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MEASURING PROACTIVE WORK BEHAVIOUR CONSTRUCT AND ITS COMPONENTS: VALIDATING TURKISH VERSION OF THE SCALES

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ABSTRACT

Proactive work behaviour has become a central topic of interest among scholars in research on organisational behaviour field (Crant, 2000; Grant & Ashford, 2008). Recently, scholars have been paying a great attention to certain behaviours which may increase individual, team, and organisational level of success and performance (Seibert, Kraimer, & Crant, 2001; Sonnentag, 2003). Proactive behaviour is one of those behaviours which has been linked to many positive outcomes including performance (Van Dyne & LePine, 1998), and career satisfaction (Seibert et al., 2001). However, well-validated measures to test the proactivity construct in non-English-speaking populations are limited and this is still a major drawback. The purpose of this study is to explore the validity and reliability of the Turkish version of proactive work behaviour scales. Structural equation modelling supported the instruments' structure ($\chi 2$ / df = 2.38; p <.05; RMSEA=.06; SRMR=.05; CFI = .97; TLI = .96) in Turkish speaking population. Cronbach's alpha coefficients of the scales ranged from .86 to .91. Thus, findings from this study have revealed that scales that measure proactive work behaviour components are valid and reliable in Turkish language.

Keywords: Proactivity, proactive work behaviour, scale, validity, reliability, Turkish.

PROAKTİF ÇALIŞMA DAVRANIŞI YAPISI VE BİLEŞENLERİNİN ÖLÇÜLMESİ: ÖLÇEKLERİN TÜRKÇE'YE UYARLANMASI

ÖZET

Proaktif iş davranışları, örgütsel davranış alanındaki araştırmalarda akademisyenler arasında ilgi odağı haline gelmiştir (Crant, 2000; Grant & Ashford,

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2008). Son zamanlarda, araştırmacılar bireysel, takım ve organizasyonel başarı ve performans düzeyini artırabilecek belirli davranışlara büyük önem vermektedirler (Seibert, Kraimer, & Crant, 2001; Sonnentag, 2003). Proaktif davranış, performans (Van Dyne & LePine, 1998) ve kariyer doyumu (Seibert ve ark. 2001) gibi bir çok olumlu sonuç ile ilişkisi tespit edilmiş davranışlardan biridir. Bununla birlikte, İngilizce dışındaki dillerde proaktif iş davranışı yapısı ve ölçekleri yeterli bir şekilde test edilmemiştir. Bu halen önemli bir eksikliktir. Çalışmanın amacı proaktif iş davranış yapısına ait bileşenlerin ve ölçeklerin Türkçe versiyonlarının geçerlilik ve güvenilirliklerini araştırmaktır. Yapısal eşitlik modellemesi, Türkçe konuşan örneklemde proaktif iş davranış yapısını ve bileşenlerini ($\chi 2$ / df = 2.38; p <.05; RMSEA = .06; SRMR = .05; CFI = .97; TLI = .96) doğrulamaktadır. Aynı zamanda ölçeklerin Cronbach alfa katsayıları .86 ile .91 arasında tespit edilmiştir. Sonuç olarak, bu çalışmanın bulguları, proaktif iş davranış bileşenlerini ölçen ölçeklerin Türkçede geçerli ve güvenilir olduğunu ortaya koymuştur.

Anahtar Kelimeler: Proaktiflik, proaktif iş davranışı, ölçek, geçerlilik, güvenilirlik, Türkçe

