

EFFECTS OF IN-SERVICE TRAINING ON THE POINTS OF SYMPTOM CHECK LIST 90-R APPLIED ON A GROUP OF TEACHER

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1. INTRODUCTION

It is important that employees have physical and mental health. Especially teachers who have significant duty as growing and educating children should be more attentive to maintain their mental health than the employees that belong to other professions.

In Turkey previous studies show that mental problems are seen in the amount of %20 and also it is seen that these problems are usually tend to proceed (Tezcan, Aslan, 2000). These circumstances require an early diagnosis and therapy for the persons who have mental problems.

While there are many researches about “burnout” over teachers and managers in literature (Akçamete, Kaner & Sucuoglu, 2001), (Abel, Sewell, 1999), (Burke, Greenglass, 1993), (Chan, Ek, 1995) the researches about mental problems of teachers are limited.

The study which is done by Keçeli et al (1998) with the purpose of investigate the psychological symptoms over teachers by applying General Health Questionnaire (GHQ) presents the relation between the GHQ points and a marital status, duration of marriage, number of children, health problems of family, habits of using alcohol and smoking, graduated school, weekly course hours, condition about possessing a duty on management department.

It is seen that there are studies which are done with the purpose of determinate the “General State of Mental Health” on the other occupational groups and these studies carried out cooperation with long-distance drivers (Öztürk et al, 1997), traffic police (Filik et al, 1995), intern doctors in Hacettepe University Faculty of Medicine (Şahin et al, 1996) and nurses

Mental problems are defined by using “Symptome Check List SCL-90”. SCL-90 have 90 substance and 10 substrate and it is used as a self-promotion inventory in the studies which are done with varied patient groups and normals. Investigated symptoms are somatisation, obsessive compulsive disorder, interpersonal susceptibility, depression, anxiety, anger-hostility, phobic anxiety disorder, paranoia, psychoticism (Derogatis, Richels, Rock, 1976).

There are some studies which shows that individual’s mental health and working performance are affined to each other (Altıntoprak, 2008). Therefore it is important to determinate the general state of health of the individuals who belong to an occupational groups –especially the teachers- not only for themselves but also their performance of professional lives.

Ministry of National Education find health declaration enough from newly-recruited teachers which state that there is not a situation constitute an impediment but attaches a condition such that “Whether the medical condition of teacher candidate is not convenient to teach during the inauguration, medical board report received from general hospital will be asked from teacher candidate informing the candidate is able to practise his/her profession as a teacher in every district of country and on entire climate conditions and will not be able to start a work without this medical release” (meb.gov.tr). Accordingly, candidate of teacher who has mental health problems will be able to start to teach in the event of stating that s/he is healthy and not finding any doubt about this statement. Besides, a teacher mentally healthy when s/he start to work is able to lose his/her mental health for a variety of reasons and maintains teaching under these conditions.

It is hard to identify whether the teachers have mental disorder or not after or before they started to work. Investigations and inquests about teachers who have communication problems due to their state of mental health can only be started whether there are complaints getting from students and parents. Inspectors and investigators are able to transact based upon the expert’s report about a complainee teacher which declares if s/he is able to teach or not by referring her/him to a general hospital. Teachers who have mental disorders do not want to accept that they have problems and most often refuse the sending operations to a hospital. Occasionally, teachers are forced to be sent to hospital for students own benefits.

There is no guarantee to protect their mental health during the term office for the teachers who started to work as mentally healthy. They can be have a difficulties about personal, social and economic problems, working conditions of school, climate conditions, inability to deal with troubled students and parents. Determination and treatment of these problems without harming teacher, her/his students and their surroundings is highly important.

In this study it is not aimed to diagnose a disease, it is aimed to *draw an attention to parameters with volume over one by means of psychological symptom screen test SCL- 90-R and investigate the effects of a training and guiding practices which will be given to teachers for a year above said parameters.*

2.MATERIAL AND METHOD

This study has been done associated with 40 classes and teachers working in the primary schools of Alpaslan, Gölcükler, Menderes and Süleyman Çevik in Menderes district of İzmir province in the academic year of 2012-2013. Sample group consisted of 31 females and 9 males.

In the beginning of academic year of 2012-2013 Symptom Check List -90R reformed by Derogatis et al and known as SCL-90R is utilized with the purpose of determinate the teachers' general state of mental health.

