

## TURKISH ADAPTATION OF THE PERCEIVED PERSON-ENVIRONMENT FIT SCALE (PPEFS)\*

### ALGILANAN KİŞİ-ÇEVRE UYUM ÖLÇEĞİ'NİN (PPEFS-TR) TÜRKÇEYE UYARLANMASI

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#### Abstract

The aim of this research was to adopt Perceived Person-Environment Fit Scale (PPEFS; Chuang, Shen & Judge, 2016) into Turkish. The PPEFS consists of four measures: Person-Job Fit Scale, Person-Organization Fit Scale, Person-Group Fit Scale and Person-Supervisor Fit Scale. The research was conducted with 643 employees from various sectors and professions, and consisted of two different studies. In Study 1 (n= 325) the CFI confirmed the hypothesized factor structure of the Turkish version of the PPEFS (PPEFS-TR). For convergent validity AVE values and the relationships of the PPEFS-TR' scales with another fit scale (Cable & DeRue, 2002; PFS), and for divergent validity the relations between the PPEFS-TR and theoretically unrelated constructs (i.e., age and gender) were examined. As expected, AVE values were higher than .50, and moderate to low level correlations between scales were found. Moreover, the PPEFS-TR has incremental validity above and beyond the PFS on organizational outcomes (i.e., organizational citizenship behavior, job satisfaction and intention to leave). In Study 2 (n= 308), each scales of the PPEFS-TR predicted the theoretically related construct (i.e., work engagement, organizational identification, group fit, and leader-member exchange) significantly. Internal consistency reliability coefficients (both Cronbach's alpha and CR) were found between .77 and .94 in both studies. Additionally, test-retest reliability coefficients were found between .90 and .94 (n= 55).

\* The first study of this research was produced from the master thesis conducted by the second author, under the supervision of the third author, at Maltepe University, Institute of Social Sciences, Department of Psychology.

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### Öz

Bu araştırmanın amacı Algılanan Kişi-Çevre Uyum Ölçeği'ni (Chuang, Shen & Judge, 2016; PPEFS) Türkçeye uyarlamaktır. Ölçek dört ölçümden oluşmaktadır: Kişi-İş Uyumu Ölçeği, Kişi-Örgüt Uyumu Ölçeği, Kişi-Grup Uyumu Ölçeği ve Kişi-Süpervizör Uyumu Ölçeği. Araştırma kapsamında iki farklı çalışma yürütülmüş ve araştırmada farklı sektör ve mesleklerde çalışan toplam 643 katılımcı yer almıştır. Çalışma 1'de (n= 325) yürütülen DFA, PPEFS'nin Türkçe formunun (PPEFS-TR) beklenen faktör yapısını doğrulamıştır. PPEFS-TR'nin, yaklaşan geçerliği için AVE değerleri ile ölçeğin başka bir uyum ölçeğiyle (Cable ve DeRue, 2002), uzaklaşan geçerliği için ise teorik olarak ilişkisiz yapılarla (yaş ve cinsiyet) olan korelasyonları incelenmiştir. Beklendiği gibi, AVE değerlerinin .50'nin üzerinde olduğu görülmüş ve ölçekler arasında ortadan düşük düzeye değişen ilişkiler bulunmuştur. Ek olarak, PPEFS-TR örgütsel sonuçları (örgütsel vatandaşlık davranışı, iş doyumu ve ayrılma eğilimi) diğer uyum ölçeğinin üzerinde ve ötesinde yordayarak artıtlı geçerliğe sahip olmuştur. Çalışma 2'de (n= 308), PPEFS-TR'nin her bir ölçeği teorik olarak ilişkili yapıları (işe bağlılık, örgütsel özdeşleşme, grup uyumu ve lider-üye etkileşimi) anlamlı olarak yordamıştır. PPEFS-TR'nin her iki çalışmadaki içtutarlılık güvenilirlik katsayıları (hem Cronbach alfa hem CR) .77 ile .94 arasında değişmiştir. Aynı zamanda, test-tekrar test güvenilirlik katsayıları .90 ile .94 arasında değişmiştir (n= 55).