1. INTRODUCTION

Due to both structural and technological advancements, organisations are facing challenges which bring more rapid and dynamic work-related transformations to the organisations (Grant & Ashford, 2008). In order to adapt to those structural and technology related changes, individuals are more expected to initiate with new procedures and implementations. Thus, change-oriented behaviours are now more important than ever before. Proactivity is one of those change-oriented behaviour which refers to the self-initiated pursuit of goals aimed at bringing about change in order to create a different future (Parker, Bindl, & Strauss, 2010). Therefore, proactivity is expected to enable organisations to adapt to changes in the environment and gain a competitive advantage (Crant, 2000; Griffin, Neal, & Parker, 2007). It can help the organisation accomplish its strategic goals by using internal resources more efficiently; it also encourages development, and the implementation of necessary changes. According to the literature, proactive behaviour has been found to be related to many positive outcomes including; higher performance (Ashford, Blatt, & VandeWalle, 2003), task proficiency and social interaction (Morrison, 1993), lower turnover rate (Wanberg & Kammeyer-Mueller,

2000), team level customer service, productivity, and job satisfaction (Kirkman & Rosen, 1999), and organisational level performance (Frese & Fay, 2001).

There has been a large number of studies conducted under the proactivity umbrella in the literature. These proactive behaviours are somehow similar but distinct constructs from each other. For instance, both "voice" and "strategic scanning" are considered as a proactive behaviour but voice focuses more on the work environment (LePine & Van Dyne, 2001) whereas strategic scanning expands the focus to the outside of the work environment (Parker & Collins, 2010).

Parker and Collins (2010) have classified proactive behaviours using three categories based on the target of impact. These second-order categories are proactive work behaviour, proactive strategic behaviour, and proactive person-environment fit behaviour. In this research, the focus is on the proactive work behaviour which predominantly investigates crafting the internal work environment. Since it is highly related to bringing more substantial and direct change to the work environment itself, this second order construct has taken more attention among the scholars (Aspinwall & Taylor, 1997; Frese & Fay, 2001; LePine & Van Dyne, 2001; Morrison & Phelps, 1999; Parker, Williams, & Turner, 2006; Rank, Carsten, Unger, & Spector, 2007; Scott & Bruce, 1994).

Proactive work behaviour construct consists of four different components including "taking charge", "voice", "problem prevention", and "individual innovation" (Parker & Collins, 2010). Taking charge is defined as an activity which is self-initiated and voluntary based, and it involves an effort for bringing a change or improvement (Morrison & Phelps, 1999). Voice refers to making an innovative suggestion, sharing ideas or sounding thoughts within the work environment with colleagues to create the better one (LePine & Van Dyne, 2001). Problem prevention denotes avoidance of the issues which are potentially problematic to the work or to the self before it occurs or re-occurs (Frese & Fay, 2001). The last one, individual innovation is simply defined as both generation and implementation of the ideas in the work environment (Scott & Bruce, 1994).

There are many studies conducted in the literature thus far in order to understand the proactive work behaviour construct. No doubt that these studies have used the proactive work behaviour scales since the construct is very well established and the scales are valid and reliable. However, the validated instruments to measure proactive work behaviour has still limitation in research, since it has been predominantly conducted only in most commonly used language which is English. In order to tackle this limitation, this

research investigates the validity and reliability of proactive work behaviour construct and its components which are "taking charge", "voice", "problem prevention", and "individual innovation" using Turkish version of the scales. Overall, the empirical results presented in this paper are expected to contribute to the improvement of research on proactive work behaviour in a different national context, as there is no well-validated measurement of proactive work behaviour covering all four components of the construct as a whole in Turkish as far as known.

2. METHODOLOGY

2.1 Procedures and Data

Instruments were translated and back-translated in English and Turkish by two independent members from the organisational behaviour and psychology fields. In cases of translation disagreements, translations were sent to another colleague to discuss the differences and its implications. After the revisions were made, final versions of the instruments became available for investigation.

Turkish version of the Proactive Work Behaviour instrument was administrated through an internet-based survey to independent samples working in Turkish organisations using Qualtrics software. There is an increase in the use of internet-based surveys in organisational behaviour field since the distribution and implementation costs are lower, and time-wise it is faster compared to the traditional paper based questionnaire.

