the small magnitude of experience and marital status, efficacy in classroom management seemed to be the most meaningful indicator of the emotional exhaustion dimension of burnout. Table I shows the bivariate and partial correlations associated with the analyses of the three subscales of MBI; Table II lists the means and standart deviations.

The second multiple regression analysis was conducted to predict the score on the depersonalization dimension of MBI. The results indicated that linear combination of four sets of variables (classroom management efficacy, marital status, gender and experience as predictors of depersonalization) was significant, $R^2 = .18$, *adjusted* $R^2 = .17$, $F(1, 517) = 28.19$ $p < .000$. When testing the contribution of each independent variable above the other three variables in the model, classroom management efficacy $R^2 \text{ change} = .14$, $F(1, 520) =$

87.03 $p < .001$; and marital status $R^2 \text{ change} = .03$, $F(1, 519) = 18.27$ $p < .001$ contributed significantly to the prediction of the depersonalization dimension of burnout above gender ($R^2 \text{ change} = .003$, $F(1, 518) = 1.82$ $p < .178$; and experience $R^2 \text{ change} = .004$, $F(1, 517) = 2.30$ $p < .130$). However, given the small magnitude of the contribution of marital status and experience, it appeared that perceived classroom management efficacy was the most meaningful predictor of the depersonalization dimension of burnout.

Third multiple regression analysis was conducted to predict the score on the personal accomplishment dimension of MBI. The results showed that the linear combination of four sets of variables (classroom management efficacy, marital status, gender and experience as predictors of personal accomplishment) was significant, $R^2 = .28$, *adjusted* $R^2 = .27$, $F(1, 517) = 50.65$, $p < .000$. While testing the contribution of each independent variable above the other three variables in the model, perceived classroom management efficacy $R^2 \text{ change} = .27$, $F(1, 520) = 191.28$ $p < .001$; gender $R^2 \text{ change} = .006$, $F(1, 518) = 4.45$ $p < .035$; and experience $R^2 \text{ change} = .006$, $F(1, 517) = 4.15$ $p < .042$ contributed significantly to the prediction of the personal accomplishment dimension of teacher burnout over the marital status ($R^2 \text{ change} = .001$, $F(1, 519) = .440$ $p < .507$) in this equation. Similar to the other dimensions of burnout, perceived classroom management efficacy appeared to be the most meaningful indicator of the personal accomplishment dimension of burnout.

Discussion

The results of the study indicated that classroom management efficacy, marital status and experience can be considered as significant predictors of emotional exhaustion dimension of burnout. In other words, classroom management efficacy, marital status and experience may simultaneously affect emotional exhaustion scores of teachers. Looking at the mean emotional exhaustion scores as a function of marital status, the negative correlation between emotional exhaustion and classroom management efficacy and positive correlation between emotional exhaustion and experience can be seen. It can be concluded that teachers who are single, who doubt about their classroom management efficacy, who are experienced tend to experience more emotional exhaustion or vice versa.

Another finding of this study was that classroom management efficacy and marital status are the predictors of depersonalization dimension of burnout. As the negative correlation between classroom management efficacy and mean depersonalization score as a function of marital status indicated, teachers who are single, and who have low classroom management efficacy appear to experience more depersonalization.

The last finding of this study indicated that classroom management efficacy, gender and experience appeared to be the significant predictors of personal accomplishment dimension of burnout. Taking into account the positive correlations between classroom management efficacy,

experience and personal accomplishment it appears that as teachers' classroom management efficacy scores and years of experience increase they feel more personal accomplishment.

Given that classroom management efficacy alone accounted for 13 % of the variance of the emotional exhaustion, 14 % of the variance of the depersonalization, and 27 % of the variance of the personal accomplishment it appeared that classroom management efficacy is the best predictor of teacher burnout. This finding seems to be consistent with and confirming previous findings [50] - [51] that found that teachers who considered themselves less competent in classroom management reported a higher level of burnout than their counterparts who have more confidence in their competence in this regard.