**Anahtar Kelimeler:** Kişi-Çevre Uyumu, Algılanan Kişi-Çevre Uyumu Ölçeği, PPEFS, PPEFS-TR, Güvenirlik, Geçerlik

## 1. Introduction

In organizational research, the conventional approach to “fit” has focused on person-environment fit, and the concept of the person includes some features of the individual (e.g., personal values), while the environment covers some characteristics of the work environment (e.g. organization values or organizational culture) (Ostroff, Shin & Kinicki, 2005). However, different researchers have various perspectives on the person-environment fit in the literature. For example, Ekehammar (1974) described it as the interaction of the person and the environment, whereas Edwards and Shipp (2007) emphasized the organization's role in meeting the needs of the person. In another definition, it is considered as the similarity between the person and the organization (Peng & Chiu, 2010).

According to the Person-Environment Fit Model (Edwards, Caplan & Harrison, 1998), attitudes and behaviors are due to interactions with the environment, and it is claimed that stress arises in particular from the misfit between the environment and the individual. According to the theory, when an employee's personality traits adapts to the environment, the result is higher satisfaction and performance, and lower stress level (Kristof-Brown, Zimmerman & Johnson., 2005). In various studies on person-environment fit, this variable has also been found to have a positive relationship with outcomes such as organizational citizenship behavior (Cable & DeRue, 2002; Li & Hung, 2010), intention to leave (Chuang, Shen & Judge, 2016; Liu, Liu & Hu, 2010) and career success (Ballout, 2007). These results highlight the issue of fit, and the importance of being able to measure it.

In the extensive person-environment fit literature, various scales have been developed to measure “fit”. Notable examples are Perceived Fit Scale (Cable & DeRue, 2002), Person-Organization Fit Scale (Netemeyer et al., 1997), Person-Work Fit Scale (Brkich, Jeffs & Carless, 2002) and Person-Group Fit Scale (Li, Kristof-Brown & Nielsen, 2019). All these scales measure the fit between the person and the specific aspects of the surrounding environment. As another measure in this field, The Perceived Person-Environment Fit Scale (PPEFS), developed by Chuang, Shen and Judge (2016), allows multidimensional evaluation of the fit between the person and environment. This scale investigates the fit notion with all aspects, such as job, organization, group and supervisor together, unlike most previous studies, which focused exclusively on person-job (e.g., Chen, Yen & Tsai, 2014; Lu et al., 2014; Peng & Mao, 2015) or person-organization fit (e.g., Cable & Judge, 1996; Chen, Sparrow & Cooper, 2016; Hoffman & Woehr, 2006; Piasentin & Chapman, 2006). Chuang, Shen and Judge (2016) stated that, in addition to multidimensional structure of person-environment fit, it is important for researchers to consider the multiple contents of each dimension (e.g., personality, interests, values and goals). Thus, the development of this scale provided not only multidimensional measurement of person-environment fit, but also, multi-content.

The PPEFS (Chuang, Shen & Judge, 2016) has been translated to languages including French (Andela, Van Der Doef & Lheureux, 2019) and Dutch (Rietveld, 2015) before, and used in different cultures. The aim of the present study is to adapt the PPEFS to Turkish and test its psychometric qualities in an employee sample from a non-Western culture, and thus contribute to the person-environment fit field by enabling more effective measurement of the fit construct.

## **2. Person-Environment Fit**

People can be said to be in harmony with their environment when they share its values and characteristics. When this similarity is noticed by people, they are able to adopt more positive attitudes towards their environment (Cable & Edwards, 2004). According to Lewin (1951), behavior is determined by a combination of the person and the environment, rather than by either in isolation. Mutchinsky and Monahan (1987) suggested two types of person-environment fit; supplementary and complementary. Since supplementary fit involves having similar characteristics with other people in the environment, and thus, complementing each other, the person is likely to comply with environmental conditions. People thus perceive that they are adapted because they resemble individuals with these characteristics. Complementary fit, on the other hand, allows a greater degree of integration between the characteristics of an individual with those of an environment. For example, weaknesses in the environment can be offset by strengths of the individual, and vice versa.

As Cable and Edwards (2004) suggested, the different dimensions of the “environment” should be examined. For example, Kristof-Brown, Zimmerman and Johnson (2005) examined the fit construct using job, organization and group dimensions. In recent years, a more holistic approach has

been taken, with the addition of the person-supervisor fit dimension to the person-job, person-organization and person-group fit dimensions (Chuang, Shen & Judge, 2016).

Among these environment dimensions, person-job fit is the most fully investigated (e.g., Brkich, Jeffs & Carless, 2002; Chen, Yen & Tsai, 2014; Lu et al., 2014; Peng & Mao, 2015). Due to its effects on job performance, person-job fit is of key importance, especially at the recruitment stage (Piasentin & Chapman, 2006). Employers test the suitability of a job candidate using different methods such as interviews, tests and assessment centers. However, this fit is not only evaluated by employers in the recruiting process, but also by the employee over time.