Sample group which was determined in the academic year of 2012-2013 has been subjected to training and guiding practices at the time period of 45 hours at the begining of term and 3 hours every month during the term given by lecturers at the university about the topics of classroom management, anger management in children and adults, effective communication skills, adolescence problems and suggestions of solution, methods of effective learning. At the end of the 2012-2013 academic year, again SCL-90R was applied on the same sample group.

In the begining and at the end of academic year "Independent Groups t-Test" was applied for comparisons which are done through the answers of the same group.

In this context, results obtained from analyses are able to evaluate the differences between individuals who not received trainings (2012) and individuals who received trainings (2013).

Symptom Check List includes 90 substances of problem and 10 substrate.

Scoring of SCL 90-R: SCL-90-R is a scale consists of 90 questions. Individual who answer the scale marks every question with one of these answers: (0)Never, (1)Too little, (2)Intermediate, (3)Pretty much, (4)Advanced. Points of individual about subscale is found by dividing into number of substance at subscale after additioning the degrees of substances. This process is applied for all scales.

Credibility of SCL 90-R: Tufan (1987), found the correlation ratio as 0.83 as a result of his researches about credibility of inventory.

Validity of SCL 90-R: Derogatis et al (1976), found the correlation ratio amongst the various scales of SCL-90-R and M.M.P.I. (Minnesota Multiphasic Personality Inventory) between the values of 0.41 and 0.64 as a result of their researches (Kılıç, 1987).

Position of individual with regards to subscale is determined by additioning the numerical answer values of substances and dividing into number of substance at subscale. "General Symptom Average" is found by dividing summation of all the points obtained from subscales into 90.

In the years of 2012 and 2013 teachers answered the expressions of Symptom Check List on a five graded scale. In this scale while minimum point is 0, maximum point is 4. Therefore the scale enables maximum 4 points for each expression. Expression of scale are (0)Never, (1)Too little, (2)Intermediate, (3)Pretty much, (4)Advanced.

"Independent Group t-Test" is utilized in order to analyze the statistical differences between the averages of given answers for each substrates and also General Symptom Average both in the years of 2012 and 2013.

3.FINDINGS

Effects of in-service training which is given to study group of teachers during the academic year of 2012 about the topics above-stated on the points of Symptom Check List given in the tables below.

Table 3.1. 2012-2013 Differences of General Symptom Average

	Year	N	Average	ss	t	sd	P
General Symptom Average	2012	38	0,58	0,48	1,256	64,65	,214
	2013	31	0,46	0,32			

Table 3.2. 2012-2013 Differences of Somatisation

	Year	N	Average	ss	t	sd	p
Somatisation	2012	39	0,66	0,61	0,842	71	,403
	2013	34	0,55	0,45			

Table 3.3. 2012-2013 Differences of Obsessive-Compulsive Disorder

	Year	N	Average	ss	t	sd	p
Obsessive-Compulsive	2012	40	0,96	0,71	0,349	73	,728
	2013	35	0,90	0,54			

Table 3.4. 2012-2013 Differences of Interpersonal Susceptibility

	Year	N	Average	ss	t	sd	p
Interpersonal Susceptibility	2012	40	0,53	0,55	0,860	73	,393
	2013	35	0,43	0,43			

Table 3.5. 2012-2013 Differences of Depression

	Year	N	Average	ss	t	sd	p
Depression	2012	40	0,66	0,54	0,355	72	,724
	2013	34	0,62	0,45			

Table 3.6. 2012-2013 Differences of Anxiety

	Year	N	Average	ss	t	sd	p
Anxiety	2012	40	0,54	0,55	1,936	61,41	,058
	2013	34	0,34	0,29			

Table 3.7. 2012-2013 Differences of Anger and Hostility

	Year	N	Average	ss	t	sd	p
Anger- Hostility	2012	40	0,48	0,53	0,349	73	,728
	2013	35	0,44	0,48			

Table 3.8. 2012-2013 Differences of Phobic Anxiety

	Year	N	Average	ss	t	sd	p
Phobic Anxiety	2012	40	0,30	0,51	1,730	52,33	,090
	2013	35	0,14	0,20			

Table 3.9. 2012-2013 Differences of Paranoia

	Year	N	Average	ss	t	sd	p
Paranoia	2012	39	0,71	0,60	0,935	72	,328
	2013	35	0,58	0,50			

Table 3.10. 2012-2013 Differences of Psychoticism

	Year	N	Average	ss	t	sd	p
Psychoticism	2012	40	0,28	0,41	1,778	53,35	,081
	2013	34	0,15	0,16			

Table 3.11. 2012-2013 Differences of Additional Clause

	Year	N	Average	ss	t	sd	p
Additional Clause	2012	39	0,62	0,61	1,539	72	,128
	2013	35	0,42	0,45			

