# PROFESSIONAL STRESS OF TEACHERS, ITS INDICATORS AND COPING ATTITUDES* 

# ÖĞRETMENLERIN STRESI, STRES BELIRTILERİVE BAŞ ETME DAVRANIŞLARI 

Semra ÜNAL**


#### Abstract

Stress is considered to be an important problem among teachers. Teachers in the schools perform their jobs in various environments. Therefore the psychological problems of teachers caused by work conditions, their perception of work environment and how they cope with these problems differ.

The purpose of this research is to determine the stress of vocational high school teachers caused by the works done in two different environments (shops and classrooms) and the behaviors shown to cope with this stress.

The research includes 138 teachers instructing vocational courses conducted in shops and 87 teachers instructing their courses in classrooms. A survey is constructed to collect data. The survey is formed in three sections. In the first section there are questions concerning the demographic data, in the second section there are questions concerning the psychological stress indications and in the third section there are questions concerning the behaviors coping with the stress.

The data collected is analysed by using frequency, percent average, standard deviation, $t$-Test and analysis of variance. The data obtained from the research is analysed and evaluated. The ways that could decrease the stress of teachers are proposed.


Key words: Job stress, Vocational High School, Teacher instructing in a shop.

ÖZET: Stresin öğretmenlerde önemli bir sorun olduğu görülmektedir. Ögretmenler okulda değişik ortamlarda görevlerini gerçekleştirmektedir. Dolayısıyla öğretmenlerin iş koşulları ve çalıştıkları ortamı algılayışlarına göre ortaya çıkan psikolojik belirtiler ve bunlarla başa çıkma davranışları da farklılık göstermektedir.

Bu araştırmanın amacı; endüstri meslek liselerinde iki farklı ortamda (atelyelerde ve sınıf ortamında) görev yapan öğretmenlerin işlerinin yarattığı stresin psikolojik belirtileri ile bunlarla başa çıkma davranışlarını belirlemektir.

Araştırma İstanbul'a bulunan endüstri meslek liselerinde görev yapan 138 atelye meslek dersleri öğretmeni ile sımıf ortamında görev yapan 87 öğretmeni kapsamaktadır. Araştırma verilerini toplamak için anket
geliştirilmiştir. Anket üç bölümden oluşmaktadır. Birinci bölümde demografik özellikler, ikinci bölümde psikolojik stres belirtileri ve üçüncü bölümde de başa çıkma davranışlarına ilişkin sorular yer almaktadır. Verilerin çözümlenmesinde frekans, yüzde aritmetik ortalama ve standart sapma ile ortalamalar arası farkın anlamlilığın test etmek üzere ( t ) testi ve çoklu değişkenlerde varyans analizi kullanılmıştır. Araştırmadan elde edilen veriler analiz edilerek yorumlanmıştır. Ulaşılan sonuçlar çerçevesinde öğretmenlerin stresini azaltabilecek önerilerde bulunulmuştur.

Anahtar Kelimeler: İs stresi, Endüstri Meslek Lisesi, atelye öğretmeni

## 1-INTRODUCTION

Teachers have very important roles and responsibilities in learning-teaching process in the school. Also effectiveness of other elements of education system mostly depend on the teacher. As it is impossible to think that a teacher who is insufficient and inefficient to fulfill purpose of education even in the best conditions, it should not be expected from even the best teacher to become efficient under nonconvenient conditions. (1) However, the teacher has duties with vital effects over students like motivating students, planning class activities, providing knowledge and skills for students, getting class under discipline, guiding to students. Occupation field of the teacher is human being. Teachers execute their works in their working environments under discipline and order problems, problems concerning their relations with school administration and their colleagues, insufficiencies in their working environment, over-crowded classes, lack of material opportunities, meeting with unexpected

[^0]situations, lack of professional development, vagueness of teacher's role. $(2,3,4,5)$

As a matter of fact, the job that person possesses determines his or her social status, satisfaction from life, opportunities he or she provides to his family. Professional life forms the most important part of daily life of human being and effects in the professional life expand to the most important part of his or her life. So, humans are affected from stress resources in professional life in various forms. (6) Teachers too are affected from stress resources due to necessity of their job. Perception by the teacher that fulfillment of whole requirements of profession is hard and impossible and consideration that non-completion of whole requirements of profession is a risk towards selfrespect and general integrity are stages of occuring of teacher's stress. $(7,5)$

