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PSYCHOMETRIC PROPERTIES OF WORK-RELATED BEHAVIOR AND EXPERIENCE PATTERNS (AVEM) SCALE

MESLEĞE YÖNELİK DAVRANIŞ VE YAŞANTI MODELLERİ (MEDYAM) ÖLÇEĞİNİN PSİKOMETRİK ÖZELLİKLERİ

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ABSTRACT: "Work-Related Behaviour and Experience Patterns" (AVEM) has been developed with the intention of determining the occupation related behaviour and lifestyle models of professionals. This study has been conducted to test the validity and reliability of MEDYAM, the abbreviated Turkish equivalent of AVEM. 373 teachers from 10 different primary and secondary schools participated in the study (28.2% male and 71.8% female). Confirmatory factor analysis results revealed that the data fits well with the model (χ^2 = 4426.30 and df = 2024 RMSEA = 0.056 and SRMR = 0.073). Moreover, the obtained absolute values were between .40 and .99 for Lambda; . 20 and .88 for R^2 value, and 8.04 and 23.09 for t-scores ($p < .05$). In scope of the scale's reliability test, all Cronbach alpha coefficients obtained regarding each dimension varied between 0.72 and 0.85. Findings related to validity and reliability demonstrates the suitability of the MEDYAM scale for studies conducted in scope of determining teachers' work related behavior and experience patterns

Keywords: AVEM, MEDYAM, teacher, stres, burn –out, validity, reliability

ÖZET: "Mesleğe Yönelik Davranış ve Yaşantı Modelleri" (MEDYAM) profesyonel çalışanların, mesleklerine yönelik davranış ve yaşantı modellerini belirleyebilmek amacıyla geliştirilmiştir. Bu çalışma, kısaltılmış şekli ile AVEM'in Türkçe karşılığı MEDYAM'ın geçerlilik ve güvenilirliğini test etmek amacıyla yapılmıştır. Çalışmaya, 10 farklı ilköğretim ve ortaöğretim okulundan, 373 öğretmen (%28.2 erkek, %71.8 kadın) katılmıştır. Doğrulayıcı faktör analizi sonuçlarından elde edilen değerler, verilerin modele iyi uyum gösterdiğini ortaya koymuştur (χ^2=4426.30 ve df=2024 RMSEA=.056 ve SRMR=.073). Ayrıca, elde edilen bulgular içerisinde mutlak değerlerin, Lambda için .40 ile .99; R^2 değeri için .20 ile .88; t skorları için 8.04 ile 23.09 ($p<.05$) aralığında olduğu belirlenmiştir. Ölçeğin güvenirlik testi kapsamında, her bir boyuta ilişkin elde edilen Cronbach alpha katsayılarının, .72 ve .85 arasında değişkenlik göstermiştir. Geçerlilik ve güvenilirlikle ilgili bulgular, MEDYAM ölçeğinin öğretmenlerin mesleki davranış ve yaşantı modellerini belirlemek için yürütülecek çalışmalarda kullanılabileceğini göstermiştir.

Anahtar sözcükler: AVEM, MEDYAM, öğretmen, stres, tükenmişlik, geçerlilik, güvenilirlik

1. INTRODUCTION

Occupational activities demanded by teachers are gradually becoming ever more complicated and intense (Brante, 2009). Maybe this can help explain the loss of appeal in the profession of teaching compared to 30 years ago, both on an international (Watt and Richardson, 2008) and national (Erden, 1998) scale. Tremendous effort is given to increase the attractiveness of teaching as a career in Organisation for Economic Cooperation and Development (OECD) member countries. These efforts concentrate on developing teachers' knowledge and skills, recruiting, selecting and employing teachers as well as retaining effective teachers in schools (OECD, 2005).

Societies are giving great importance to focus their efforts on improving the education system practiced at schools in the hope to better respond to diverse expectations multiplying on a daily basis. Evidently, teachers are given most priority in scope of these efforts (OECD, 2005). The success of an education system is undoubtedly very closely related to the qualities featured by teachers offering education (Gerçek et al., 2006). Increasing the efficacy and value of education offered at schools is directly related to students accessing good quality education and this, to a great extent, is only possible by establishing a framework that makes the profession of teaching appealing to people qualified in this

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area (OECD, 2005). Improving the quality of education is only possible by competent, devoted and healthy teachers (Prenzel et al., 2005).

Professional success of employed individuals is closely related to the satisfaction they get from their jobs. Hence, it would be correct to assume that individuals satisfied by their professional career are in fact devoted to their jobs. However, Kieschke and Schaarschmidt (2008) suggest that strong occupational devotion is not enough on its own to be satisfied in professional life. Compared to other professions, teaching is known to be one of the most stressful jobs and occupational stress in teaching rises as the struggle for success intensifies. Coupled with the impact of expectations from themselves and others, teachers maintaining this struggle for extended periods of time increasingly encounter stress and the risk of disappointment (Jepson and Forest, 2006), presenting the potential of curtailing teachers' occupational devotion (Jepson and Forest, 2006) and therefore adversely effect their teaching efficacy and classroom management skills (Kluusmann et al., 2006).