Person-job fit is considered as a two-dimensional concept by Edwards (1991), expressed as needs-supplies (N-S) fit, and demands-abilities (D-A) fit. The author described the N-S fit as harmony between the individual's needs, desires and priorities, and rewards from the job, and the D-A fit, as a harmony between the job demands and the employee's knowledge, skills and abilities. N-S fit is provided if the environment provides resources (e.g., financial, physiological and psychological) that meet the individual's needs (e.g., development opportunities). On the other hand, the environment demands time, effort, commitment, knowledge, skills and abilities, and if the capacity of individuals meets these demands, D-A fit is achieved (Kristof, 1996; Lauver & Kristof-Brown, 2001). N-S and D-A fits are covered by complementary rather than supplementary fit because the complementary model is about the demands and requirements of the environment, rather than the individuals in it (Sekiguchi, 2004).

The other environment dimension is person-organization fit, which can be addressed from various aspects; one of these deals with the person-organization fit as a fit between person and organization in terms of the harmony of the goals and values (Chuang & Sackett, 2005). According to the Attraction-Selection-Attrition Model (Schneider, 1987), individuals are attracted to organizations that have similar goals to their own. These goals attract similar people to particular organizations, but individuals perceive that their goals are not achieved, they can decide to leave. Another aspect is related with the values of the person and the organization. The Person-Organization Fit Model suggested by Chatman (1989) focuses on the conformity between the norms and values of the organization and the values of the individuals. Values are permanent attributes in which people generally consider various phenomena in terms of good-bad, and right-wrong (Sigri & Gurbuz, 2014). People prefer jobs and organizations that reflect their own values (O'Reilly, Chatman & Caldwell, 1991). A match between values is important both for gaining employment and continuity. According to Kristof (1996), person-organization fit occurs when at least one meets the needs of the other, when they share similar basic characteristics or when both these conditions exist.

In addition to the fit of the individuals with their job and organization, their fit with colleagues is another important dimension. Interpersonal similarity is one of the most important factors promoting fitting; according to Kristof-Brown, Zimmerman and Johnson (2005), it may arise from an individual's personality, values and abilities. According to the Social Identity Theory, individuals joins

groups that have characteristics similar to their own (Tajfel & Turner, 1979). Also, empirical studies have determined that such similarity strengthens identification among the group members (Cable & DeRue, 2002), and facilitates interpersonal communication (Schaubroeck & Lam, 2002).

Person-group fit is based on the concept that many positions require interpersonal interaction with other group members. The ability of the employees to engage in and develop interpersonal interactions can enable them to make a wider range of contributions to the work units (Werbel & Johnson, 2001). DeRue and Hollenbeck (2007) suggested two types of group fit; internal and external. Internal fit refers to the degree to which the variables within the group are compatible, for example, how characteristics of group members – such as the various personalities and skills – fit together. External fit, on the other hand, refers to the compromise between certain group characteristics and the external environment.

Thomson and Thomson (2002) discussed the managerial skills of supervisors related to the organization's internal and external environment, and suggested that one key skill related to internal management is the building and developing teams. Of all the definitions related to leadership, the most common one stresses the importance of influencing a group and enabling certain goals to be achieved (Bennis & Townsend, 1989; House, 1971). In other words, the fit or non-fit between supervisors and subordinates affects the management process.

Subordinates can have varying perspectives on person-supervisor fit. For example, this fit concerns the similarities of the manager with subordinates in terms of personality traits, values, behaviors (Kristof-Brown, Zimmerman & Johnson, 2005), and demographic characteristics, such as gender or age (Strauss, Barrick & Connerley, 2001). Perceived attitudinal similarity with supervisor was found to be associated with Leader Member Exchange (LMX) and liking (Engle & Lord, 1997).

### **3. Perceived Person-Environment Fit Scale**

The PPEFS, developed by Chuang, Shen and Judge (2016), allows a comprehensive examination of the person-environment fit. They determined a four-dimension structure, including person-job, person-organization, person-group and person-supervisor fits. Person-job fit includes D-A (KSAs and personality) and N-S (interests and job characteristics) fit, while person-organization fit includes values (honesty, fairness, achievement and helping others) and goal (effort, reward and competition). Items in relation to the person-group fit concern the scope of values, goals and member attributes. On the other hand, the items in person-supervisor fit allow the evaluation of values, work style, lifestyle, personality and leadership style.

