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## Examining the Validity of MWEP Scale in Turkish Culture

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### Abstract

This study aims to assess validity of Turkish version of Multidimensional Work Ethic Profile (MWEP). In 2007, MWEP has been used as an international scale to measure work ethic in English, Spanish and Korean cultures. Examining its validity in Turkish culture helps to discern its extent of generality and comprehensiveness. Sample group consisted of 312 employers, senior and intermediate level managers and freelance employees who were working in commercial and industrial SMEs, large bureaucratic and network enterprises in Istanbul, economic capital of Turkey. Results of Factor analysis indicated that Turkish version of MWEP didn't exactly measure all work-ethic dimensions proposed by Miller et al. (2002). Further analyses revealed that 9 items of 10 in 'Leisure' dimension, only 5 items of 10 in 'Centrality of work', 'Morality/Ethics', 'Self-Reliance' dimensions measured the same dimensions of English version of MWEP scale.

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### 1. Introduction

Turkey has experienced significant economic, political and ideological changes since 1990. Many people think that economic development along with political changes arises out of a kind of neo-liberal Islamism in Turkish society (see Yurdakok, 2009; Tugal, 2011). Some others believe that Islam is fundamental source of actual changes and of economic development process in the country like Protestantism in the early stage of capitalism in Europe (ESI Research Report, 2005). On the contrary, some are referring to a kind of adaptation and interrelation between economic infrastructure and religious and political superstructures (e.g. Gumuscu, 2008). In recent works, the relationship between neo-liberalism and Islam in Turkey is considered, either as "marriage" of two dynamics aiming separately to transform the state, which has been both secular and devout before (Atasoy, 2009), or as a consequence of "*the absorption of the Islamist conservatism by the neo-liberal state*" (Tugal, 2009). Whatever the relation might be between Islam and capitalism, the concrete consequence of this was the emergence of a new entrepreneurial class in Turkey which has a work ethic equipped with the frankly religious connotations (Ozdemir, 2006; Adas, 2006; Hosgor, 2011). Hence, during the last 10 years, Turkey has undergone

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a growth rate of 6.5% on average and in this process of development the role of conservative Islamist businessmen was quite obvious.

In this context, the role of the new work ethic spread out especially among the conservative business circles should certainly be studied. Is there really a distinct work ethic in Turkey? Do Islamic values make any distinction between Turkey and Western countries? To answer these questions, we should probably have a scale to measure work ethic, which at the same time is relevant to the Turkish context.

Reviewing the related literature indicates that attempts to elaborate a scale for work ethic construction dates back to 1960s. Goldstein and Eichhorn's *Protestant Ethic Scale* (Goldstein & Eichhorn, 1961) is perhaps the first model to measure work ethic qualitatively. Another scale, *Pro-Protestant Ethic Scale*, belongs to Blood (1961). Nonetheless, *Mirels and Garrett Scale* -or also known as the *Protestant Work Ethic Scale* - (Mirels & Garrett, 1971) is another seminal scale. Other scales namely the *Spirit of Capitalism Scale* (Hammond & Williams, 1976); the *Work and Leisure Ethic Scale* (Buchholz, 1978); the *Eclectic Protestant Ethic Scale* (Ray, 1982); the *Australian Work Ethic Scale* (Ho & Lloyd, 1984) and the *Multidimensional Work Ethic Profile* (MWEP) (Miller et al., 2002) are used by scholars in socio-psychological research.

This study tries to examine feasibility of MWEP as the most through work ethic scale in Turkey. Woehr, Arciniega and Lim (2007) studied equivalence of this scale across different cultures in Korea, Mexico, United States, and elaborated its Korean and Spanish versions. Having used in a different culture, Turkish culture, MWEP can reveal to what extent this scale can be used as a universal scale. In previous studies in Turkey, scholars (for example see Arsalan 2000, 2001; Bozkurt et al., 2010) have used Mirels and Garrett's PWE scale (1971) widely for work ethic measurement. Application of MWEP in Turkey can measure work ethic precisely on the one hand, and introduce Turkish version of MWEP on the other.