The significance of teaching means that a broad variety of studies are conducted with the objective of determining occupational opinions and attitudes of teachers and teacher candidates from different disciplines (Çetinkaya, 2009). Teachers' attitude and behaviour is critical in terms of the quality of education they provide (Tsigilis et al., 2006). The profession of teaching is not only difficult but also very demanding. Teachers are confronted with immense pressure and expectations in regards to their personal enthusiasm and skill (Kieschke and Schaarschmidt, 2008). Nowadays researchers generate a large number of studies on the topics of severe occupational pressure, prolonged stress and "job burnout syndrome" emerging as a result of such factors (Muszalska et al., 2007).

The term burnout was first described by Freudenberger as a syndrome potentially seen amongst people involved in tasks with a very high degree of social and ethical responsibility (Bauer et al., 2006). Burnout is especially encountered in areas directly serving people and where service quality is highly dependent on the human factor. Burnout can be described as the individual's alienation from the meaning and purpose of his or her occupation and becoming unable to deal with the people he or she serves, or, in other words, individual's withdrawal from occupational responsibilities in a psychological sense as an outcome of phenomena such as stress and dissatisfaction (Kaçmaz, 2005; Sertöz et al., 2008).

Compared to the past, contemporary financial, political and cultural settings provide a more suitable environment for the development of burnout. Organisations focusing on short-term objectives and the ever-growing presence of technology in human life are factors contributing to the development of burnout. In this context excessive workload, lack of control over effectuated tasks, inadequate awards, loss of positive workplace communication amongst colleagues, injustice and conflicting values stand out as reasons for burnout (Maslach and Leiter, 1997). It is important to pay attention to the physical, mental and behavioural symptoms of burnout because it is generally very difficult to reverse burnout once initiated. Whilst chronic fatigue, weakened resistance to illnesses and alcoholism are the physical symptoms of burnout; deep and pervasive cynicism towards education system, jobs, colleagues and students are the mental symptoms; quitting the profession of teaching following a period of chronic absence or illness stand out as the behavioural symptoms of burnout (Dunham, 2002).

The impact of symptoms presenting themselves as an outcome of burnout are not only limited to the respective individual (Tümkaya, 2000). Whilst these symptoms cause significant personal losses they also threaten to spawn serious problems within the organisations employing these individuals. A decline in personal professional performance and job satisfaction together with weakened organisational loyalty and related rise in resignations present organisations with critical challenges often hard to overcome (Halbesleben and Buckley, 2004). On the other hand, individuals obtaining or having to obtain services from these organisations are also adversely affected from the problems experienced by the individuals offering their services to these organisations. Personal problems experienced by teachers not only adversely affect themselves and the school, but also present the potential of irreversible unfavourable effects on the students and their prospective contribution to society.

Considering burnout related problems in an individual, organisational and civil society context the importance of studies executed with employees become more eminent. The Maslach Burnout

Inventory stands out as the most frequently resorted measurement tool in such studies. However, this inventory remains inadequate in demonstrating the risk of disturbance and individual behaviour in the form of standard and limit values (Sosnowsky, 2007). This fact opened the way for developing different measurement tools capable of better explaining the concept of burnout. The AVEM (**A**rbeitsbezogenes **V**erhaltens- und **E**rlebens**m**uster) developed by Schaarschmidt and Fischer (1997) with this objective is capable of offering diagnostic support incorporating the active participation of respective individuals in determining the development of proposed behaviour. More so, AVEM organises the nominal symptoms of psychological and physiological effects in a specific form (Schaarschmidt and Kieschke, 2007).

Besides being used for a variety of professions (Muszalska et al. 2007; Voltmer, Kieschke & Saphn, 2007; Voltmer, Schauer, Schroder & Spahn 2008) AVEM has especially been used for studies conducted on teachers (Schaarschmidt 2005; Stück, Rigotti & Balzer 2005; Bauer et al. 2006; Kieschke & Schaarschmidt 2008). Besides teachers' work-related behaviour and experience patterns, educational sciences researchers focus on specific subjects like determining risks presenting the potential of adversely effecting teachers' occupational competence and performance (Schaarschmidt and Kieschke, 2007). In either of the stated cases the AVEM inventory can be guiding for implementers in initial and final measurements within the process as well as planning and executing interventions required to improve such adversities (Schaarschmidt ve Fischer 2003).

The objectives of this study are to adapt the AVEM developed by Schaarschmidt and Fisher (1997) into the Turkish language and investigate the validity and reliability of this scale. Investigating AVEM for validity and reliability is not only fundamental for this current study it is also critical in order to be used by future studies conducted in this field.

2. METHOD

2.1. Participants

This study has been effectuated with the approval of school administrations and by permission of Ministry of National Education's Izmir Provincial Directorate. During the application process a questionnaire was distributed amongst 467 teachers from 10 different primary and secondary schools (public and private) and actual feedback from 373 participants (79.87%) was taken into consideration. Of the participants, 28.2% were male and 71.8% were female teachers with an average age of 39.97±8.47 years. Occupational experience of participating teachers varied between 1 and 39 years with an average of 16.24±9.2 years in service (Table 1).