A possible explanation for this finding might be that if teachers have less confidence about how to manage a class they may feel ineffective. As a result, they may get stressed and emotionally worn out, and may develop a negative attitude toward students [52].

Findings of the present study also showed that although the amount of variance explained by the marital status was not very high, marital status has been found to be significant predictor of two dimensions of burnout (emotional exhaustion and depersonalization), explaining 2 % and 3 % of these dimensions respectively. Looking specifically the mean scores as a function of marital status it becomes apparent that married teachers tend to have lower scores on emotional exhaustion and depersonalization than single teachers. This finding is consistent with the findings of the previous studies that indicated married people had lower emotional exhaustion and depersonalization scores than single or divorced people [17] - [20]. However, some studies indicated no statistically significant relationship between burnout and marital status of teachers [1] - [8].

As several researchers concluded social support have significant negative effect on burnout and people who have social support available (listening, emotional support) are less likely to experience burnout [10] - [26] - [53]. Therefore one might conclude that, in this study married teachers who might have social support from their spouse in coping with stress and may experience less burnout.

In this study, although gender was not found to be a significant predictor of emotional exhaustion and depersonalization, it was one of the predictors of personal accomplishment. In the literature, relationship between gender and burnout revealed inconsistent findings across studies. In some studies gender were found to be related to emotional exhaustion and depersonalization dimensions of burnout [15] - [17]. On the other hand, in other studies significant relationship between gender and personal accomplishment dimension of burnout was reported [54]. However, several researchers did not find significant relationship between gender and three measures of burnout [27] - [31]. A possible explanation for the lack of relationship between emotional exhaustion, depersonalization and gender in this study might be that, regardless of gender teachers in Turkey may be

suffering from similar problems. Tufan's [55] study that showed teachers perceptions of stress sources do not differ as a function of gender seems to support this explanation.

Another finding of this study was that male teachers present higher scores on the personal accomplishment. This finding might be attributed to sex role socialization and different career expectations between males and females. Because as Nakou, Stogiannidou and Kiosseoglou [56] stated males are socialized to be achievement-oriented and burnout is less likely with achievement oriented teachers [12]. Therefore, male teachers might be experiencing less burnout in terms of personal accomplishment dimension.

With regard to the teaching experience, findings showed that experience is a significant predictor of emotional exhaustion and personal accomplishment dimensions of burnout. This finding is not supported by some previous studies which suggested that teachers' burnout did not differ as a function of teaching experience [8] - [13]. However, finding that personal accomplishment is predicted by the variable of experience supported by the findings of the other studies [14] - [57] - [58]. The finding that emotional exhaustion was predicted by experience is consistent with the findings of Antoniou, Polychroni and Walters [59] who indicated that as years of teaching experience increased, the levels of emotional exhaustion increased. One explanation for this finding might be that in Turkey teachers as their experience increases they become more emotionally exhausted or tired and wear out. This does cause them to feel less competent, less successful and lead inability to cope with job demands.

Several implications for practice can be drawn from the findings of the present study. First, the findings indicated that classroom management efficacy is one of the significant predictors of three dimensions of burnout. This result suggests that classroom management efficacy might be involved in decreasing the likelihood of teacher burnout. As the findings of Hoy and Woolfolk [60] also indicated that some aspects of efficacy increase during student teaching. Thus, adequate training during student teaching and throughout a teacher's career how to handle classroom problems may offer effective solution to the prevention of teacher burnout.

Second, it is important to take perceived classroom management efficacy into consideration when developing interventions to prevent and to treat teacher burnout for teachers who already in teaching. Therefore, from the findings of the present study it can be concluded that for teachers those having problems in classroom management, programs that could enhance classroom management efficacy could be designed. Third, in this study only four factors were investigated in relation with burnout, therefore, further studies that incorporate both individual and organizational factors in searching the contributors of burnout are also needed. Fourth, only secondary school teachers in Çankaya region of Ankara participated in this study and data were collected through self-report scales. Therefore further research that include subjects from different socioeconomic and geographic areas, and

different educational levels that uses other methods of data collection such as personal interviews with the teachers and observations of teachers in their work settings are also needed.