## 2. Review of literature

Various scales have introduced to measure Protestant work ethic construction since 1960s (Goldstein & Eichhorn, 1961; Blood, 1961; Mirels & Garrett, 1971; Hammond & Williams, 1976; Buchholz, 1978; Ray, 1982; Ho & Lloyd, 1984; Miller et al. 2002). There has been a serious debate among scholars regarding reliability of the Protestant Work Ethic Construction whether this will cover each of these dimensions or not. Furnham (1990) carried a factor analysis on seven Work Ethic scales and drew 5 interpretable factors "belief in hard work", "leisure avoidance", "independence from others", "moral and religious beliefs" and "asceticism".

Miller, Woehr, and Hudspeth (2002) have criticized previous Protestant Work Ethic scales and instead of them they introduced multi-dimensional Work Ethic scale. They argued that the previous scales were not capable of measuring various aspects of Work Ethic. From their perspectives, the Work Ethic construct is multi-dimensional and includes: centrality of work, hard work, leisure, wasted time, self-reliance, morality/ethics and delay of gratification dimensions. The Multidimensional Work Ethic Profile (MWEP) developed by Miller, Woehr, and Hudspeth's was used internationally later in England, Spain and Korea to examine its validity as an international criterion for Work Ethic. Woehr, Arciniega, and Lim (2007), later indicated that the application of the original English and subsequently developed Korean and Spanish versions of the scale on a sample composed of three different populations gave consistent results and found also that the three language versions of the scale measured similarly seven work ethic dimensions proposed originally by Miller et al. (2002). A study undertaken by Ebadollahi Chanzanagh and Akbarnejad (2011) is an example of the latest attempt to measure validity of MWEP. They tried to measure validity of the scale in an Islamic culture. Results revealed that Persian version of scale have a close proximity to MWEP in its English, Spanish and Korean versions. The result also represents that 7 work ethic dimensions in these cultures apply to Persian version as well (Ebadollahi & Akbarnejad, 2011).

### 3. Method

The present paper applies MWEP (Miller et al., 2002) in Turkish culture as a new context. Sample group was composed 312 employers and managers. They were working in commercial and industrial Small and Medium Enterprises/SMEs (“Glocal” entrepreneurial spirit), large bureaucratic enterprises (“National” entrepreneurial spirit) and network enterprises (“Global/Informational” entrepreneurial spirit) in Istanbul. Factor analysis is used to assess the extent to which Miller, Woehr, and Hudspeth (2002) scale apply to Turkish culture as it has been in American, Mexican, Korean and Persian cultures. In the other words, the factor analysis result is used to validate scope of this scale in Turkish culture.

The MWEP scale was translated into Turkish language. The scale has 65 items to measure seven dimensions of work ethic, which are conceptually different. The seven dimensions are work centrality, morality/ethics, hard work, self-reliance, leisure, wasted time and delay of gratification. Each of seven dimensions is evaluated by 10 items, with the exception of the “delay of gratification” dimension which is assessed by 7 items and “wasted time” dimension by 8 items (Woehr, Arciniega, & Lim, 2007). Likert-type scales (1=strongly disagree, 5=strongly agree) are used in the questionnaire.

### 4. Results

Data analysis of the present paper has two parts. The first part deals with the validity of MWEP and the second part regards its reliability.

#### *i. The validity of MWEP*

Investigating the extent to which the results of factor analysis are in line with the MWEP seven dimensions is the main purpose of the current research. Results showed that KMO is .853 which is greater than 0.5. It means that the number of respondents is enough to run factor analysis. The amount of Bartlett’s Sphericity is 7901.686 with a significance level of .000. Bartlett’s Sphericity also reveals that the questions contained in each factor are correlated with each other at higher root because significant amount is accurately done.

Table 1. KMO and Bartlett’s test

<b>KMO &amp; Bartlett’s Test</b>		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy		.853
Bartlett’s Test of Sphericity	Approx. Chi-Square	7901.686
	Df	2080
	Sig.	.000

The results of Scree’s test shows that based on the data we can define 7 factors. Furthermore, according to residue correlation matrix, 7 factors could explain 42 percent of variances in observations.