ALTERNATIVE TABLE (ALL RESULTS)

Table 3.12. PROBLEMS OF TEACHERS: STATISTICAL DIFFERENCES BETWEEN THE AVERAGES IN THE YEARS OF 2012-2013

	Year	N	Average	ss	t	sd	p
General Symptom Average	2012	38	0,58	0,48	1,256	64,64	,214
	2013	31	0,46	0,32			
Somatisation	2012	39	0,66	0,61	0,842	71	,403
	2013	34	0,55	0,45			
Obsessive-Compulsive Disorder	2012	40	0,96	0,71	0,349	73	,728
	2013	35	0,90	0,54			
Interpersonal Susceptibility	2012	40	0,53	0,55	0,860	73	,393
	2013	35	0,43	0,43			
Depression	2012	40	0,66	0,54	0,355	72	,724
	2013	34	0,62	0,45			
Anxiety	2012	40	0,54	0,55	1,936	61,41	,058
	2013	34	0,34	0,29			
Anger Hostility	2012	40	0,48	0,53	0,349	73	,728
	2013	35	0,44	0,48			
Phobic Anxiety	2012	40	0,30	0,51	1,730	52,33	,090
	2013	35	0,14	0,20			
Paranoia	2012	39	0,71	0,60	0,935	72	,328
	2013	35	0,58	0,50			
Psychoticism	2012	40	0,28	0,41	1,778	53,35	,081
	2013	34	0,15	0,16			
Additonal Clause	2012	39	0,62	0,61	1,539	72	,128
	2013	35	0,42	0,45			

4.DISCUSSIONS AND RESULTS

Before the evaluation of answers that study group has given to the inventory of SCL-90R, properties of substrates must be explained.

- (a) **SOMATISATION (SOM):** Test consists of 12 substances (1.4.12.27.40.42.48.49.52.53.56.58) and represents the difficulties of function disorders in body systems of cardiovascular, stomach, messentery, respirations and other systems. It also determines the functional and physical disorders occuring as a result of unsolved preclusion or conflict.
- (b) **OBSESSIVE-COMPULSIVE (O-C):** Test consists of 10 substances (3.9.10.28.38.45.46.51.55.65) and represents the obsessive-compulsive symptoms. These are the considerations that individuals continously and overwhelmingly experienced despite they do not want to. By using this test, obsessive-compulsive disorders which are defined as repeating considerations and accusations can be identified.
- (c) **INTERPERSONAL SUSCEPTIBILITY (INT):** Test consists of 9 substances (6.21.34.36.37.41.61.69.73). It represents negative considerations and emotions such as personal inadequacy and indignity. As a result of these emotions, an individual underestimate herself/himself and have some troubles with interpersonal relationships by comparison with herself/himself with others.
- (d) **DEPRESSION (DEP):** Test consists of 13 substances(5.14.15.20.22.26.29.30.31.32.54.71.79). It represents living sensations including cognitive and somatic symptoms such as pessimism, despair, absence of motivation, suicidal ideas.
- (e) **ANXIETY (ANX):** Test consists of 10 substances (2.17.23.33.39.57.72.78.80.86).It display symptoms and behaviors caused by clinical anxiety just as disorders, irritability, stress and fatigue. Anxiety is be able to defined as an emotion which makes individual feel like there will be bad news. Object and reason of anxiety is not clear. Literally an individual see waking nightmares.

- (f) **ANGER-HOSTILITY (HOS):** Test consists of 6 substances (11.24.63.67.74.81). It emphasizes attributes such as anger, unrest, defiance, hostility, irritability, aggression and resentment.
- (g) **PHOBIC ANXIETY (PHOB):** Test consists of 7 substances (13.25.47.50.70.75.82). It represents reaction of fear that an individual exhibits insistently to a specific object or situation.
- (h) **PARANOIA (PAR):** Test consists of 6 substances (8.18.43.68.76.83). It represents the hostile, sceptical, centralist, reflector considerations and hallucinations or fears about losing self-dependence.
- (i) **PSYCHOTICISM (PSY):** Test consists of 10 substances (7.16.35.62.77.84.85.87.88.90). It represents the life-style carried out alone, autism and leaving himself/herself to loneliness.
- (j) **ADDITIONAL CLAUSES:** Test consists of 7 substances (19.44.59.60.64.66.89). It represents the symptoms related to sleep disorders, appetite disorders and guiltiness.