Table 1: Descriptive Statistics for the Sample

		N	%
Gender	Female	268	71.8
	Male	105	28.2
Age	30 years old and below	60	16.1
	31 – 40 years old	143	38.3
	41 – 50 years old	136	33.8
	51 years old and over	44	11.8
Marital Status	Single	83	22.3
	Married	290	77.7
School Type	Public	167	44.8
	Private	206	55.2
Experience	10 years and below	112	30
	11-20 years	148	39.7
	21 – 30 years	88	23.6
	31 years and over	25	6.7

2.2. Work-Related Behavior and Experience Patterns (AVEM)

The AVEM has been developed in German and adapted in to other languages. This scaling scheme has been created in order to uncover various emotional problems existing in the fields of work and health. The objective of this exercise is to enable individuals to cope with occupational difficulties encountered at work by expressing depressing behaviors and living habits presenting the potential of affecting their health. Furthermore, this scale presents opportunities especially in the early diagnosis of health related risk, taking urgent precautions against these risks and putting them into action (Schaarschmidt and Fischer 2003).

The overall assessment material consists of 66 items and 11 dimensions. These components are evaluated on the 5-point Likert scale (from "I totally agree [5]" to "I don't agree at all [1]"). Answer intervals were backed up orally and graphically coded twice on the scale. Each dimension of the AVEM comprises of 6 items. Points belonging to each dimension were calculated independently and these raw points were converted to standard points that vary between 1 and 9. Items with negative expressions (item 13, 16, 19, 22, 23, 30, 31, 33, 49, 54, 55, 56, and 60) are assigned minus signs to calculate exact total values and 6 points are added to the total for each minus value. For example, in the professional ambition dimension with one component in a negative direction, the calculation was: "MEDYAM 2 – MEDYAM 13 + MEDYAM 24 + MEDYAM 35 + MEDYAM 46 + MEDYAM 57 + 6", and for the subjective significance of professions dimension having two negative components the calculation was: "MEDYAM 1 + MEDYAM 12 – MEDYAM 23 + MEDYAM 34 + MEDYAM 45 – MEDYAM 56 + 12".

The explanatory factor analysis results, performed on the original scale, were gathered and arranged on 11 dimensions and these dimensions were divided into three areas of characteristics: Professional commitment (scales 1-5), coping capacity (scales 6-8), and subjective well being (scales 9-11) (Schaarschmidt and Fischer 2003).

Aiming "Multiple Personality Diagnosis", AVEM, consists interpretation of the data towards the self-description of the individual in 11 different dimensions. These dimensions and example items are presented in Table 3. These dimensions all together display behaviors towards profession and four different lifestyle models. These are; Type "G" (*Gesundheit* – Beautiful Health), Type "S" (*Schonung* – Heedless Attitude), Type "A risk group" (*Risiko i.der Selbstüberforderung* – Hyper devotion), Type "B risk group" (Burnout – Exhaustion) lifestyle models. The characteristics of these lifestyle models could be explained as followed (Schaarschmidt and Fischer 2003).

Type "G": Individuals included in this group, not only display healthy behavior towards their profession but they are also in good psychological condition. These individuals have high points regarding their occupational responsibilities. Individuals included in this group have the desire to demonstrate high performance and are capable of containing problems concerning profession from their social life. Indicated as subjective work environment emotions, the capability to cope with problems faced at work by Type ''G'' individuals returned high values in dimensions such as actively struggling with problems, inner peace and balance, professional satisfaction and social support lifestyle. These are considered as positive affection of behaviors towards life in general.

Type "S": With Type "S", behavior is characterised with an unmotivated attitude towards the profession. Individuals included in this type group returned the lowest values in dimensions of subjective importance of the profession, tendency to act, professional ambition and perfectionism. On the other hand, these individuals get the highest points among all types for the "ability to get away" dimension. The point demanding emphasis is the low rate of return in the "giving up" dimension. This demonstrates that the displayed behaviors are not to be interpreted as a decreased tendency towards the profession, but as the pressure of a submissive perception. When overviewed generally, the high values displayed in the "inner peace and balance" dimension reveals the presence of power of resistance to individuals' occupational problems. Gratitude for life is displayed in a positive direction in this situation. However, the intended point in the group type "S" is the display of behaviors towards the profession rather than that of health.

Type "A risk group": The behavior seen at this point is defined as extreme devotion to work and the workplace. Points individuals attain in related dimensions show significant variations. For example, while points gained by individuals for ability to get away are low, points gained in the

dimensions of the subjective importance of the profession, the tendency to do, tendency for perfectionism are substantially high in comparison to other groups. Extreme devotion observed at this level may lead to health problems. These individuals might be unable to prevent situations caused by intensive stress and occupational demands. One of the most important symptoms of this condition could be shown as the rather low points gained from inner peace and balance, and the high points gained from the "giving up" dimension. Extreme professional devotion coupled by the lack of success in return will result in a low level of satisfaction. The rather low points gained at satisfaction of life and social support lifestyle dimensions supports this line of reasoning.

Type "B risk group": This group included individuals with the characteristic behavior defined as "burnout" in relevant literature. While these individuals gain high points in the "giving up" dimension', they gain low points in inner peace and balance, professional satisfaction, and satisfaction of life dimensions. A general overview of obtained values indicates that the points gained in professions' subjective importance and work ambition exhibit significant similarities to those in Type "S". The limiting points obtained in the ability to "get away'' dimension are among the most important points which differ from the type "B risk group". Some attitudes that can be observed at this point include withdrawal, loss of motivation, inability for self-renewal against professional stress, loss of strength, development of negative thoughts and emotions towards the occupation. Such symptoms form the principal characteristics that occur in scope of burnout syndrome.