Realization of teaching purposes requires teacher to work in healthy environment without stress. However, teaching is a stressful profession. During stress, humans are affected in various forms in psychological and physiological viewpoints. Therefore, humans who are under stress show different reactions. These come forth as anxiety, hate, aggressiveness, perception disorders, learning insufficiencies, over-eating, sweating, etc. These psychological and physical effects break interior balance and harmony of human being. $(8,9)$

Stress level changes according to perception form by teacher as for environment where he or she realizes his or her profession.

If teacher's stress turns to cause harm to himself or herself in psychological and physiological viewpoints, realization of profession by that teacher is prevented. In this case, teacher cannot realize teaching activities sufficiently. Students get most harm from this. Therefore, teacher's stress holds special significance. It is necessary to manage stress well in order to decrease stress of teachers and to support them to be affected less.

## 2- RELATED LITERATURE

In the research conducted by Pehlivan (10) concerning stress resources in education management, it was established that grave physical stress indicators are not observed and behavioural stress indicators among teachers are found as little. Saylan and Yurdakul (11) established in their research concerning strategies implemented to cope with stress and professional stress level of teachers that teachers manipulated emotional strategies rather than physical strategies and have no organizational strategies employed often to decrease stress situation. Balcı also (12) stated in research concerning job stress of university teaching staff that there is no meaningful difference in findings of coping with stress according to variants of gender, age, faculty and title while stress level is under medium.

In the research conducted by Shea (13) it was put forth that teachers who get support from experienced parents of students and colleagues show lighter stress reactions.

Aldwin and Revensan (14) and Hipps and Halpin stated that teachers are affected and have stress more than directors from conditions of school and human relations and have more tendency for quiting job as they are directly related with teaching and their constant togetherness with students.

## 3- PURPOSE

Purpose of this research is to determine psychological and physiological indicators of stress of teachers caused by their jobs in different environments (in work-shops and classes) in industrial vocational high schools as well as coping behaviours against these according to their own views.

With this purpose, answers were sought for the following questions.

1- What are psychological and physical indicators of teachers caused by job stress and their coping experiences according to their own views?

2- Does job stress differ according to gender, age, working environment, marital status and weekly load of class hour in forming views concerning stress indicators and coping experience?

## 4- METHODOLOGY

In this research, scanning model is employed. In the study, 225 teachers who are employed in the industrial vocational high schools located in Istanbul are within research scope.

A survey is developed by the researcher in order to collect research data. With this purpose, firstly literature concerning the subject is scanned, views of experts were extracted and a draft survey was prepared in line with the obtained theoretical information. This survey was implemented to a group of students who are outside the established study group and its results were studied and final shape was given to survey by realizing necessary corrections. Cronbach Alpha interior consistency coefficient of survey is defined as $r=.79$. Survey is formed by three chapters. It consists of 8 propositions in first chapter where personal information exists, 21 propositions in the second chapter where propositions caused by concerning physical and psychological indicators caused by stress; 19 propositions in the third chapter where propositions concerning technics to cope with stress exist. Arranged survey was implemented with 225 teachers who are selected by random method.

By taking into consideration that answers to be given in the second and third chapters of survey change between 1.00-3.00 and crosssections of $0.66(3-1=2 / 3=0.66)$ occur in the used scale, marks were evaluated as none for 1.00-1.66; sometimes for 1.67-2.33; always for 2.34-3.00.

Findings which were extracted with data collection tools were analyzed by SPSS statistical packet program. Frequency and
percentage values of data were calculated, " t " test was employed in dual comparisons concerning parametric data and variance analysis was employed in multiple comparisons. Arithmetical mean and standard deviation of data were calculated. .05 error rate was obtained in relations and differences among all groups.

## 5- FINDINGS

### 5.1 Informations Concerning the First Section

Totally, 225 teachers participated in the research. While $35.1 \%$ of this total was formed by female teachers, $64.9 \%$ of it was male teachers. (Table 1).