REFERENCES

- [1] Gold, Y., & Bachelor, P. (2001). Signs of burnout are evident for practice teachers during the teacher training period. *Education*, vol.108, no. 4, pp. 546-555.
- [2] Edelwich, J., & Brodsky, A. (1980). Burnout: stages of disillusionment in the helping profession. New York: Human Sciences.
- [3] Maslach, C., & Leiter, M.P. (1997). The truth about burnout. How organizations cause personal stress and what to do about it. Jossey-Bass publishers. San Francisco.
- [4] Bryne, J. J. (1998). Teachers as hunger artist: Burnout: Its causes, effects, and remedies. *Contemporary Education*, vol. 69, no. 2, pp. 86-92.
- [5] Rudow, B. (1999). Stress and burnout in the teaching profession: European studies, issues, and research perspectives. In R. Vandenberghe & A. M. Huberman (Eds.), *Understanding and preventing teacher burnout: A sourcebook of international research and practice*. New York: Cambridge University Press, pp. 38- 58.
- [6] Archibald, V., Azouz, I., Colf, G., Julian, S., Latham, K., & White, L. (1999). Assessment of burnout among southern Utah university faculty, faculty recruitment retention committee report. Retrieved May 20, 2001, from the <http://www.suu.edu/ad/provest/wort/fr-98-99/report.coc>.
- [7] Wisniewski, L., & Gargiulo, R. M. (1997). Occupational stress and burnout among special educators: A review of the literature. *Journal of Special Education*, vol. 31, no. 3, pp. 325-347.
- [8] Farber, B. A. (1984). Stress and burnout in suburban teachers. *Journal of Educational Research*, vol. 77, no. 6, pp. 325-331.
- [9] Whiteman, J. L., Young, J. C., & Fisher, M. L. (1996). Teacher burnout and the perception of student behavior. *Education*, vol. 105, no. 3, pp. 299-305.
- [10] Brissie, J. S., Hoover-Dempsey, K. V., & Bassler, O. C. (1988). Individual, situational contributors to teacher burnout. *Journal of Educational Research*, vol. 82, no. 2, pp. 106-112.
- [11] Perlman, B., & Hartman, E. A. (1982). Burnout: summary and future research. *Human Relations*, vol. 35, no.4, pp. 238-305.
- [12] Leithwood, K., Jantzi, D., & Steinbach, R. (2001). Maintaining emotional balance. *Educational Horizons*, vol. 15, pp. 73- 82.
- [13] Tümkaya, S. (2001). Burnout of primary school teachers with different level of locus of control. *Turkish Psychological Counseling and Guidance Journal*, vol. 2, no. 15, pp. 29-40.
- [14] Berg, B. D. (1994). Educator burnout revisited. *Clearing House*, vol. 64, no.4, pp. 185-189.
- [15] Burke, R. J., Greenglass, E. R., & Schwarzer, R. (1996). Predicting teacher burnout over time: Effects of work stress, social support, and self-doubts on burnout and its consequences. *Anxiety, Stress, and Coping: An International Journal*, vol. 9, pp. 261-275.
- [16] Burke, R. J., & Greenglass, E. R. (1995). A longitudinal study of psychological burnout in teachers. *Human Relations*, vol. 48, pp. 187-202.