This scale contributed to the current person-environment fit scales in various respects. While developing the PPEFS, Chuang, Shen and Judge (2016) based on multiple theory, and also proved the multidimensional (e.g. job, organization, group and supervisor fit) and multi-content (e.g. personality, interests, goals and values) nature of person-environment fit. It also has some differences

from the scale of Cable and DeRue (2002), which is also multidimensional and is frequently used in the person-environment fit literature. For example, in the PPEFS, a new dimension emerged by separating supervisor fit from group fit. Additionally, not only value but also goal fit is evaluated in the PPEFS's person-organization fit scale. Furthermore, the PPEFS has incremental validity above and beyond Cable and DeRue's (2002) fit scale. Thus, adapting the PPEFS to different languages will contribute to the person-environment fit literature.

Chuang, Shen and Judge (2016) reported various psychometric evidence for the PPEFS. In the CFA analysis, proof was provided not only for the factor structure of four different fit measures, and the second-order model that indicates multi-dimensionality, but also even its superordinate construct. The correlations between the measures of the PPEFS and Perceived Fit Scale of Cable and DeRue (2002) were evaluated under convergent validity. They found that each scale has incremental validity above and beyond the scale of Cable and DeRue on organizational outcomes. In addition, since it is theoretically acknowledged that the structure in question is unrelated to age or gender, an examination of its relation with these two factors demonstrated that the factors of the PPEFS Scale were indeed unrelated with gender (except person-group fit) or age. It was also revealed that all dimensions of the scale were significantly interrelated, and also related with organizational citizenship behavior, job satisfaction, intention to leave, and in role behaviors in the scope of validity. Internal reliability coefficients of all factors were satisfactory. These findings were regarded important evidence for the measurement's reliability and validity.

Previously, the PPEFS was translated to Turkish by Tatli and Cakmak (2019). However, it is noteworthy that there are some issues with this translation. In that study, only 20 items of the scale were translated, not all items. For reasons that remain unclear, during translation process 6 items were excluded from the scale. Additionally, it was determined that the translation of some of the items in this version are not sufficiently clear or accurate. Thus, it was deemed necessary to create a Turkish version containing all the items of the scale and to test its psychometric qualities of it. Another issue is related to the sample characteristic that used by Tatli and Cakmak (2019). The sample consisted of predominantly female members of a single occupational group and was considered to have potentially low representativeness. Thus, the current study aimed to adapt this scale to Turkish with all 26 items as in the original scale, and test the psychometric qualities of the scale in a sample that has a wide range of demographic, occupational and sectoral aspects in two different studies.

#### **4. Study 1**

Study 1 was conducted in order to translate the PPEFS into Turkish and to explore some psychometric properties of it. In this context, it was first aimed to examine the construct of the Turkish form of the PPEFS. In the development process of the PPEFS, Chuang, Shen and Judge, (2016) considered person-environment fit as multidimensional and having multiple content. On the basis of multidimensionality, they indicated that the PPEFS has a construct that consist of 4 different measures as

person-job, person-organization, person-group and person-supervisor fit. In terms of multiple content, the authors showed that person-organization fit dimension involves value and goals contents, and in addition to these content person-group fit dimension also includes member attributes content. In Chuang, Shen and Judge's (2016) study, it was also indicated that the four dimensions are reflective of a superordinate construct of person-environment fit. Since the original factor structure of the PPEFS is expected to be the same in the Turkish form in this study, Hypothesis 1 is expressed as follows:

*Hypothesis 1: The Turkish form of the PPEFS (PPEFS-TR) has four-factor and superordinate structure.*

In order to test convergent validity, AVE values were calculated. Additionally, the relations between the PPEFS-TR and another fit measure were analyzed. On the other hand, for divergent validity, the relations of the PPEFS-TR to age and gender, which are, theoretically, unrelated variables (Liao & Chuang, 2004). Hypothesis 2 is expressed as follows, since a significant positive relationship is expected for convergent validity and insignificant correlation for divergent validity.