The Turkish form of the Proactive Work Behaviour instrument was administrated to a sample of 405 individuals working in companies at private service sector in Turkey. Participants were employed by sending an invitation e-mail asking them to participate in the study. This e-mail delivered the URL link to access to the questionnaire and participants were asked to forward the link to their colleagues at work in order to use snowballing sampling method. The e-mail also provided with general information and described the goals of the study. Since the ethical issues are crucial for the research, participants were informed about the anonymity, confidentiality, and also their consents about the consequences of being a part of the study. Participants were also provided a chance to leave the study at any time point if desired.

Table 1. Measurements: English and *[Turkish]*

Voice scale *[Seslilik]*
How frequently do you … *[Ne sıklıkla …]*
Communicate your views about work issues to others in the workplace, even if your views differ and others disagree with you? *[İş ile alakalı görüşleri diğerlerinden farklı olsa ve insanlar bu görüşlere katılmasa bile yinede dile getirir?]*
Speak up & encourage others in the workplace to get involved with issues that affect you? *[Kendisini ilgilendiren konularda çekinmeden konuşur ve başkalarınında konuşmalarını teşvik eder?]*
Keep well informed about issues where your opinion might be useful to your workplace? *[Gerektiğinde faydalı bir fikir sunabilmek için iş yerinde olup bitenden haberdar olur?]*
Keep well informed about issues where his/her opinion might be useful to his/her workplace? *[Yeni bir fikir ortaya atıldığında veya bir prosedür değişikliği gündeme geldiğinde çekinmeden fikrini beyan eder?]*
Taking charge scale *[Sorumluluk]*
How frequently do you … *[Ne sıklıkla …]*
Try to bring about improved procedures in your workplace? *[Gelişmiş yöntemleri kendi isyerine getirmek icin çaba gösterir?]*
Try to institute new work methods that are more effective? *[Daha verimli olan yeni iş yöntemlerini hayata geçirmek için çaba gösterir?]*
Try to implement solutions to pressing organization problems? *[Kurum üzerinde baskı yaratan problemlere karşı çözüm sağlamak için çaba gösterir?]*

Table 1. Measurements: English and *[Turkish] (Continued)*

Problem Prevention scale
[Problem Önleme]

How frequently do you …
[Ne sıklıkla …]

Try to develop procedures and systems that are effective in the long term, even if they slow things down to begin with?
[İşleri ilk etapta yavaşlatsa dahi uzun vadede verimli olacak prosedür ve sistemler geliştirmek için çaba gösterir?]

Try to find the root cause of things that go wrong?
[Yanlış giden şeylerin kökündeki nedeni bulmak icin çaba gösterir?]

Spend time planning how to prevent re-occurring problems?
[Tekrarlayan sorunların önlenmesi için planlama yapmaya zaman harcar?]

Individual Innovation scale
[Bireysel İnovasyon]

How frequently do you …
[Ne sıklıkla …]

Generate creative ideas?
[Yaratıcı fikirler üretir?]

Search out new techniques, technologies and or product ideas?
[Yeni teknikler, teknolojiler, veya ürün fikirleri araştırır?]

Promote & champion ideas to others?
[Fikirleri başkalarına tanıtır ve destekler?]

(1=very infrequently [çok nadiren], 2=infrequently [nadiren], 3=moderate [orta derece], 4=frequently [sık sık], 5=very frequently [çok sık]).

2.2 Measurement

The 13 items of the Proactive Work Behaviour Instruments were used in the Turkish sample. Voice was measured with 4 item by Parker and Collins (2010) which was originally developed by Van Dyne and LePine (1998); Taking Charge was measured with 3 items by Parker and Collins (2010) that was originally developed by Morrison and Phelps (1999); Problem Prevention was measured with 3 items by Parker and Collins (2010); and Individual Innovation was measured with 3 items by Parker and Collins (2010) which was originally developed by Scott and Bruce (1994) (See Table 1 for the items).

2.3 Demographics

Participants were asked to provide their demographic information including; gender, age, job tenure, position, and education in the online questionnaire for descriptive statistics.