Table 1: The Sample According To Their Gender

| Gender | $\mathbf{f}$ | $\%$ |
| :--- | :---: | :---: |
| Male | 146 | 64.9 |
| Female | 79 | 35.1 |
| Total | 225 | 100 |

Table - 2 shows the age of respondent teachers. Biggest portion of teachers is found in the age group of 26-30. ( $28.4 \%$ ) This age group of teachers was followed by the age group of 31$35(21.8 \%)$; by the age group of 41 and over ( $18.2 \%$ ); by the age group of $36-40$ ( $16.4 \%$ ) and by the age group of 21-25 (15.1 \%).

Table-2 Distribution of the Sample Ages

| Age | $\mathbf{f}$ | $\%$ |
| :--- | :---: | :---: |
| $21-25$ | 34 | 15.1 |
| $26-30$ | 64 | 28.4 |
| $31-35$ | 49 | 21.8 |
| $36-40$ | 37 | 16.4 |
| $41-45$ | 28 | 12.4 |
| $46-$ Over | 13 | 5.8 |
| Total | 225 | 100 |

Teachers from two separate branches participated in the research. Biggest portion ( $61.3 \%$ ) among teachers is formed by teachers of work-shop vocational lessons. However, teachers of general culture lessons ( $38.7 \%$ ) are in less proportion. (Table-3)

Table-3 Distribution of Sampling According To Branch

| Branch | $\mathbf{f}$ | $\%$ |
| :--- | ---: | ---: |
| General Cultural | 87 | 38.7 |
| Work-Shop Vocational Lessons | 138 | 61.3 |
| Total | 225 | 100 |

As distributions (Table-4) of teachers according to environments where they mostly do lessons are also studied, as it was seen it is fixed that the majority of them ( $57.8 \%$ ) conduct lessons in work-shop environment and some lessons (42.8 \%) are realized in class environment.

Table-4 Distribution of Sampling According to Environment of Class Work

| Environment | $\mathbf{f}$ | $\%$ |
| :--- | ---: | ---: |
| Work-shop | 130 | 57.8 |
| Class | 95 | 42.8 |
| Total | 225 | 100 |

As teachers are studied in regard with weekly lesson intensity, highest concentration is in the 31 -over hours ( $45.8 \%$ ). This was followed by those with 21-30 hours of weekly lesson hours of weekly intensity lesson hours $(44.9 \%)$. Of teachers, $7.6 \%$ have $10-20$ hours, $1.8 \%$ have less than 10 hours (Table-5) when it is considered that average load of weekly lesson hours of teachers is 18 hours, it can be stated that teachers face with very intensive lesson load.

Table-5 Weekly Lesson Hours Load of Teachers

| Weekly Lesson Load | $f$ | $\%$ |
| :--- | ---: | ---: |
| Less than 10 lesson hours | 4 | 1.8 |
| $10-20$ Lesson Hours | 17 | 7.6 |
| $21-30$ Lesson Hours | 101 | 44.9 |
| $31-$ Over | 103 | 45.8 |
| Total | 225 | 100 |

As it will be seen when distribution (Table6) of views of teachers concerning their knowledges about subject of coping with job stress, majority ( $63.1 \%$ ) of teachers try to recover from stress according to their views. It was determined that, of those teachers, $26.2 \%$ state that they have knowledge about stress by reading books, $5.3 \%$ get informed by joining with meetings like seminar and panel, and $5.3 \%$ have no knowledge about this subject.