Each individual is able to display his or her own profile within these reference intervals. More so, individuals who cannot be clearly classified as either one of the possible types G, S, A or B risk groups can be categorized into type combinations (for example: G/S, G/A, S/B, A/B) (Schaarschmidt and Fischer 2003).

2.3. Process

Dr. Schaarschmidt sent the AVEM package to the Turkish research group in both German and English (MECCA) languages. Two independent translators translated the version in each language into Turkish. Later, two academicians competent in English and German compiled both translations from each language into one Turkish translation. Finally these two translations extracted from the original English and German versions of AVEM were examined in structural and semantic contexts and combined into one advanced Turkish translation by a group of scientists under the supervision of an experienced Turkish teacher. Furthermore, the Turkish form of the AVEM obtained through translations from two different languages was presented to fifteen teachers of different fields to be evaluated regarding the clarity of expressions. Taking their suggestions into account produced the final form of the scale. Thus the Turkish form of the AVEM with the acronym "MEDYAM" was developed. This scale was then put into action after obtaining necessary permissions from the Turkish Ministry National Education, Directorate of Educational Research and Development.

We used the SPSS 13.0 software package for statistical data analysis. In view of the internal consistency of the dimensions, Cronbach alpha values were taken into consideration for the reliability analysis and average, standard deviation, maximum and minimum percentages were calculated. With respect to the Cronbach alpha coefficient criteria, 0.70 was accepted as the lowest value sufficient for reliability of the scale.

Confirmative factor analysis was applied to the performed validity analysis. We used Lisrel 8.51 software package. Apart from chi-square (χ^2) statistics, we evaluated Root Mean Square Error of Approximation (RMSEA) and Standardized Root Mean Square Residual parameters to verify the conformity of the data to the model. In evaluating the degree of data stability we examined Lambda-x ($\lambda \geq .40$), which determines the load of the components; R^2 ($\geq .20$), which shows the power of the relations between the dimensions of attached components, and the t-value ($p<0.05$), which shows significance of the relations. We also evaluated points gathered from the data of 373 teachers and determined and interpreted the constituents in each lifestyle model (G, S, A, B).

3.FINDINGS

Item Analysis

We initially calculated the sum of item points to determine items used in scope of the scale and utilised the method of comparing the upper 27% and lower 27% group to establish a comparison between items. We calculated total points after reversing items that were considered negative expressions (items 13, 16, 19, 22, 23, 30, 31, 33, 49, 54, 55, 56 and 60), which were included in the scale prior to this operation.

T-test was conducted to determine the significance of difference between the lower and upper group averages of point distribution belonging to items in the scale. 101 people getting the highest (27%) and 101 people getting lowest points (27%) were respectively incorporated into the upper and lower groups. According to average received values all items presented difference within the lower and upper group and all returned a significant result at p<.05 (Table 2).

Table 2: Item Analysis Results for MEDYAM

Item	Lower 27%		Upper 27%		t	Item	Lower 27%		Upper 27%		t
	Mean	Sd.	Mean	Sd.			Mean	Sd.	Mean	Sd.	
1	3.42	.88	4.37	.79	-8.01*	**34**	2.99	1.02	4.23	.99	-8.69*
2	2.48	1.02	4.06	.94	-11.40*	**35**	2.48	1.02	3.85	1.07	-9.32*
3	2.66	1.23	3.70	1.18	-6.09*	**36**	2.71	.97	3.98	1.10	-8.65*
4	3.83	.82	4.67	.65	-8.05*	**37**	3.24	.97	4.50	.84	-9.89*
5	1.59	.63	4.00	.92	-21.51*	**38**	1.71	.62	3.22	1.41	-9.76*
6	2.16	.95	1.56	1.14	4.00*	**39**	2.48	.87	2.12	1.27	2.31*
7	3.28	.90	4.29	1.01	-7.46*	**40**	3.69	.82	4.76	.47	-11.34*
8	2.62	.88	3.47	1.13	-5.88*	**41**	3.50	.87	4.39	.70	-7.94*
9	3.78	.74	4.67	.53	-9.80*	**42**	3.69	.71	4.66	.49	-11.18*
10	3.75	.80	4.61	.66	-8.30*	**43**	3.38	.93	4.48	.85	-8.70*
11	3.91	.99	4.47	.85	-4.25*	**44**	3.69	1.09	4.61	.73	-7.02*
12	2.58	.86	3.84	.94	-9.86*	**45**	2.75	1.13	3.83	1.27	-6.35*
13	3.25	.96	4.09	1.24	-5.38*	**46**	2.58	.91	3.87	1.09	-9.06*
14	3.80	.84	4.70	.48	-9.28*	**47**	2.49	.79	3.79	.97	-10.45*
15	3.99	.90	4.84	.39	-8.71*	**48**	3.49	.89	4.58	.68	-9.84*
16	2.66	.99	2.18	1.11	3.26*	**49**	3.15	.87	2.77	1.37	2.32*
17	2.07	.82	1.51	1.08	4.08*	**50**	2.33	.89	1.94	1.21	2.57*
18	3.07	.93	4.25	1.01	-8.60*	**51**	3.23	.70	4.25	.96	-8.58*
19	3.54	.96	4.20	1.12	-4.43*	**52**	3.01	.83	4.20	.84	-10.05*
20	3.51	.92	4.47	.94	-7.23*	**53**	2.96	.83	4.11	1.06	-8.51*
21	3.80	.93	4.73	.58	-8.47*	**54**	2.91	.92	3.73	1.05	-5.87*
22	3.05	1.06	3.92	1.30	-5.19*	**55**	2.77	.98	3.51	1.10	-5.04*
23	3.11	1.21	3.68	1.40	-3.11*	**56**	2.12	.97	2.56	1.12	-3.00*
24	2.99	.96	4.16	1.01	-8.37*	**57**	2.94	.78	4.18	.72	-11.62*
25	3.17	.86	4.52	.61	-12.92*	**58**	2.03	.86	3.11	1.20	-7.30*
26	3.48	.92	4.67	.58	-11.01*	**59**	3.14	1.02	3.93	1.32	-4.75*
27	3.31	.95	4.22	.92	-6.88*	**60**	3.33	.89	2.38	.94	7.32*
28	2.50	.97	2.01	1.22	3.18*	**61**	3.16	.93	3.90	1.01	-5.40*
29	3.37	.84	4.52	.74	-10.34*	**62**	2.91	.90	3.81	1.23	-5.92*
30	3.43	1.07	3.92	1.28	-2.97*	**63**	3.20	.78	4.31	.89	-9.36*
31	3.28	1.20	3.74	1.44	-2.48*	**64**	3.68	.76	4.67	.70	-9.57*
32	3.64	1.05	4.81	.41	-10.35*	**65**	3.01	.99	3.76	1.12	-5.03*
33	2.20	.90	3.58	1.45	-8.14*	**66**	3.57	.98	4.44	.89	-6.49*