- [17] Schwarzer, R., Schmitz G. S., & Tang, C. (2000). Teacher burnout in Hong Kong and Germany: a cross- cultural validation of the Maslach Burnout Inventory. *Anxiety, Stress & Coping*, vol. 13, no. 3, pp. 309-327.
- [18] Ergin, C. (1992). Burnout among doctors and nurses: An application of Maslach Burnout Inventory. 7th National Psychology Congress, pp. 143-154. (Doktor ve hemşirelerde tükenmişlik ve Maslach Tükenmişlik ölçeğinin uygulanması. 7. Ulusal Psikoloji Kongresi Bilimsel Çalışmaları, s. 143-154. In Turkish).
- [19] Özer, R. (1998). Investigation of counselors career burnout: Causes, sources and levels. Unpublished master's thesis, University of Karadeniz Teknik, Institute of Social Science, Trabzon (Rehber Öğretmenlerde Tükenmişlik Düzeyi, Nedenleri ve Çeşitli Değişkenlere Göre İncelenmesi. Yayınlanmamış Yüksek Lisans Tezi, Karadeniz Teknik Üniversitesi, Sosyal Bilimler Enstitüsü, Trabzon).
- [20] Yaman, H., & Ugan, M. (2002). Burnout in young physicians: A study on family medicine residents. *Journal of Turkish Psychology*, vol. 17, no. 49, pp. 37- 44.
- [21] Lunenburg, F. C. & Cadavid, V. (1992). Locus of control, pupil control ideology, and dimensions of teacher burnout. *Journal of Instructional Psychology*, vol. 19, pp. 13-23.
- [22] Yiu-kee, C., & Tang, C. S. (1995). Existential correlates of burnout among mental health professionals in Hong Kong. *Journal of Mental Health Counseling*, vol. 17, no. 2, pp. 220- 230.
- [23] Delaney, B. H., Newcomb, M., & Dembo, M. H. (1997). The role of hardiness, efficacy, and humanitarianism in the reduction of educator stress, burnout and illness. Stress and coping in education, 1 (2), Paper presented at the March 1997 American Educational Research Association (AERA) Conference in Chicago.
- [24] Pettigrew, L., & Wolf, G. 1982. "Validating measures of teacher stress." *American Educational Research Journal*, vol. 19, no. 3, pp. 373--396.
- [25] Rosse, J. G., & Wayne B. R. (1991). Conceptualizing the role of self-esteem in the burnout process. *Group & Organization Management*, vol. 16, no. 4, pp. 428- 454.
- [26] Gil-Monte, P. R., & Peiro, J. M. (1997). A study on significant sources of the "burnout syndrome" in workers at occupational centers for the mentally disabled. *Psychology in Spain*, vol. 1, no.1, pp. 55-62.
- [27] Freed, E. H. (1994). The relationship of social support, occupational stress, burnout and job satisfaction among special education teachers. *Dissertation Abstracts International*, 55 (4).
- [28] Byrne, B. M. (1993). Burnout: Testing for the validity, replication, and invariance of causal structure across elementary, intermediate, and secondary teachers. *American Educational Research Journal*, vol. 31, pp. 645-673.