## Table-6Knowledge of Sampling Concerning <br> Subject of Coping With Stress

| Stress Coping Knowledges | $\mathbf{f}$ | $\%$ |
| :--- | ---: | ---: |
| Action According to Their <br> Own Views | 142 | 63.1 |
| By Reading Books | 59 | 26.2 |
| Joining With Seminar and Panel | 12 | 5.3 |
| No Knowledge | 12 | 5.3 |
| Total | 225 | 100 |

Table-7 Distribution of Sampling According State of Being Affected From Working Environment

| Being Affected By Working <br> Environment | $\mathbf{f}$ | $\%$ |
| :--- | ---: | ---: |
| None | 9 | 4.0 |
| Sometimes | 154 | 68.4 |
| Always | 62 | 27.6 |
| Total | 225 | 100 |

Of teachers, 68.4 \% state that they sometimes get affected from working environment, $27.6 \%$ always get affected, $4.0 \%$ never get affected. (Table-7)

### 5.2 Knowledge Concerning Stress Indicators of Teachers

Stress Indicators formed by job stress of teachers are studied according to frequency degree of meeting. (Table-8)

Table-8 Distribution of Stress Indicators of Teachers According to their Frequency Levels

| Stress Indicators | None (1) |  | Sometimes (2) |  | Always (3) |  | X | Ss |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | f | \% | f | \% | $f$ | \% |  |  |
| 1. Head and back ache | 42 | 18.7 | 157 | 69.8 | 26 | 11.6 | 1.93 | . 55 |
| 2.Nervousness, sudden rage | 28 | 12.4 | 172 | 76.4 | 25 | 11.1 | 1.99 | . 49 |
| 3.Insomnia, over-sleep, sleeping disorder | 101 | 44.9 | 95 | 42.2 | 29 | 12.9 | 1.68 | . 69 |
| 4.Sweating, stomach nauseate | 160 | 71.1 | 62 | 27.6 | 3 | 1.3 | 1.30 | . 49 |
| 5.Anorexia | 143 | 63.6 | 75 | 33.3 | 7 | 3.1 | 1.40 | . 55 |
| 6.Tÿredness | 14 | 6.2 | 127 | 56.4 | 84 | 37.3 | 2.31 | . 58 |
| 7.Tense muscles | 123 | 54.7 | 85 | 37.8 | 17 | 7.6 | 1.53 | . 63 |
| 8.Over-appetite, stomach disorders | 113 | 50.2 | 84 | 37.3 | 28 | 12.4 | 1.62 | . 70 |
| 9.Rapid Heartbeat | 128 | 56.9 | 88 | 39.1 | 9 | 4.0 | 1.47 | . 58 |
| 10.Calcination, muscle disorders | 158 | 70.2 | 52 | 23.1 | 15 | 6.7 | 1.36 | . 61 |
| 11.Pale face | 108 | 48.0 | 109 | 48.9 | 8 | 3.6 | 1.56 | . 57 |
| 12.Incompatibleness | 130 | 57.8 | 87 | 38.7 | 8 | 3.6 | 1.46 | . 57 |
| 13.Drop in working performance, unwillingness | 47 | 20.9 | 159 | 70.7 | 19 | 8.4 | 1.88 | . 53 |
| 14.Unlogical behaviours | 148 | 65.8 | 75 | 333 | 12 | 5.3 | 1.35 | . 50 |
| 15.Constant anxiety, panic | 126 | 56.0 | 87 | 38.7 | 12 | 5.3 | 1.49 | . 60 |
| 16.Complaint for everything | 106 | 47.1 | 114 | 50.7 | 5 | 2.2 | 1.55 | . 54 |
| 17.Feeling self-insufficiency, lack of boldness | 130 | 57.8 | 91 | 40.4 | 4 | 1.8 | 1.44 | . 53 |
| 18.Absent from job | 182 | 80.9 | 41 | 18.2 | 2 | 0.9 | 1.20 | 48 |
| 19.Boredness, unwillingness in social relations | 86 | 38.2 | 126 | 56.0 | 13 | 5.8 | 1.68 | . 58 |
| $20 . L$ ung and skin disorders | 189 | 84.0 | 28 | 12.4 | 8 | 3.6 | 1.20 | . 48 |
| 21.Depression | 176 | 78.2 | 40 | 17.8 | 9 | 4.0 | 1.26 | . 52 |

Teachers (averages under $\mathrm{X}: 1.66$ ) do not exhibit grave physiological reactions because of stress like depression, lung and skin disorders, stomach disorders, sweating, calcinations, muscle disorders, heart and berating problems. They also show almost no lighter physiological reactions which occur as feeling helplessness, lack of boldness, feeling self-insufficiency, complaining from everything, incompatibility, lack of appetite. Stress reactions (averages between $\mathrm{x}: 1.67-2.33$ ) which teachers occasionally endure are tiredness and also head and back aches, nervousness, drop in working performance, unwillingness, broadness, insufficiency in social relations, sleeping disorders which are stated as occurring occasionally as stress reactions of teachers. Teachers have no indicator that they show these all the time as stress reaction.