*p<.05

Validity Analysis

We applied confirmative factor analysis to the data set for the validity analysis and determined to have received compatible results. The following results were obtained after examining fit indexes: RMSEA = 0.056 and SRMR= 0.073, the ratio of chi-square to the degree of independence = (χ^2 /df) 2.19 (where χ^2 = 4426.30 and df = 2024). On the other hand, we determined absolute values in the outcomes to be between 0.40 and 0.99 for Lambda, between 0.20 and 0.88 for R^2 value and between 8.04 and 23.09 for t-scores (p<.05) (Table 3).

Table 3: Confirmatory Factor Analysis Results for MEDYAM

Item	Factor	λ	R^2	t	Item	Factor	λ	R^2	t
1	1	0.45	0.21	8.82*	**34**	1	0.96	0.75	19.70*
2	2	0.75	0.39	11.86*	**35**	2	0.67	0.34	10.94*
3	3	0.60	0.28	10.48*	**36**	3	0.57	0.26	10.02*
4	4	0.45	0.34	11.53*	**37**	4	0.77	0.60	16.80*
5	5	0.89	0.70	19.36*	**38**	5	0.57	0.22	9.30*
6	6	0.66	0.42	12.66*	**39**	6	0.65	0.38	11.82*
7	7	0.47	0.23	9.17*	**40**	7	0.54	0.50	14.67*
8	8	0.54	0.25	9.31*	**41**	8	0.43	0.26	9.64*
9	9	0.51	0.55	15.91*	**42**	9	0.60	0.69	18.78*
10	10	0.53	0.43	13.70*	**43**	10	0.65	0.44	13.81*
11	11	0.44	0.23	9.47*	**44**	11	0.89	0.84	22.06*
12	1	0.44	0.20	8.56*	**45**	1	0.74	0.36	12.15*
13	2	-0.51	0.22	-8.54*	**46**	2	0.49	0.20	8.04*
14	3	0.40	0.30	10.82*	**47**	3	0.85	0.68	18.51*
15	4	0.45	0.37	12.31*	**48**	4	0.52	0.35	11.70*
16	5	-0.99	0.88	-23.09*	**49**	5	-0.57	0.25	-9.90*
17	6	0.48	0.24	9.14*	**50**	6	0.73	0.49	13.90*
18	7	0.53	0.26	9.72*	**51**	7	0.51	0.32	11.02*
19	8	-0.63	0.32	-10.89*	**52**	8	0.77	0.61	16.23*
20	9	0.48	0.24	9.45*	**53**	9	0.66	0.67	18.32*
21	10	0.79	0.81	21.39*	**54**	10	-0.60	0.42	-13.39*
22	11	-0.64	0.29	-10.68*	**55**	11	-0.58	0.24	-9.67*
23	1	-0.97	0.71	-19.04*	**56**	1	-0.68	0.28	-10.37*
24	2	0.59	0.31	10.39*	**57**	2	0.57	0.39	12.01*
25	3	0.84	0.79	20.73*	**58**	3	0.57	0.24	9.62*
26	4	0.63	0.53	15.46*	**59**	4	0.70	0.48	14.51*
27	5	0.55	0.21	8.94*	**60**	5	-0.77	0.55	-16.29*
28	6	0.73	0.46	13.44*	**61**	6	0.60	0.25	9.26*
29	7	0.57	0.35	11.75*	**62**	7	0.50	0.24	9.41*
30	8	-0.65	0.30	-10.36*	**63**	8	0.64	0.45	13.39*
31	9	-0.48	0.31	-11.01*	**64**	9	0.40	0.23	9.39*
32	10	0.69	0.51	15.27*	**65**	10	0.67	0.47	14.39*
33	11	-0.89	0.77	-20.52*	**66**	11	0.58	0.36	12.25*

*p<.05

Reliability Analysis

In scope of the scale's reliability test, all Cronbach alpha coefficients obtained regarding each dimension varied between 0.72 and 0.85 (Table 4).