- [29] Leiter, M. P. (1992). Burnout as a crisis in self-efficacy. Conceptual and practical implications. *Work and Stress*, vol. 6, no. 2, pp. 107-115.
- [30] Van Yperen, N. W. (1998). Informational support, equity and burnout: The moderating effect of self- efficacy. *Journal of Occupational and Organizational Psychology*, vol. 71, pp. 29- 33.
- [31] Evers, W. J. G., Brouwers, A., & Tomic, W. (2002). Burnout and self-efficacy: A study on teachers' beliefs when implementing an innovative educational system in the Netherlands. *British Journal of Educational Psychology*, vol. 72, pp. 227- 243.
- [32] Bandura, A. (1995). *Self-efficacy in changing societies*. Cambridge: Cambridge University Press.
- [33] Schmitz G. S. & Schwarzer R. (2000). Perceived self-efficacy of teachers: Longitudinal findings with a new instrument. *Zeitschrift Fur Padagogische Psychologie*, vol. 14, no. 1, pp. 12-25.
- [34] Chwalisz, K., Altmaier, E. M., & Russel, D. W. (1992). Causal attributions, self-efficacy cognitions, and coping with stress. *Journal of Social and Clinical Psychology*, vol. 11, no. 4, pp. 377- 400.
- [35] Smylie, M. A. (1989). Teachers' views of the effectiveness of sources of learning to teach. *The Elementary School Journal*, vol. 89, no. 5, pp. 543-558.
- [36] Henson, R. K. (2001). Relationships between preservice teachers' self-efficacy, task analysis, and classroom management beliefs. Paper presented at the Annual Meeting of the Southwest Educational Research Association (New Orleans, LA, February 1-3), Selected ERIC Abstracts.
- [37] Emmer, E.T., & Hickman, J. (1991). Teacher efficacy in classroom management and discipline. *Educational and Psychological Measurement*, vol. 51, no. 3, pp. 755-766.
- [38] Brouwers, A., & Tomic, W. (1999). Teacher burnout, classroom management efficacy, and student disruptive behaviour in secondary education. *Curriculum and Teaching*, vol. 14, no. 2, pp. 7- 26.
- [39] Turkish Statistical Institute (2007). Number of school, student and teacher by level of education. Available:http://www.tuik.gov.tr/Veribilgi.d?tb_id=148ust_id=5.
- [40] Öztürk, N. (2001). Bureaucratization and stress levels of teachers at high schools. Unpublished doctoral thesis, University of Dokuz Eylül, Institute of Educational Sciences, İzmir. (Liselerde Bürokratikleşme ve Öğretmenlerin Stres Düzeyleri. Yayınlanmamış Doktora Tezi, Dokuz Eylül Üniversitesi. Eğitim Bilimleri Enstitüsü, İzmir).
- [41] Kırılmaz, A. Y., Çelen, Ü. & Sarp (N). (2003). A study on Teacher Burnout with a group of primary teachers. *İlköğretim-Online*, vol. 2, no. 1, pp. 2-9. İlköğretimde Çalışan Bir Öğretmen Grubunda "Tükenmişlik Durumu" Araştırması", İlköğretim-Online, cilt. 2, sayı .1, s. 2-9. Available: <http://www.ilkogretim-online.org.tr> (26.12.2007).
- [42] Pehlivan, I. (2000). *Stres in work*. Pegem Publishing, Ankara. (İş Yaşamında Stres. Pegem Yayıncılık, Ankara).