*Hypothesis 2: The PPEFS-TR is significantly related with a) the PFS positively, and with b) age and c) gender insignificantly.*

Within the scope of incremental validity, whether the PPEFS-TR predicts some organizational outcome variables beyond another fit scale was tested. Previous studies have shown that each of the fit dimensions is related to various organizational outcomes. These outcomes include job satisfaction, organizational citizenship, and turnover intention. There are studies indicating that person-job fit (Cable & DeRue, 2002; Je & Kim, 2010; Leng & Chin, 2016; Kristof-Brown, Zimmerman & Johnson, 2005; Peng & Mao, 2015), person-organization fit (Cable & DeRue, 2002; Chen, Sparrow & Cooper, 2016; Lamm et al., 2010; Kristof-Brown, Zimmerman & Johnson, 2005; Verquer, Beehr & Wagner, 2003), person-group fit (Cable & DeRue, 2002; Chuang, Shen & Judge, 2016; Kim, Kim & Shin, 2010; Kristof-Brown, Zimmerman & Johnson, 2005) and person-supervisor fit (Chuang, Shen & Judge, 2016; Kristof-Brown, Zimmerman & Johnson, 2005; Tak, 2011) are positively related to organizational citizenship and job satisfaction behaviors, and negatively related to turnover intentions. Therefore, in this study, it is expected that the PPEFS-TR will predict these outcomes above and beyond the existing fit measure in relation to the incremental validity.

*Hypothesis 3: The PPEFS-TR will predict a) organizational citizenship behavior, b) job satisfaction, and c) intention to quit beyond an existing fit scale.*

## **4.1 Method**

### **4.1.1. Participants and Procedure**

A total of 383 white collar employees from various sectors and positions participated in this study. The inclusion criteria for the study stated that all participants must have held the same position in an

organization at least 6 months, and worked under a supervisor. In order to pilot test of the PPEFS-TR, 58 of the participants were given the survey as a paper-pencil form. Based on the participants' evaluations that the items clear and understandable, no changes were made in the translation, and the test-retest analysis was also performed on this participants group. Then, the online versions of the scales were prepared in a survey program and promoted by the researchers via social media. The rest of the participants (n= 325) completed the surveys online, and all other statistical analyzes were performed on the data of this group. All of the data were collected between March and April 2018.

The participants' average age was 39.3 (s.d.= 10), and the proportion of women was 49%. While 77.8% of the participants were from Istanbul, a significant proportion of the rest were from the other major cities of the country, and the remainder were from various regions of Turkey. In terms of educational status, 1.8% of the participants had high school degree, 60.1% had undergraduate degree, and 38.2% had graduate degree. The average lengths of experience in years is as follows: in the same institution, 5.5, in the same position, 4.2, working with the same manager, 3, total professional experience, 14.3.

#### **4.1.2. Measures**

##### **4.1.2.1. Perceived Person-Environment Fit Scale**

The scale, developed by Chuang, Shen and Judge (2016), includes a total 26 statement and 4 dimensions, such as person-job fit, person-organization fit, person-group fit and person-supervisor fit. The PJFS has 4 items in relation to demand-ability and needs-supplies fit, the POFS contains 7 items about person-organization values and goals fit. On the other hand, there are 10 items person-group values, goals and attributes fit in the PGFS, whereas the PSFS has 5 items. Statements are assessed with a 7 point Likert scale, with response categories ranging from "not compatible at all" to "fully compatible".

For the adaptation of the scale, first of all, Aichia Chuang, the corresponding author of the PPEFS was contacted for permission (via e-mail, 05-05-2017). When this was granted, the translation process started. The process employed the technique consisting of initial translation and evaluation, back-translation and evaluation and expert opinion (Beaton et al., 2000). In the first phase, the PPEFS was translated into Turkish by two experts in the Industrial/Organizational Psychology field. The researchers reviewed these translations to produce a final version which was both comprehensible and culturally appropriate. Two different experts in the field translated the new Turkish form back into English, and these two translations were compared with its original form. In the final stage, the English translation was presented to the corresponding author of the PPEFS for approval, after which the Turkish form of the scale was finalized.

##### **4.1.2.2. Perceived Fit Scale**

For the convergent and incremental validity testing, the scale developed by Cable and DeRue (2002) was used. The scale consists of 9 items and three factors, named as Needs-Supplies Fit, Person-Organization Fit, and Demands-Abilities Fit. It has a 5-point Likert type response scale ranging from "strongly

disagree” to “strongly agree”. Some sample items are “My personal values match my organization’s values and culture”, “The job that I currently hold gives me just about everything that I want from a job”. Behram and Dinc (2014) adapted this scale to Turkish and found the same 3-factorial construct in the Turkish version. The relations of the scale to intention to leave and interpersonal conflict were presented as evidence for validity. The Cronbach Alpha reliability coefficients were reported as .93 for Needs-Supplies Fit, .90 for Person-Organization Fit, and .84 for Demands-Abilities Fit.