2.4 Analytical Method

Based on the data collected, the following method of analysis has been employed: (a) screening the normality of the distributions for each constructs, (b) descriptive statistics for the sample, (c) reliability of the scales, (d) exploring the factor structures, (e) testing the construct validity using structural equation modelling, (e) exploring the correlation among components.

3. RESULTS

Normal distribution of the proactive work behaviour scales was tested in order to select the method of estimation in confirmatory factor analysis. It was crucial since possible violation of normality might bring inappropriate estimation method which can lead to biased results in confirmatory factor analysis (Byrne, 2012). Results indicated that values of skewness and kurtosis for all four measures deviated from zero. Furthermore, normal distribution was observed for all measures (See Figure 1)

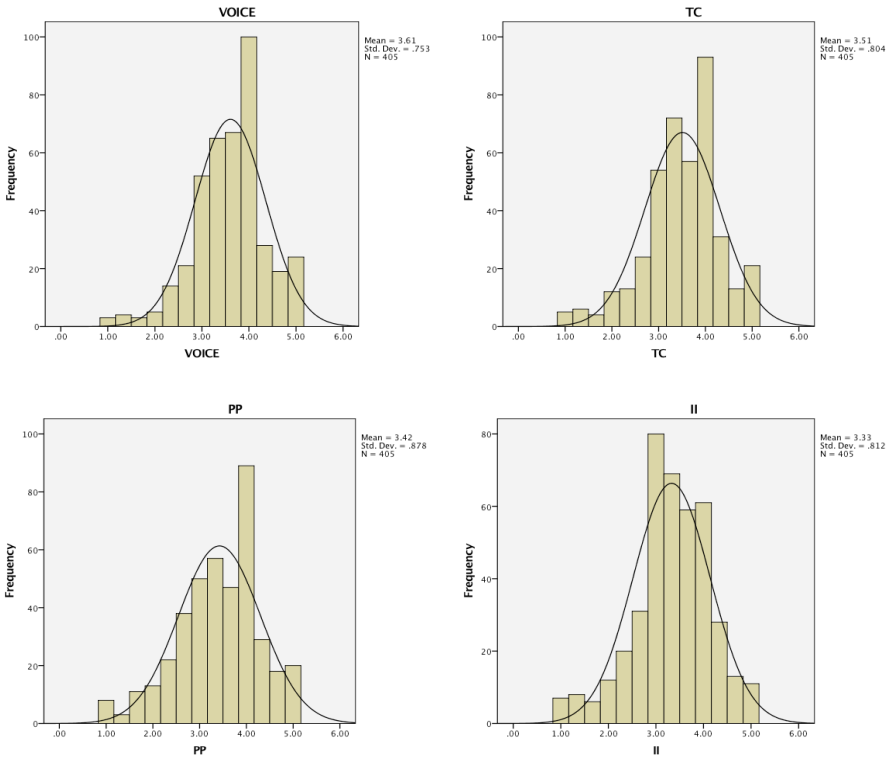

Figure 1. Distributions of the four measurements (VOICE = Voice, TC = Taking Charge, PP = Problem Prevention, and II = Individual Innovation)

Sample comprised 405 individuals working in the service sector in Turkey. 64.6% of the participants were male and 35.4% were female. Average age of the sample was 35.6 years (*SD = 8.74*). They worked as administrative staff (17.6%), professional staff (68.8%), and supervision staff (13.6%), whilst the average job tenure was 5.12 years (*SD = 6.05*). 15.3% of the participants held high-school degree, 62.2% university degree, 20.3% master degree, and 2.2% PhD degree.

Cronbach's alpha coefficients for Voice scale was .87, for Taking Charge .89, for Problem Prevention .86, and for Individual Innovation was .91. The results revealed

that the internal consistency of the scales was good enough to determine that the Turkish version of the measurements were reliable.