Table 4: Means, Standard Deviations and Cronbach Alfa Coefficients for MEDYAM

Subscale (sample item)	M	Sd	Min.	Max.	α
1. Subjective significance of work (''Work is the most important element in my life.'')	6.48	1.67	0.3	11.3	.78
2. Professional ambition (''I want to achieve more in my career than most people I know.")	5.70	1.63	1.1	3.5	.72
3. Tendency to exert (''If necessary, I will work until I am exhausted.'')	5.59	1.60	0.8	2.4	.79
4. Striving for perfection (''My work should never contain errors or deficiencies.'')	6.00	1.79	1.1	6.7	.82
5. Emotional distancing (''After work is over I can forget about it quickly.'')	4.62	1.55	0.8	1.9	.81
6. Resignation tendencies (''I quickly resign myself to lack of success.'')	4.45	1.67	3.2	0.8	.77
7. Offensive coping with problems (''For me, difficulties are there to overcome.'')	5.02	1.86	3.8	2.1	.72
8. Balance and mental stability (''I don't get upset easily.'')	5.64	1.92	1.1	8.8	.76
9. Satisfaction with work (''Until now I have been successful in my work.'')	5.55	4.69	0.8	5.1	.79
10. Satisfaction with life (''So far, I have been satisfied with my life.'')	5.23	1.78	2.4	4.3	.85
11. Experience of social support (''My partner shows understanding for my work.'')	4.57	1.74	3.8	2.7	.80

Evaluating data obtained from 373 teachers working at different schools, we found the distribution of type groups in descending order to be: Type "G" (44.5%), Type "A group risk" (34.0%), Type "S" (12.3%) and as Type "B group risk" (9.1%) (Table 5).

Table 5: Statistical Distribution of Type Groups

	Type G	Type S	Type A	Type B	Total
n	166	46	127	34	373
%	44.5	12.3	34.0	9.1	100.0

4. DISCUSSION

This study conducted with the objective of adapting the AVEM developed by Schaarschmidt and Fisher (1997) into the Turkish language and determine the validity and reliability of this scale found that the Turkish adaptation of the scale termed MEDYAM is suitable for use as a valid and reliable scale.

Considering the item analysis results performed with the objective of validity for the scale, we compared total item points using t-test belonging to lower and upper groups consisting of 101 individuals each categorised into segments of 27% and determined significant differences ($p<0.05$). The item analysis performed to prove that the qualities desired to quantify, which happen to be the primary indicator for the internal consistency of the test, can actually be quantified without the need for comparison with other qualities by items within the scale (Tavşancıl, 2002), can be substantiated by the significant difference observed amongst groups (Büyüköztürk, 2004). Applying DFA, another structural validity measurement method, determined the ratio of χ^2 value to the degree of independence to be 2.19. Taking fit indexes into account, obtaining a ratio of less than 3 for χ^2 value to the degree of independence demonstrate a good degree of compatibility (Kline, 1998) between the model and data since χ^2 value has the potential of revealing variability according to the size of the sample (Byrne, 1998).

Analysing other fit indexes, finding the values RMSEA= 0.056 and SRMR= 0.073, again demonstrate compatibility between the model and data. Hu and Bentler (1999) report that RMSEA and SRMR values should respectively be close to or smaller than 0.06 and 0.08 to demonstrate good fit between data and model. Values obtained based on the assumption of Lambda-x values ≥0.40; taking

the value of ≥0.20 as limit value amongst R^2 values as criteria and calculating t-scores to be $p<0.05$ we see that the obtained values have significance.

Considering the fact that internal consistency coefficients larger than 0.70 are adequte in terms of scale reliability we observe that the reliability values obtained for MEDYAM dimensions are complient with specified values. More so, making a comparison based on the internal consistency coefficients of the original scale it is interesting to see that we observe directly porportional and almost identical results on a dimension scale between AVEM and MEDYAM.

Looking at the distribution of type groups in perspective of obtained results we see that almost half (Type "Risk Group A" = 34% and Type "Risk Group B" = 9.1%) of the sample group are classified in the category considered to be negative in regards to health. 9.1% of teachers participating in the study were burnt out (Type B) and a significantly high rate (34%) were Type A teachers who are extremely devoted to their occupation however remain under psychological pressure for failing to achieve the targeted level of success, falling in the category considered to be negative in regards to health.

Looking at the study results conducted by Bauer et al. (2006) on 406 teachers using the English version of AVEM, MECCA where 32.5% of teachers were found to be burnt out (Type B) and 17.7% of them to be individuals devoted to their occupation but under psychological pressure we could say that, compared to colleagues in other countries, teachers in Turkey are in a better state in terms of burnout. The findings we derived from this study are coherent with the findings of Demirel et al. (2005) who reported that the occurrence of burnout amongst teachers in Turkey are lower than that of their colleagues in most developed countries.

In conclusion we saw that the MEDYAM scale is a reliable and valid measurement tool within the profession of teaching in asserting work-related behaviour and experience patterns for teachers. We are persuaded that, besides its general-purpose use, MEDYAM can effectively be utilised within scope of school practices at the beginning and end of each academic year. In context of these practices, we determined that school administrations will have the opportunity of evaluating changes in work-related behaviour and experience patterns amongst teachers and have the opportunity of taking necessary measures.