As obtained findings are taken into
consideration, physical and psychological reactions of teachers are not constant, their occurrence from time to time is an indicator that teachers have tolerant and patient structure due to their profession.

### 5.3 Findings Concerning Coping Strategies of Teachers Against Stress

Activities conducted by teachers to recover from stress are studied according to frequency level (Table-9)

It was determined that strategies as blaming others, using sedative drugs, drinking alcohol, distancing from everything, using relaxing technics were almost never used by teachers to cope with stress. They were observed to employ other coping strategies occuring in the Table 9

Table-9 Coping Strategies of Teachers Against Stress

| Coping Stategies Against Stress | None (1) |  | Sometimes (2) |  | Always (3) |  | X | SS |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $f$ | \% | f | \% | $f$ | \% |  |  |
| 1.Self-confedence to remove stress | 21 | 9.3 | 111 | 49.3 | 93 | 41.3 | 2.32 | . 64 |
| 2.To forget stress factor | 32 | 14.2 | 132 | 58.7 | 61 | 27.1 | 2.13 | . 63 |
| 3.Sports | 75 | 33.3 | 108 | 48.0 | 42 | 18.7 | 1.85 | 71 |
| 4.Decrease work load | 69 | 30.7 | 130 | 57.8 | 26 | 11.6 | 1.81 | . 62 |
| 5.Engage in hobby | 46 | 20.4 | 116 | 51.6 | 63 | 28.0 | 2.08 | . 69 |
| 6.Follow cultural, social activities | 25 | 11.1 | 133 | 59.1 | 67 | 29.8 | 2.19 | . 61 |
| 7.Speak with friends on stress factor | 21 | 9.3 | 118 | 52.4 | 86 | 38.2 | 2.29 | . 63 |
| 8.Make prayers | 68 | 30.2 | 103 | 45.8 | 54 | 24.0 | 1.94 | . 74 |
| 9. Raise problems to superiors | 55 | 24.4 | 144 | 64.0 | 26 | 11.6 | 1.87 | . 59 |
| 10.Blame others | 140 | 62.2 | 82 | 36.4 | 3 | 1.3 | 1.39 | . 52 |
| 11.Distance from everything | 143 | 63.6 | 75 | 33.3 | 7 | 3.1 | 1.40 | . 55 |
| 12.Change working environment | 72 | 32.0 | 140 | 62.2 | 13 | 5.8 | 1.74 | . 56 |
| 13. Stay by oneself | 46 | 20.4 | 156 | 69.3 | 23 | 10.2 | 1.90 | . 55 |
| 14.Smoke cigarettes | 126 | 56.0 | 36 | 16.0 | 63 | 28.0 | 1.72 | . 87 |
| 15.To benefit from relaxing technics | 102 | 45.3 | 106 | 47.1 | 17 | 7.6 | 1.62 | . 62 |
| 16.To read interesting books | 77 | 34.2 | 114 | 50.7 | 34 | 15.1 | 1.81 | . 68 |
| 17.To use sedative drugs | 196 | 87.1 | 26 | 11.6 | 3 | 1.3 | 1.14 | . 39 |
| 18.To drink more tea, coffee,etc. | 61 | 27.1 | 95 | 42.2 | 69 | 30.7 | 1.72 | . 52 |
| 19. To drink alcohol | 160 | 71.1 | 58 | 25.8 | 7 | 3.1 | 1.20 | . 40 |

occasionally. It was fixed that among these, mostly self-confidence to overcome the stress factor, speaking on stress factor with friends, not to think the stress creating situation, engaging in a hobby and making prayers were applied more than others.

A meaningful difference was not found in the level of $p<0.05$ in regard with stress indicators and coping strategies of teachers according to variants like gender, age, weekly lesson load, environment where lesson is conducted.