#### **4.1.2.3. Organizational Citizenship Behavior Scale**

The scale developed by Podsakoff, MacKenzie, Moorman and Fetter (1990) was used for the incremental validity testing. The scale has 5 factors and 24 items with 7-point Likert type response scale (ranged from (1) “strongly disagree” to (7) “strongly agree”). Two example items in the scale are: “Obeys company rules and regulations even when no one is watching”, “Consumes a lot of time complaining about trivial matters”. The scale was adapted to Turkish by Bayazit, Aycan, Aksoy, Goncu and Oztekin (2006). As reported by Goncu (2006), the scale has a total of 23 items and 6 factors. The Cronbach Alpha value of the scale was reported as .84.

#### **4.1.2.4. Job Satisfaction Scale**

This scale was used for the incremental validity. The scale is a part of the Job Stress Battery (Unsal et al., 2008), developed to measure employees’ general job satisfaction (Yilmaz & Özalp Türetgen, 2014). It has 5 items (e.g. “My job meets most of my expectations”) with 5-point Likert type response scale ranging from “it doesn’t fit me at all” to “it fits me perfectly”. Validity evidence was provided by its positive relationships with organizational commitment, performance, social support and self-efficacy, and negative relation with work stress, intention to leave, stress symptoms and neuroticism. Confirmatory factor analysis indicated the unidimensionality of the scale, and the Cronbach Alpha coefficient of the scale was reported as .81 (Özalp Türetgen, 2020).

#### **4.1.2.5. Intention to Leave Scale**

Intention to Leave Scale of Job Stress Battery (Unsal et al., 2008) was utilized for incremental validity. It was developed by Sertel Berk, Özalp Türetgen, Unsal, and Basbug (2010). The scale, which has a 5-point Likert type response category ranging from “does not fit me at all” to “completely fits me”, consists of 3 items in total (e.g. “If I believed I could find a job with better conditions, I would quit this job”). Validity evidence was found in terms of the significant relations of the scale with theoretically related constructs, such as job satisfaction, performance, job stress, and also convergence with another scale measuring the same construct. Confirmatory factor analysis supported the unidimensionality of the scale. The internal consistency coefficient was specified as .73 (Özalp Türetgen, 2020; Sertel Berk et al., 2010).

### 4.1.3. Data Analysis

For construct validity, first of all a CFA was conducted using SPSS Amos 24.0 program. In the CFA, the goodness of fit indices were calculated using  $\chi^2 / df$  ( $< 5$  acceptable fit), RMSEA ( $< .08$  acceptable fit), CFI and IFI ( $> .90$  acceptable fit) values (Schermelleh-Engel, Moosbrugger & Müller, 2003; Simsek, 2007). The alternative 6 models were tested and compared using chi-square difference tests. The superordinate model of the PPEFS-TR is presented in Figure 1.