On the other hand, although it is pleasing to know that burnout level amongst teachers participating in our study is considerably low compared to their colleagues in developed European countries, this finding nonetheless brings several important questions with it. At the same time, we believe that conducting psychometric measurements amongst various other professions will be beneficial for the effective use of the MEDYAM Scale.

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GENİŞLETİLMİŞ ÖZET

Bu çalışmanın amacı, Mesleğe Yönelik Davranış ve Yaşantı Modelleri (AVEM-MEDYAM) ölçeğinin, Türk öğretmenler üzerinde, güvenilirlik ve geçerlik çalışmasının yapılmasıdır. Bireylerin sürekli artan ve çeşitlilik gösteren beklentilerini karşılayabilmek için tüm ülkeler, eğitim faaliyetlerini geliştirebilmek çabalarına ağırlık vermişlerdir. Bu çabalar içerisinde öğretmenler, eğitim sistemi içerisinde sahip oldukları rolün önemi ile her zaman ön plana çıkmaktadır. Öğretmenler bireylerin, dolayısıyla toplumların gelişimde son derece önemli rollere sahiptir. Yapılan çeşitli araştırmalarda, eğitim kalitesini ancak yetkin, mesleğine bağlı ve sağlıklı öğretmenlerin geliştirebilecekleri önemle vurgulanmaktadır. Dolayısıyla bu çalışma öğretmenler üzerinde gerçekleştirilmiş ve çalışmaya örneklem olarak çeşitli ilköğretim ve ortaöğretim kurumlarında profesyonel olarak görev yapmakta olan 373 öğretmen (%28.2 erkek, %71.8 kadın) katılmıştır. Çalışmaya katılan öğretmenlerin mesleki deneyimleri, 1 yıl ile 39 yıl arasında değişmekte olup, hizmet yılı ortalamasının 16.24±9.2 olduğu tespit edilmiştir.

MEDYAM ölçeği, toplamda 66 madde ve 11 boyuttan oluşmaktadır. Bu maddeler 5'li Likert tipi ölçüme göre değerlendirilmektedir (Tamamen Katılıyorum [5] – Hiçbir Şekilde Katılmıyorum [1]). Cevap aralıkları, ölçek üzerinde sözlü ve grafik olarak iki kere kodlanarak desteklenmektedir. Ölçek, 11 alt boyutun oluşturduğu 3 temel alan üzerine toplanmış ve düzenlenmiştir. Bu alt boyutlar sırasıyla, İşin Öznel Önemi (özel yaşam içersinde işin yeri), Mesleki Hırs (mesleki başarı ve yükselmeye yönelik çaba), Başarma Eğilimi (mesleki görevleri eksiksiz yerine getirebilmek için tüm gücünü kullanma eğilimi), Mükemmelliyetçilik Çabası (bireysel çalşma performansının iyiliğine ve eksiksizliğine yönelik çaba), Duygusal Uzaklaşma Yeteneği (işe yönelik psikolojik rahatlama yeteneği), Pes Etme Eğilimi (başarısızlıkla oluşan kolay pes etme eğilimi), Problemlerle Aktif Mücadele (oluşabilecek ve karşılaşılan problemlere yönelik aktif tutum), İçsel Huzur ve Dengeleme (içsel denge ve psikolojik kararlılık yaşama) Mesleki Doyum (meslekte ulaşılan noktadan duyulan memnuniyet), Yaşam Doyumu (meslek hayatında olduğu gibi genel anlamda da yaşamdan duyulan memnuniyet) ve Sosyal Destek Yaşantısı (yakınında bulunan insanların desteğine inanmak) şeklindedir. Bu alt boyutlar,"Mesleki Bağlılık" (1.– 5. boyutlar), "Başa Çıkma Kapasitesi" (6.– 8. boyutlar) ve "Öznel Duygu Bütünlüğü" (iş ortamı içerisinde) (9. – 11. boyutlar) temel alanlarını oluşturmaktadır.