In order to assess if proactive work behaviours (voice, taking charge, problem prevention, and individual innovation) were distinct from each other, An exploratory factor analysis (EFA) was conducted using maximum likelihood extraction with varimax rotation. Table 2 indicates the loadings for the four factor solution with total thirteen items, which accounted for 66.8% of the total variance. Kaiser-Meyer-Olkin Measure of Sampling Adequacy was .91, and Bartlett's Test of Sphericity was $\chi 2 = 3314.49$ with p=.000. Consistent with the expectation the variables are defined by distinct items.

Table 2. Item Loadings from Exploratory Factor Analysis of Items

Item	Voice	Taking Charge	Problem Prevention	Individual innovation
V1	.70			
V2	.71			
V3	.69			
V4	.72			
TC1		.77		
TC2		.80		
TC3		.76		
PP1			.80	
PP2			.82	
PP3			.76	
II1				.74
II2				.69
II3				.72

Note. V=Voice, TC=Taking Charge, PP=Problem Prevention, II=Individual Innovation
Total Variance explained = 66.8%
Kaiser-Meyer-Olkin Measure of Sampling Adequacy = .91
Bartlett's Test of Sphericity: $\chi 2 = 3314.49$, p = .000

Confirmatory factor analysis using Mplus (Muthén & Muthén, 1998–2010) with maximum likelihood estimation was conducted to confirm the factor structures and fit statistics for the structure (See Figure 2 below). Confirmatory factor analysis showed an excellent goodness-of-fit for the four-factor model in Turkish sample ($\chi 2$ / df = 2.38; p <.05; RMSEA=.06; SRMR=.05; CFI = .97; TLI = .96). All the items loaded related factors with a range between .65 to .81.