## 6. CONCLUSION AND PROPOSITIONS

It was fixed that teachers rather showed very light physical and psychological stress indicators, these indicators did not show continuity, they sometimes occured in this study which was conducted in order to determine stress indicators concerning job stresses of teachers and coping strategies against stress as well as their usage frequency.

It was determined that teachers do not have continually used stress coping strategies and they try to decrease their stresses by using various coping ways which are rather developed by themselves.

It was fixed that teachers do not differ according to variants as gender, age, working environment, weekly lesson load in regard with stress indicators and coping technics.

In order to decrease stresses of teachers within obtained results, it is recommendable to improve their working conditions, decrease their weekly lesson loads to get them work more efficiently, to promote sports activities, to integrate them in social and cultural activities and to improve their financial opportunities. Researches concerning these subjects must be conducted in schools. While opportunities of schools are improved and they are equiped with new technologies, on the other hand, interrupting aspects of education (15) and stress resources must be fixed.

As teachers fulfill their jobs under especially very complicated structures of schools and various factors, they must be informed on this subject by organizing conferences, seminars, etc. to decrease stress may be caused by them.

## REFERENCES

[1]. Açıkgöz, K. Ü; Skovholt, T; Açıkgöz, K. Minnesota Turkish Debate of Teacher Stress". İzmir: Educational Review of Buca Education Faculty, Issue no 8, Year 4, p:34, (1995)
[2]. Blasé, J. J. "A Qualitative Analysis of Sources of Theacher Stress: Consequence for Performance" American Educational Research Journal, p:14, (1986)
[3]. Wanberg, E. G. "The Complex Issue of teacher Stress and Job Dissatisfaction" Contemporary Education., p:11-16, (1984)
[4]. Johns, D.R. "Pupil Control Ideology as a Source of Stress" Eric ED. 214917, (1992)
[5]. Kalkan, M. " A Reason for Teacher's Stress: Tendency of Prohibitive Student Control" Ankara: Review of Çağdaş Eğitim, Issue no 235. (1997)
[6]. Baltaş, A; Baltaş Z. "Stress and the Ways of Coping With", 16. Printing, İstanbul: Remzi Publication, p: 75-79 (1997)
[7]. Kyriacou, C. "The Stress and Burnout: An International Review" Educational Studies, Vol: 10, No:1, p: 146, (1987)
[8]. Arnold H. J, Daniel C, Feldman "Organizational

Behaviour" Newyork: Mc Graw- Hill Book Co., Singapone, p: 232-233 (1986)
[9]. Başaran, İ.E. "Human Relations in Management", Ankara: Kadıoglu Printing-press. (1992)
[10]. Pehlivan, İ, "Sources of Stress in Management" Ankara: Pegem Publications: 16, (1995)
[11].Saylan, N; Yurdakul, B. "Organizational Strategies for Teachers' Professional Stress" Konya: University of Selçuk, Eight Congress of National Educational Sciences, Vol 1, 9-11 September, (1998)
[12].Balcı A. "Work Stress of University Lecturers" Ankara: Review of Educational Sciences Faculty, 27 (1) Issue 1, (1994)
[13]. Shea, C. A. "Emotional Exhoustion Aspect of Bournout and Stressors in Resource LD Teachers" Research Report, U. S. Indiana (1990)
[14].Aldwin, C. M; Revenson, T.A "Does Coping Help? A Reexamination of the Relation Between Coping and Mental Health" Journal of Personality and Social Psychology, 53(2), (1987)
[15]. Bayram,H; Sökmen, N; Gürdal, A. "The Change of Students' Levels of Understanding of Primary Scientific Concepts with the Level of Education and the Relation Between Abilities of Logical Thinking" University of Marmara Review of Educational Sciences Faculty, Issue no 11, İstanbul. (1999)
[16].Köksal, A. "A Research on University Students' Ways of Coping with the Stress : Review of Çağdaş Eğitim, Issue no 252. (1999)


[^0]:    * This article was presented in Star 1999 as a poster.
    ** Marmara University Technical Educational Faculty Education Department Göztepe-İstanbul Turkey