Bu temel alanları oluşturan alt boyutların hepsi birden, "Mesleğe yönelik davranış" ve dört farklı "Yaşantı modelini" ortaya koymaktadır. Bu yaşantı modelleri; Tip "G" (Güzel Sağlık), Tip "S" (Sakınmacı Davranış), Tip "A" (Aşırı Bağlılık), Tip" B" (Burnout – Tükenmişlik) yaşantı modelleridir. Tip "G" grubu içerisinde yer alan bireyler, işlerine yönelik sağlıklı bir davranış sergilemekle beraber psikolojik olarak da iyi durumdadırlar. Bu bireyler, işe yönelik mesleki sorumluluklarına ilişkin yüksek puanlara sahiplerdir. Tip "S" grubu içerisinde yer alan bireyler, İşin Öznel Önemi, Yapma Eğilimi, Mesleki Hırs ve Mükemmeliyetçilik Çabası boyutlarında en düşük değerlere sahip iken, Uzaklaşabilme Yeteneği boyutunda diğer tip gruplarına göre en yüksek puanları almaktadırlar. Tip "A" grubu içerisinde yer alan bireylerin, Uzaklaşabilme Yeteneğine ilişkin aldıkları puanlar düşükken, İşin Öznel Önemi, Yapma Eğilimi ve Mükemmeliyetçilik Eğilimi boyutlarında aldıkları puanlar diğer gruplarla karşılaştırıldığında oldukça yüksektir. Bu bireyler, işle ilgili taleplere ve yoğun strese bağlı durumlara karşı koyamayabilirler. Bu noktada gözlemlenen Aşırı Bağlılık durumu, bu bireyler için sağlık sorunları yaratabilmektedir. Tip "B" grubu içerisinde yer alan bireylerin, İşin Öznel Önemi ve Mesleki Hırs boyutlarında elde ettikleri puanlar Tip "S" ile büyük oranda benzerlik göstermektedir. Tip "B" grubunu farklılaştıran noktaların başında, Uzaklaşabilme Yeteneği boyutunda alınan düşük puanlar gelmektedir. Bu noktada gözlenebilecek durumlar, kendini geri çekme, motivasyon azalması, mesleki yüke karşı kendini yenileme gücünün kaybolması ve işe yönelik olumsuz duygu ve düşüncelerin oluşumu şeklinde sıralanabilir. Bu tür belirtiler, tükenmişlik sendromu içerisinde yer alan temel noktaları oluşturmaktadır. Bunların yanı sıra, olası tip gruplarının içerisinde (Tip – G, S, A veya B) net olarak yer alamayan bireyler, tip kombinasyonları içerisinde de tanımlanabilmektedirler (örn. G/S, G/A, S/B, A/B). Böylesi bir durumun gerçekleşmesi halinde, tanıya yönelik erken teşhis ve ön müdahale anlam kazanmaktadır.

Çalışmada hataya yer vermemek amacıyla, orijinal ölçeğin yaratıcısı olan uzman ekiple birlikte çalışmalar sürdürülmüş ve gelişmiş istatiksel uygulamalardan yararlanılmıştır. Verilerin güvenirlik değerlerinin hesaplamasında, SPSS 13.0 paket programı kullanılmıştır. Yapılan güvenilirlik analizinde, boyutların iç tutarlılık bakımından Cronbach alpha değerleri dikkate alınmış; ortalama, standart sapma, minimum ve maksimum değerleri hesaplanmıştır. Cronbach alfa iç tutarlılık katsayısı ölçütü olarak en düşük .70'in, ölçek güvenilirliği için yeterli olduğu kabul edilmiştir. Geçerlilik analizinde ilk olarak madde analizi uygulanmıştır. Elde edilen sonuçlar alt (%27) ve üst (%27) gruplara ait toplam madde puanları arasındaki farkın anlamlı olduğunu ortaya koymaktadır. Daha sonra gerçekleştirilen doğrulayıcı faktör analizi uygulaması için LISREL 8.51 paket programından yararlanılmıştır.

Yapılan yapı geçerliliği analizinde maddelerin Lambda, R^2 ve t değerleri incelenmiş ve bunun yanı sıra χ^2 istatistiği uygulanarak önemli uygunluk indekslerine bakılmıştır. Elde edilen sonuçlar, Lambda için .40 ile .99; R^2 değeri için .20 ile .88; t skorları için 8.04 ile 23.09 ($p<.05$) aralığında olup anlamlı olarak belirlenmiştir. Doğrulayıcı faktör analizi sonuçlarından elde edilen değerler χ^2=4426.30 ve df=2024 (χ^2/df = 2.18), RMSEA=.056 ve SRMR=.073 şeklinde tespit edilmiş ve verinin modele iyi uyum gösterdiğini ortaya koymuştur. Yapılan güvenirlik analiz sonuçlarına bakıldığında ise Cronbach alpha katsayılarının, .72 ve .85 arasında değişkenlik gösterdiği ve oldukça iyi sonuçlar ortaya koyduğu görülmektedir. Bu bilgiler ışığında, orjinal AVEM ölçeğinin MEDYAM olarak adlandırdığımız Türkçe versiyonunun, öğretmenler üzerinde uygulanabilir olduğu görülmüştür.

Çalışmaya katılan öğretmenlerin tip gruplarının dağılımına bakıldığında, elde edilen sonuçlar doğrultusunda, örneklem grubunun hemen hemen yarısının (Tip "Risk Grup A" = %34 ve Tip "Risk Grup B"=%9.1) sağlık açısından olumsuz olarak değerlendirilen sınıf içersinde yer aldığı görülmektedir. Fakat bu grup içersinde tükenmiş olarak değerlendirilen Tip B grubunun oldukça az bir yüzdeye sahip olduğu da dikkat çekici bir sonuç olarak görülmektedir.

Eğitim sektörünün öncelikli sorunlarından olan öğretmen sağlığı ve mesleğe yönelik davranışların değerlendirilmesi açısından MEDYAM kılavuz bir araç olarak kullanılabilir. MEDYAM genel amaçlı kullanımın yanı sıra, okulların kendi bünyelerinde, öğretim yılı başında ve sonunda yapılacak uygulamalarda da kullanılabilir. Okul yönetimleri, çalışan öğretmenlerinin eğitim öğretim yılı başında, ortasında ve hatta sonunda mesleğe yönelik davranış ve yaşantı modellerini belirleyip, zaman içerisinde oluşan değişimleri değerlendirebilir ve gerekli önlemleri alabilirler.