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Development of motivation scale for teachers

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Abstract

The purpose of this study is to develop a motivation scale for teachers. The scale is developed based on Herzberg's two factor motivation theory. Initially constructed motivation scale has 51 items and was administered to 150 teachers. The explanatory factor analysis is conducted to identify the factors in the motivation scale. Four factors are identified as a result of the analysis. Four factors explained 60.9 percent of the total variance. Cronbach Alpha internal consistency coefficients varied between 0.811 and 0.904. The results indicated a reliable and valid motivation scale that can be used to measure teachers' motivation in Turkish.

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1. INTRODUCTION

Motivation is defined internal state that initiates, directs and sustains our behaviors (Woolfolk, 2001). Motivation divided into intrinsic and extrinsic motivation. While intrinsic motivated people participate the activities for its own sake; extrinsic motivated people participate the activities to get rewards (Moreno, 2010).

Theories that explain how human motivate are behaviorism, cognitivism and humanism (Arends & Kilcher, 2009). Behaviorists contend reinforced behaviors maintain, unreinforced behaviors extinct. That is, behavior is controlled by an external stimulus. If people receive an reward because of their behavior, they demonstrate same behavior more eagerly (Senemoğlu, 2001). Cognitivists explain motivation as a struggle of understanding and exploring world. People are motivated to reach equilibrium when they live cognitively disequilibrium (Eggen & Kauchak, 2004). According to humanists, source of motivation is satisfying the needs. Humans interacts their environment in order to satisfy their needs and, needs control human behaviors. Maslow proposed hierarchy of needs. Sequence of needs that must be satisfied (Santrock, 2011):

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- * Physiological. Hunger, thirst, sleep.
- * Safety. Ensuring survival, such as protection from war and crime
- * Love and belongingness. Security, affection, and attention from others
- * Esteem. Feeling good about oneself
- * Self-actualization. Realization of one's potential (highest and the most elusive need).

Self-actualizing people are accepted by self and others, spontaneous, democratic, creative, humoristic, and independent, that is, psychological healthy (Slavin, 2006).

Another humanistic motivation theory is Herzberg's two factor theory. First factor is motivator (satisfying) that intrinsic to job is achievement, recognition for achievement, the work itself, responsibility, and growth or advancement. Other factor is hygiene (dissatisfying) that extrinsic to job is company policy and administration, supervision, interpersonal relationships, working conditions, salary, status, and security. This study based on Herzberg's two factor theory (Herzberg, 2003).

The aim of this study is to develop scale of motivation for teachers. So, it can be used to measure motivation level of teachers.

2. METHOD

2.1. Writing items of scale

Initially, a pool of item was assembled from a variety of resources including a thesis, articles, and scales. Items was written according to Herzberg's motivation theories. Trial form of scale consisted of a total of 51 items. Teachers marked Any (1), little (2), moderate (3), very (4), completely (5).

2.2. Pilot Study

Scale was applied to 150 teachers from different branches attending in Zonguldak province in 2011-2012 academic year for validity and reliability study.

2.3. Analysis of Data

Factor analysis was conducted in order to reveal the construct validity of the scale. Eigenvalue is greater than 1 is considered to be significant factors. Items which don't load any factor and items loaded to multiple factor was extracted from scale.

3. FINDINGS

Exploratory factor analyses was conducted for construct validity of scale. Kaiser Meyer Olkin Measure of Sampling Adequacy, Bartlett sphericity test and determinant value of correlation matrix was applied for appropriateness of data for factor analysis. KMO value of the data was 0.866 whereas the value of Bartlett's sphericity test was significant. Seeing that the KMO value was higher than 0.60 and Bartlett's sphericity test yielded a significant result, it was concluded that it would be appropriate to conduct a factor analysis (Büyüköztürk, Çakmak, Akgün, Karadeniz & Demirel, 2008).

Kolmogorow-Smirnow test was used for normality of data. According to analysis it was observed distribution of data wasn't normal. So, principal axis factoring method was applied as a factor analysis method. Common variance values of items were between 0.437 and 0.710.