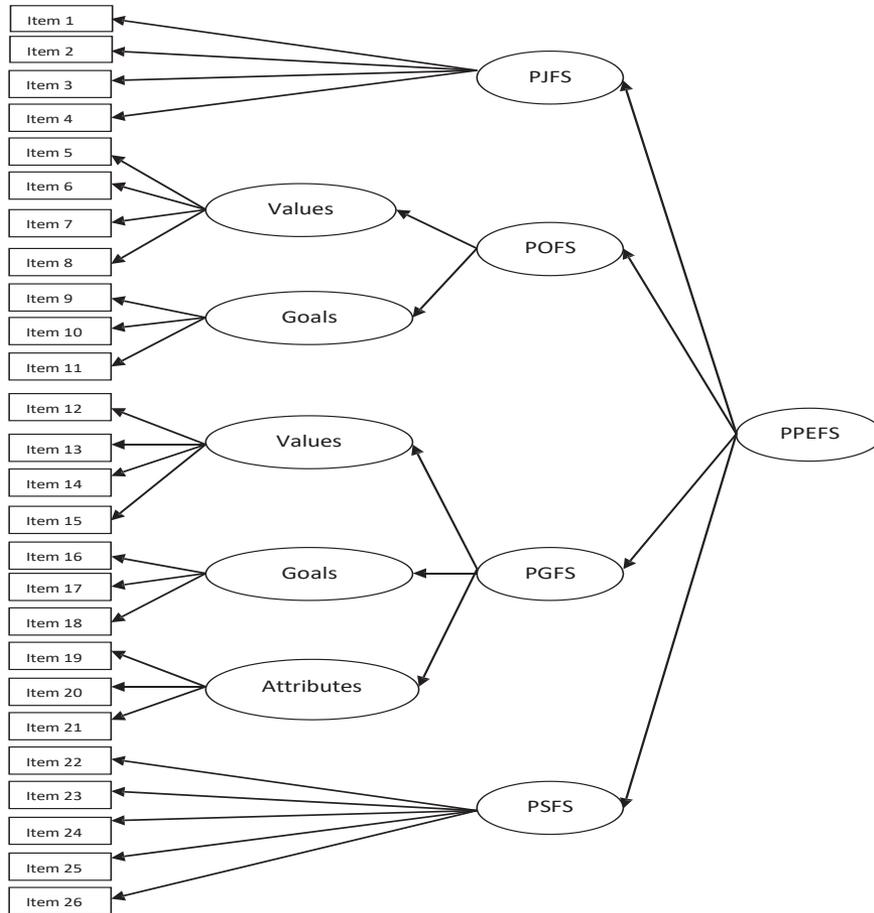


Figure 1. Superordinate Model for PPEFS

In order to test convergent validity, the average variance extracted (AVE) for each factors were calculated. For reliability, composite reliabilities (CR) of the factors were calculated. Other psychometric tests were conducted using SPSS 22 package program. Another convergent validity evidence was determined by testing the relationships between the PPEFS-TR and a relevant fit scale (PFS;

Cable & DeRue, 2002) which measures the same construct. On the other hand, discriminant validity was determined by investigating the relations of the PPEFS-TR with age and gender, which are theoretically unrelated constructs. For utility analysis, tests were conducted of the incremental validity of the PPEFS-TR on organizational citizenship behavior, job satisfaction, and intention to leave beyond the PFS, as another fit scale measuring the same construct (Cable & DeRue, 2002). Within the scope of the reliability analysis of the scale, the coefficients of internal consistency (Cronbach Alpha) and test-retest reliability were also calculated for each dimensions of the PPEFS-TR.

**4.1.4. Results**

The CFA results are reported in Table 1. In the analysis, 6 models were tested, the first 4 were related to each scales. For the PJFS Model 1 with one factor, for the POFS Model 2 with two factors, for the PGFS Model 3 which is second-order, and finally, for the PSFS Model 4 with one factor were acceptable. In all models, all factor loadings were significant. Additionally, second-order and super-ordinate models of the PPEFS-TR were also tested. The results indicated that both models show acceptable fit. These findings support Hypothesis 1.

**Table 1.** Goodness of Fit Index Values Obtained as a Result of Confirmatory Factor Analysis of the PPEFS-TR (n= 325)

Model	Description	$\chi^2$	df	$\chi^2/df$	RMSEA	CFI	IFI
Model 1	PJFS one factor model	7.51***	2	3.75	.09	.98	.98
Model 2	POFS two factor model <sup>a</sup>	58.55***	13	4.5	.10	.96	.96
Model 3	PGFS second order model <sup>b</sup>	105.49***	32	3.29	.08	.97	.97
Model 4	PSFS one factor model	10.40***	5	2.08	.05	.99	.99
Model 5	PPEFS-TR Second order model <sup>c</sup>	913.31***	288	3.17	.08	.90	.90
Model 6	PPEFS-TR Superordinate model <sup>d</sup>	913.86***	290	3.15	.08	.90	.90

Note: \*\*\* $p < .001$ .

PPEFS = Perceived Person-Environment Fit Scale; PJFS = Person-Job Fit Scale; POFS = Person-Organization Fit Scale; PGFS = Person-Group Fit Scale; PSFS = Person-Supervisor Fit Scale; RMSEA = Root Mean Square Error of Approximation; CFI = Comparative Fit Index; IFI = Incremental Fit Index.

<sup>a</sup> The two factors contained (POFS-Values and POFS-Goals)

<sup>b</sup> The three factors (PGFS-Values, PGFS-Goals, and PGFS-Attributes) were specified as manifestations of a more general umbrella construct: PG fit.

<sup>c</sup> The second order contained the four PPEFS-TR measures (i.e. PJFS, POFS, PGFS, and PSFS) and the first order included two subscales of POFS and three subscales of PGFS.

<sup>d</sup> Removed the first-order subscales of POFS and PGFS, and PPEFS-TR added to Model 5 as a general umbrella construct.

The measurement model was presented in Table 2. All of the factor loadings were significant. The CR values differed between .80 and .94. On the other hand, the AVE values were ranged between .50 and .76.