Table 2. Total variance explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loading			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	11.221	17.264	17.264	11.221	17.264	17.264	9.679	14.891	14.891
2	4.577	7.042	24.306	4.577	7.042	24.306	3.925	6.038	20.928
3	3.837	5.903	30.209	3.837	5.903	30.209	3.847	5.919	26.847
4	2.447	3.765	33.974	2.447	3.765	33.974	2.827	4.350	31.197
5	1.868	2.874	36.847	1.868	2.874	36.847	2.589	3.983	35.180
6	1.823	2.804	39.652	1.823	2.804	39.652	2.415	3.715	38.895
7	1.534	2.360	42.011	1.534	2.360	42.011	2.026	3.116	42.011

Factor analysis (principal components method, selecting 7 factors, Varimax rotation) was used to reveal the ways 65 items are loaded around factors. It is presented at table 3 which are as follows:

Table 3. Items' loading in Turkish version of MWEP

Factor /Dimensions	English version	Turkish version
Factor 1 (Hard Work)	<u>17, 20, 22, 24, 35, 38, 45, 47, 53, 60</u>	<u>38, 24, 60, 35, 45, 65, 22, 46, 20, 19, 21, 52, 62, 23, 55, 17, 26, 29, 12, 47, 58, 36, 56, 64</u>
Factor 2 (Leisure)	<u>5, 8, 14, 18, 27, 31, 43, 49, 58, 63</u>	<u>5, 8, 31, 14, 18, 43, 63, 27, 49</u>
Factor 3 (Morality/Ethics)	<u>7, 15, 16, 25, 37, 48, 51, 54, 57, 61</u>	<u>15, 25, 6, 7, 9, 13, 1, 4, 2, 61, 39, 51</u>
Factor 4 (Centrality of Work)	<u>2, 4, 10, 13, 30, 33, 40, 41, 52, 64</u>	<u>33, 40, 41, 10, 30</u>
Factor 5 (Wasted Time)	<u>1, 9, 12, 23, 36, 39, 65, 56</u>	<u>48, 57, 53, 16, 37, 54</u>
Factor 6 (Self-Reliance)	<u>6, 21, 26, 28, 32, 34, 44, 50, 59, 55</u>	<u>59, 50, 32, 34, 44, 28</u>
Factor 7 (Delay of Gratification)	<u>3, 11, 19, 29, 42, 46, 62</u>	<u>42, 3, 11</u>

On the right column of table 3, items are in the order of their factor loadings. It means that the more their factor loadings, the more their places on the left (in right column). Underlined items are similar in both English and Turkish versions of MWEP. For instance, all items of ‘leisure dimension’ are the same in both versions except item 58.

Table 3 shows that which items in Turkish version of MWEP are measuring 7 dimensions the same as its English version relatively. According to Turkish respondent’s answers, items are loaded in a way that proved the similarity of English and Turkish versions to some extent, except ‘wasted time’ dimension. In fact, an independent dimension namely ‘wasted time’ cannot be identified in Turkish respondents’ answers. Also, observing distribution of MWEP 65 items carefully around 7 dimensions/factors reveals some interesting points. For example, the way of loading items around factor 1 indicates that the concept of ‘hard work’ for Turkish respondents accompanies by a kind of ‘delay of gratification’. Besides, Turkish version of MWEP measures ‘leisure’ dimension like English one. Loading some items of ‘self-reliance’, ‘wasted time’ and ‘centrality of work’ dimensions around ‘morality/ethics’ dimension in Turkey shows that some parts of those dimensions are more moral issues in Turkish culture. Some more research can discover other delicate points of Turkish version of MWEP. Interested readers can contact the authors for additional details.

## ii. Reliability of MWEP scale

Having run factor analysis to investigate the way in which items are loaded, we examined reliability estimates of the items using Cronbach's coefficient alpha. The following table indicates the reliability of factors which are derived from factor analysis:

Table 4. Reliability estimates for each dimension by sample

Factors/Dimensions	Items number	Reliability
1	24	.896
2	9	.788
3	12	.731
4	5	.715
5	6	.277
6	6	.672
7	3	.370
MWEP	65	.855