- [43] Kyriacou, C. (1989, September). The nature and sources of stress facing teachers. Paper presented at the Third European Conference for Research on Learning and Instruction Madrid, Spain.
- [44] Cemaloğlu, N. & Şahin, D. E. (2007). A study of the teacher's burnout level according to various variables. *Kastamonu Education Journal*, vol. 15, no. 2, pp. 465-484. (Öğretmenlerin mesleki tükenmişlik düzeylerinin farklı değişkenlere göre incelenmesi. *Kastamonu Eğitim Dergisi*, cilt. 15, sayı. 2, s. 465-484).
- [45] Baysal, A. (1995). Factors affecting high school teachers' occupational burnout. Unpublished doctoral thesis, University of Dokuz Eylül, Institute of Social Sciences, İzmir. (Lise ve dengi okul öğretmenlerinde meslekte tükenmişliğe etki eden faktörler. Yayınlanmamış doktora Tezi, Dokuz Eylül Üniversitesi: İzmir).
- [46] Girgin, G. (1995). Analysis of variables affecting primary school teachers' burnout and proposing a model. Unpublished doctoral thesis, University of Dokuz Eylül, Institute of Social Sciences, İzmir. (İlkokul öğretmenlerinde meslekten tükenmişliğin gelişimini etkileyen değişkenlerin analizi ve bir model önerisi. Yayınlanmamış doktora tezi, Dokuz Eylül Üniversitesi, Sosyal Bilimler Enstitüsü, İzmir).
- [47] Yerlikaya, A. (2000). The study of burnout of primary school teachers working at villages and in cities. Unpublished Master's Thesis, University of Atatürk, Institute of Social Sciences, Erzurum. (Köy ve şehirde çalışan sınıf öğretmenlerinde tükenmişlik düzeylerinin incelenmesi. Yayınlanmamış Yüksek Lisans Tezi, Atatürk Üniversitesi, Sosyal Bilimler Enstitüsü, Erzurum).
- [48] Maslach, C., & Jackson, S. E. (1986). *Maslach Burnout Inventory Manual* (2nd edn.). Palo Alto, CA: Consulting Psychologists Press.
- [49] Güneri, O.Y., Bulut, S., & Özdemir, Y. (2004). Development of teacher efficacy in classroom management and discipline scale. Unpublished manuscript.
- [50] Brouwers, A., & Tomic, W. (2000). A longitudinal study of teacher burnout and perceived self efficacy in classroom management. *Teaching and Teacher Education*, vol. 16, pp. 239-253.
- [51] Friedman, I. A., & Farber, B. A. (1992). Professional self-concept as a predictor of teacher burnout. *Journal of Educational Research*, vol. 86, no. 1, pp. 28-35.
- [52] Jerusalem, M., & Mittag, W. (1995). Self- efficacy in stressful life transitions. In Bandura, A. (Ed.). *Self-efficacy in changing societies* (pp.178-201). Cambridge: Cambridge University Press.
- [53] Um, M. Y., & Harrison, D. F. (1998). Role stressors, burnout, mediators, and job satisfaction: a stress-strain-outcome model and an empirical test. *Social Work Research*, vol. 22, no. 2, pp. 100- 116.
- [54] Beer, J. (1992). Burnout and stress, depression and self-esteem of teachers. *Psychological Reports*, vol. 71, no. 3, pp. 1331-1336.
- [55] Tufan, Ş. (1997). Teachers' views about sources of occupational stress and coping strategies working in the state and private high schools located in Ankara, Turkey. Unpublished Master's Thesis, Hacettepe University, Ankara. (Ankara İli Çankaya İlçe Merkezi'ndeki devlet ve Özel Liselerde görevli öğretmenlerin işlerinde stres yaratan etmenler ve bunlarla başa çıkma yolları konusundaki görüşleri. Yayınlanmamış yüksek lisans tezi, Hacettepe Üniversitesi, Ankara.).
- [56] Nakou, B., Stogiannidou, A., & Kiosseoglou, G. (1999). The relation between teacher burnout and teachers' attributions and practices regarding school behaviour problems (abstract). *School Psychology International Abstract*, vol. 20, no.02.
- [57] Ito, M. (2000). Burnout among teachers: Teaching experience and type of teacher. *Japanese Journal of Educational Psychology*, vol. 48, no. 1, pp. 12-20.
- [58] Sucuoğlu, B., & Kuloğlu, N. (1996). Studying burnout of teachers working with exceptional children. *Journal of Turkish Psychology*, vol. 10, no. 36, pp. 44- 60. (Özürlü çocuklarla çalışan öğretmenlerde tükenmişliğin değerlendirilmesi. *Türk Psikoloji Dergisi*, cilt. 10, sayı. 36, s. 44- 60)9.
- [59] Antoniou, A. S., Polychroni, F., & Walters, B. (2000). Sources of stress and professional burnout of teachers of special educational needs in Greece. Paper Presented At International Special Education Congress: Manchester.
- [60] Hoy, W. K. & Woolfolk, A. E. (1990). Socialization of student teachers. *American Educational Research Journal*, vol. 27, pp. 279-300.

Yalçın Özdemir is a Turkish-born Ph. D. student at Ankara University in Ankara, Turkey. He received his master's degree in Guidance and Psychological Counseling from Middle East Technical University, Ankara, the Turkey. His research interests focus on the teachers health, stress in teachers, classroom management, social development in adolescence.