As it can be seen from the tables, General Symptom Averages of teachers which are obtained from the results of both in 2012 and 2013 are on the interval of 0,00 – 1,50 for each substrates. (normal). Also the tables given above shows that there is a decrease on the results of not only General Symptom Averages but also the averages of every 10 substrates in the year of 2013 by comparison with in the year of 2012. Nevertheless, differences between the averages do not make sense statistically (on the level of $p < 0,05$).

In addition to this there are 3 substrates that approaching to the level of 0,05 statistical meaningfulness. These are anxiety (avg of 2012=0,54; avg. of 2013=0,34; $p = 0,058$), psychoticism (avg. of 2012=0,28; avg. of 2013=0,15; $p = 0,081$) and phobic anxiety (avg. of 2012 =0,30; avg. of 2012=0,14; $p = 0,090$) respectively. Differences between the averages for each substrates that observed in the years of 2012 and 2013 can only be meaningful as long as the statistical meaningfulness is increased to the level of 0,10.

By analyzing the averages taken for each substrates it is observed that while minimum tendencies of teachers are Psychoticism (avg. in 2012=0,28 ; avg. in 2013=0,15) and Phobic Anxiety (avg. in 2012=0,30; avg. in 2013=0,14); the maximum tendency is Obsessive-Compulsive (avg. in 2012 =0,96; avg. in 2013 =0,90).

In-service training and supervisor support given to the teachers regularly during one year about the topics to overcome with adolescence problems of 6th, 7th and 8th graded students, anger management, classroom management and how to communicate with students and their parents effectively contribute to differences approaching to the level of meaningfulness about teachers' section points of anxiety, phobic anxiety and obsessive-compulsive. This result shows that the in-service training is highly important for teachers in terms of given psychological support and indirect contribution to the students.

REFERENCES

- Abel, M., & Sewell, J. (1999). Stress and Burnout in Rural and Urban Secondary School Teachers. *Journal of Educational Research*(5), 287-293.
- Akçamete, G., S., K., & Sucuoğlu, B. (2001). *Burnout, Job Satisfaction and Personality in Teachers*. Ankara : Nobel Publications.
- Altıntoprak, A. E., Karabilgin, S., Çetin, Ö., Kitapçioğlu, G., & Çelikkol, A. (2008). Stress sources of nurses in job environment; their level of depression, anxiety and life standard: A Comparison study about nurses working intensive care and bed units. *Psychiatry In Turkey*, 10, 9-17.
- Baysal, A. (1995). *Factors Leading Burnout on Highschool Teachers*. İzmir: DEÜ Institute of Social Science.
- Burke, R., & Greenglass, E. (1993). Work stress, role conflict, social support, and psychological burnout among teachers. *Psychological Reports*, 73,371-380.
- Chan, D., & Ek, H. (1995). Burnout and coping among Chinese secondary school teachers in Hong Kong. *Br J Educ Psychol*, 65(1), 15-25.

- Derogatis, L., Richels, A., & Rock, F. (1976). The SCL-90R and MMPI: A stemp in validation of a new self report. *British Journal of Psychiatry*, 128, 280-289.
- Fılık, L., Kan, E., Keşkek, M., Tekşan, H., & Uz, F. (1995). *General mental health evaluation of traffic policemen in the city of Ankara*. Intern Research Report, Ankara.
- Keçeli, B., M.G., B., Aktaş, N., Aksoy, B., Bilgin, E., & Akel, A. (1998). *General mental health evaluation of primary school teachers in the district of Ankara OR-AN Cottage Hospital*. Intern Research Report, Ankara.
- Kılıç, M. (1987). *Problems of Students with and without psychological symptoms*. Ankara: Hacettepe University.
- Kök, M. (200?). *Evaluation of Psychological Symptom Level of Students in Orphanage* . 78-84: Journal of Education Faculty of Pamukkale University .
- Öztürk, M., Güner, Ş., Mete, A., & İlen, E. (1997). *General State of Mental Health Of Long-Distance Drivers and Determination of Affecting Factors*. Intern Research Report, Ankara.
- Şahin, O., Ozbay, Y., Abdullah, K., & Bükülmez, Y. (1996). *Evaluation of General Mental Health Status of 1995-96 Period HUTF Interns*. Intern Research Report, Ankara.
- Tezcan, S., & Aslan, D. (200?). Determination of General Mental Health Status Among Various Occupational Groups in Ankara. *Journal of Crisis*, 9(1), 1-8.
- Tufan, B. (1987). An Investigation About Students' Care for the Self. *Congress of National Psychiatry and Neurological Science*. Ankara.