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## References

- Adas, E.B. (2006). The making of Entrepreneurial Islam and the Islamic spirit of capitalism. *Journal for Cultural Research*, 10(2), 113-137.
- Arslan, M. (2000). A cross-cultural comparison of British and Turkish managers in terms of Protestant work ethic characteristics. *Business Ethics: A European Review*, 9, 13-19.
- Arslan, M. (2001). The work ethic values of Protestant British, Catholic Irish and Muslim Turkish managers. *Journal of Business Ethics*, 31, 321-339.
- Atasoy, M. (2009). *Islam's marriage with Neo-liberalism: State transformation in Turkey*. Basingstoke: Palgrave Macmillan.
- Blood, M. R. (1969). Work values and job satisfaction. *Journal of Applied Psychology*, 53, 456-459.
- Bozkurt, V., Bayram, N., Furnham, A., & Dawes, G. (2010). The Protestant work ethic and Hedonism among Kyrgyz Turkish and Australian college students. *Journal for General Social Sciences*, 19, 749-769.
- Buchholz, R. (1978). An empirical study of contemporary beliefs about work in American society. *Journal of Applied Psychology*, 63, 219-227.
- Ebadollahi Chanzanagh, H., & Nejat, J. (2010). Values and work ethic in Iran: a case study on Iranian teachers. *Procedia Social and Behavioral Sciences*, 5, 1521-1526.
- ESI Research Report (2005). *Islamic calvinist change and conservatism in central Anatolia*, European Stability Initiatives Research. Retrieved from [http://www.esiweb.org/pdf/esi\\_document\\_id\\_69.pdf](http://www.esiweb.org/pdf/esi_document_id_69.pdf)
- Furnham, A. (1990). A content, correlational, and factor analytic study of seven questionnaire measures of the Protestant work ethic. *Human Relations*, 43, 383-399.
- Goldstein, B., & Eichhorn, R. L. (1961). The changing Protestant ethic: Rural patterns in health, work, and leisure. *American Sociological Review*, 26, 557 – 65.
- Gumuscu, S. (2008). *Economic liberalization, Devout bourgeoisie, and change in political Islam: comparing Turkey and Egypt*. EUI Working paper, RSCAS, 19. Retrieved from [http://cadmus.eui.eu/bitstream/handle/1814/8869/RSCAS\\_2008\\_19.pdf?sequence=1](http://cadmus.eui.eu/bitstream/handle/1814/8869/RSCAS_2008_19.pdf?sequence=1)
- Hammond, P. E., & Williams, K. R. (1976). The Protestant Ethic thesis: A social psychological assessment, *Social Forces*, 54(3), 579 – 89.
- Ho, R., & Lloyd, J. I. (1984). Development of an Australian work ethic scale. *Australian Psychologist*, 19(3), 321-332.
- Hosgor, E. (2011). Islamic capital/Anatolian tiger: past and present. *Middle Eastern Studies*, 47(2), 343-360.
- Miller, M. J., Woehr, D. J., & Hudspeth, N. (2002). The meaning and measurement of work ethic: Construction and initial validation of a multidimensional inventory. *Journal of Vocational Behavior*, 60, 451-489.

- Mirels, H. L., & Garrett, J. B. (1971). The Protestant ethic as a personality variable. *Journal of Consulting and Clinical Psychology*, 36, 40–44.
- Ozdemir, S. (2006). *Anadolu sermayesinin donusumu ve Turk modernlesmesinin derinlesmesi* [Transformation of the Anatolian capital and deepening of the Turkish modernisation]. Ankara: Vadi yayinlari.
- Ray, J. J. (1982). The Protestant ethic in Australia. *Journal of Social Psychology*, 116, 127–138.
- Tugal, C. (2009). *Passive revolution: absorbing the Islamic challenges to capitalism*. Stanford: Stanford University Press.
- Tugal, C. (2011). The Islamic making of a capitalist habitus: the Turkish sub-proletariat's turn to market. *Research in the Sociology of Work*, 22, 85-112.
- Woehr D. J, Arciniega L. M., & Lim D. H. (2007). Multidimensional work ethic profile, across three diverse cultures. *Educational and Psychological Measurement*, 67, 154.
- Yurdakok, I. (2008). Culture of Islamic Economics in Turkey. Paper presented at the 7<sup>th</sup> international conference on Islamic economics, King Abdul Aziz University, Jaddah, Retrieved from <http://islamiccenter.kau.edu.sa/7iecon/English/Englisg%20Papers/%5B15%5D%20Ismail%20Yurdakok.pdf>