Factors of scale, explained variance by each factor, internal constituency, factor loadings and corrected item total correlations of items obtained from factor analysis were presented in Table 1.

Table 1. Factor Analysis

	Communication		Progress in Profession		Institution		Expectation	
	Factor Loading	Item-total corr	Factor Loading	Item-total corr.	Factor Loading	Item-total corr.	Factor Loading	Item-total corr.
10	0.744	0.760						
6	0.708	0.711						
5	0.684	0.670						
7	0.634	0.603						
11	0.628	0.608						
8	0.625	0.594						
2	0.592	0.616						
14			0.615	0.620				
18			0.724	0.687				
20			0.460	0.504				
21			0.795	0.719				
24					0.513	0.540		
29					0.569	0.598		
30					0.534	0.608		
32					0.477	0.564		
33					0.615	0.662		
35					0.690	0.674		
36					0.674	0.693		
37					0.727	0.703		
43							0.717	0.746
44							0.751	0.785
45							0.712	0.747
46							0.620	0.658
48							0.723	0.753
49							0.672	0.664
50							0.656	0.654
Explained variance (%)		36.732		7.358		10.138		6.684
Cronbach Alpha		0.873		0.811		0.870		0.904

When examined Table 1, it is seen the scale consists of 4 factors that eigenvalue of it is greater than 1. First factor was named as a communication. This factor has 7 items. Factor loadings were between 0.592 and 0.744 ; corrected item-total correlations were between 0.594 and 0.711. it explained 36.732 % of total variance. Cronbach internal constituency coefficient was calculated as a 0.873. Second factor of scale was named as a progress in profession. This factor has 4 items. Factor loadings were between 0.460 and 0.794; corrected item-total correlations were between 0.504 ile 0.719. It explained 7.358 % of total variance. Cronbach internal constituency coefficient was calculated as a 0.811. Third factor of scale was named as a instution. This factor has 8 items. Factor loadings were between 0.477 and 0.727; corrected item-total correlations were between 0.540 ile 0.703. It explained 10.138 % of total variance. Cronbach internal constituency coefficient was calculated as a 0.870. Fourth factor of scale was named as a expectations. This factor has 7 items. Factor loadings were between 0.620 and 0.751; corrected item-total correlations were between 0.654 ile 0.785. It explained 6.684 % of total variance. Cronbach internal consistency coefficient was calculated as a 0.904. All factors explained 60,9 % of total variance. Explained variance between 40% and 60% is sufficient for multi factorial designs (Çokluk, Şekercioğlu ve Büyükoztürk, 2010).

4. CONCLUSION

Scale of motivation for teachers developed by researchers can be used to identify sources and level of teachers' motivation. Because motivated teachers can be successful in their profession. So, necessary precaution can be taken.

Scale constitutes 4 four factors. Each factor explain important parts of total variance. Also, factor loadings and corrected item-total correlations items is very high. Factors' internal constituency coefficient least 0.811. According to these data, it can be interpreted the scale (Appendix A) measure validly and reliably motivations of teachers. Also, scale can be tried in different samples.

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Appendix A. Motivation Scale

How does Items motive in below? Mark, pls.		None	Little	Moderate	A lot	Fully
2	Active interaction between colleagues					
5	Valueing colleagues reciprocally					
6	Situmalting cooperation in instution					
7	Relations between parents-teacher					
8	Relations between student-teacher					
10	Positive relations among colleagues.					
11	Espousal of profession					
14	Opportunity of carrier					
18	Oppotunity of progress in profession					
20	Salary					
21	Advancement					
24	Security is instution					
29	Not to be monoton					
30	Health care presented by instution					

32	Participating to decisions in instution	Expectations
33	Sufficient equipment	
35	Too workloads	
36	Appropriateness of work hours ?????	
37	Sufficient of orientation system	
43	Appreciation of the work from administrators	
44	Positive critics	
45	Social activities presented by instution	
46	Participating administration	
48	Being fair of administer	
49	Interest and help for special issues.	
50	Using initiative	