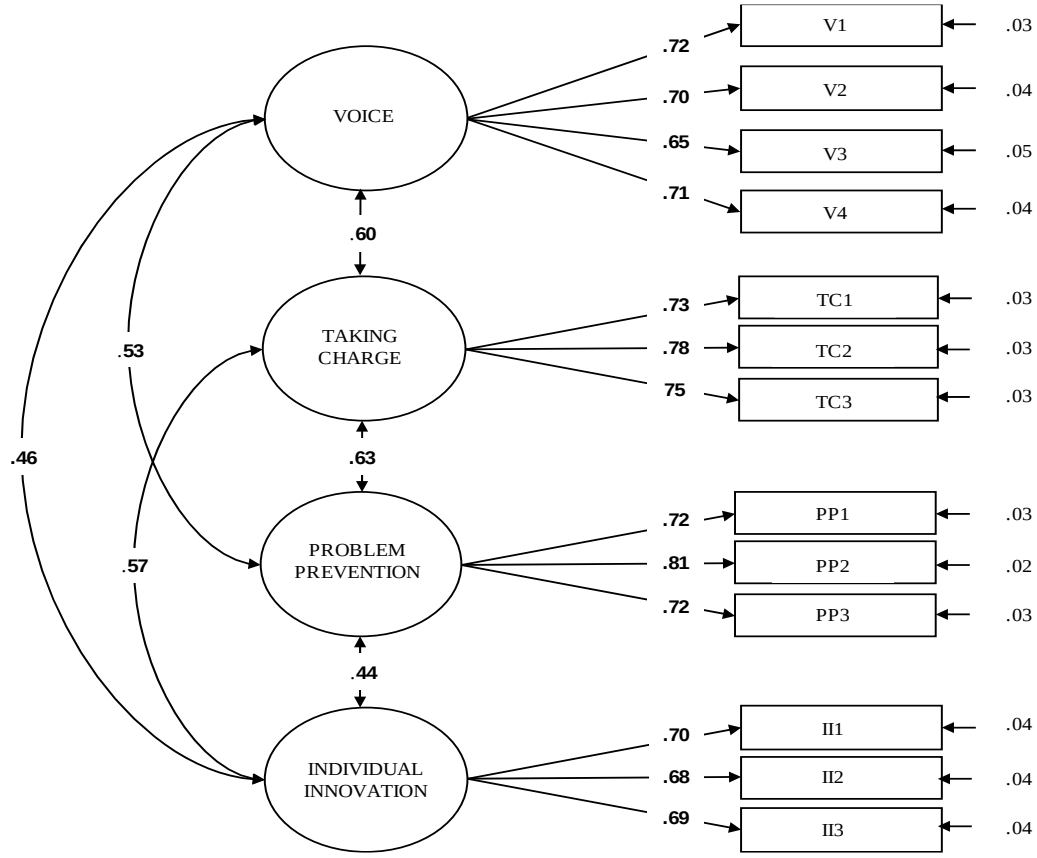

Figure 2. CFA Proactive Work Behaviours (N = 405, Turkish speaking employees).

Factor loadings, standard error of observed variables and latent correlation between factors (standardised estimates). All estimates were statistically significant ($p < .01$)
Note. V=Voice, TC=Taking Charge, PP=Problem Prevention, II=Individual Innovation
($\chi 2$ / df = 2.38; p <.05; RMSEA=.06; SRMR=.05; CFI = .97; TLI = .96).

In overall, four-factor model showed an acceptable representation of the data. Furthermore, correlations between the proactive work behaviours were examined since these behaviours are categorised under the same higher-order classification (Parker and Collins, 2010). Thus, it is expected to observe relatively higher correlations among voice, taking charge, problem prevention, and individual innovation. The results disclosed that the correlation between voice and taking charge was r = .60, voice and problem prevention was r = .53, voice and individual innovation was r = .46, taking charge and problem prevention was r = .63, taking charge and individual innovation was r = .57, and problem prevention and individual innovation was r = .44 with all the correlations were found statistically significant p < .01 (See Table 3 below). These high intercorrelations among proactive work behaviours may indicate the existence of higher-order structure.

Table 3. Descriptive Statistics, Zero-order correlations, and Reliabilities.

	Variable	***M***	***SD***	**1**	**2**	**3**	**4**
1.	Voice	3.61	.75	**.87**			
2.	Taking Charge	3.51	.80	.60**	**.89**		
3.	Problem Prevention	3.42	.88	.53**	.63**	**.86**	
4.	Individual Innovation	3.33	.81	.46**	.57**	.44**	**.91**

Note. *N*=405. Cronbach's alphas are displayed on the diagonal.
**p < .01

4. DISCUSSION, LIMITATIONS, AND CONCLUSION

In this study, proactive work behaviour construct and its components' validities and reliabilities were tested. To assess if proactive work behaviours (voice, taking charge, problem prevention, and individual innovation) were distinct from each other, first exploratory factor analysis was conducted using maximum likelihood varimax rotation.

The variables are defined by distinct items, a total 66.8% of the variance was accounted for by the four-factor solution.

Then, to test the validity of the four-factor structure of the proactive work behaviour construct, a confirmatory factor analysis was conducted. A model in which items were loaded on the related latent factor had an excellent fit to the data, suggesting that the four-factor model was indicating the distinct behaviours consistent with exploratory factor analysis findings. Therefore, the results of analyses have revealed that the Turkish version of the Proactive Work Behaviour scales were valid according to both exploratory and confirmatory factor analyses. Cronbach's alpha coefficients for each scale was also high to conclude that the Turkish version of the scales are reliable as well.

The limitations of the study should be noted for consideration of the further investigation. The current research relies on self-report assessment which means the ratings might have been inflated since the individuals are tend to rate their own behaviours in more subjective matters. Peer and supervisor ratings would be more objective and could eliminate the potential common method variance. The current research is also limited with cross-sectional design. Since, this research investigated the construct validity and reliability of the scales in Turkish language, having cross-sectional design would not be considered as a major threat for this particular study. However, it is highly recommended to adopt longitudinal design when proactive work behaviour is investigated with its antecedents and outcomes.

In conclusion, this is one of the first pioneering studies to validate the Proactive Work Behaviour construct and its components in Turkish language. It is hoped that the knowledge developed here will be helpful for the further investigation of the proactive work behaviour in the Turkish work context.

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