**Table 2.** The Results of the Measurement Model

Scale	İtem	Loadings	CR	AVE
PJFS	PJFS – 1	.80	.80	.50
	PJFS – 2	.79		
	PJFS – 3	.51		
	PJFS – 4	.69		
POFS	POFS – 1	.76	.90	.55
	POFS – 2	.76		
	POFS – 3	.81		
	POFS – 4	.68		
	POFS – 5	.74		
	POFS – 6	.78		
	POFS – 7	.64		
PGFS	PGFS – 1	.83	.93	.58
	PGFS – 2	.84		
	PGFS – 3	.80		
	PGFS – 4	.79		
	PGFS – 5	.76		
	PGFS – 6	.79		
	PGFS – 7	.73		
	PGFS – 8	.74		
	PGFS – 9	.71		
	PGFS – 10	.61		
PSFS	PSFS – 1	.92	.94	.76
	PSFS – 2	.92		
	PSFS – 3	.86		
	PSFS – 4	.82		
	PSFS – 5	.84		

**Notes:** PJFS = Person–Job Fit Scale; POFS = Person–Organization Fit Scale; PGFS = Person–Group Fit Scale; PSFS = Person–Supervisor Fit Scale.

The relations of the PPEFS-TR with the variable of this study were presented in Table 3. Among these relations, the correlations between the PPEFS-TR dimensions and the factors of the PFS (Cable & DeRue, 2002) were investigated for convergent validity, and the relations between each the PPEFS-TR dimension and age, and sex were tested for divergent validity. As seen in the table, supporting Hypothesis 2a, all the PPEFS-TR measures are positively and significantly correlated to the factors of the PFS; the coefficients range between .34 and .66. Additionally, as expected in Hypothesis

2b and 2c, the PPEFS-TR measures' relation to gender and age were either insignificant, or these coefficients were so low as to be negligible.

**Table 3.** Descriptive Statistics, Cronbach Alpha's Values, and Pearson Correlation Coefficients of the PPEFS-TR and Variables Used for Validity Testing in Study 1 (n=325)

	Mean	SD	Min.	Max.	CR Alpha	PJFS	POFS	PGFS	PSFS
Gender	-	-	0	1	-	.03	.02	.03	-.06
Age	36.7	7.9	20	60	-	.11*	.04	-.03	-.00
PFS Needs-Supplies	9.6	3.1	3	15	.92	.47***	.56***	.57***	.53***
PFS Person-Organization	9.8	3.1	3	15	.95	.35***	.66***	.64***	.62***
PFS Demands-Abilities	12.0	2.8	3	17	.91	.50***	.37***	.34***	.36***
Organizational Citizenship Behavior	5.9	0.5	1	7	.82	.24***	.29***	.29***	.16**
Job Satisfaction	3.4	0.9	1	5	.91	.50***	.57***	.56***	.54***
Intention to Quit	2.9	1.1	1	5	.87	-.31***	-.53***	-.45***	-.48***
PJFS	5.5	0.9	1	7	.78	-	.38***	.36***	.29***
POFS	4.7	1.3	1	7	.89		-	.72***	.62***
PGFS	4.7	1.2	1	7	.93			-	.63***
PSFS	4.1	1.6	1	7	.94				-

**Notes:** Gender was coded as 0 for female and 1 for male. \*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$ . PJFS = Person–Job Fit Scale; POFS = Person–Organization Fit Scale; PGFS = Person–Group Fit Scale; PSFS = Person–Supervisor Fit Scale

As shown in Table 3, all the PPEFS-TR measures are positively correlated to each other. The coefficients vary between .29 and .72. All dimensions of the PPEFS-TR have significant positive relationships with organizational citizenship behavior and job satisfaction, and negative relationships with intention to leave. In order to investigate the incremental validity of the PPEFS-TR above the PFS, a series of hierarchical regression analysis was conducted. For these analyses, in the first step, the PFS was added to the regression, and in the second step, the PPEFS-TR dimensions were added to analysis, in order to predict organizational outcomes. The results of the analysis indicate that the  $\Delta R^2$  values were 2.86 ( $p < .05$ ) for organizational citizenship behavior, 5.11 ( $p < .01$ ) for job satisfaction, and 4.5 ( $p < .01$ ) for intention to quit in the second step which the PPEFS-TR added to the model. These finding means the PPEFS-TR explained more variances above the PFS, and also support Hypothesis 3.

For the sake of reliability, first of all the Cronbach Alpha coefficients were calculated, and the results were shown in Table 3. These coefficients were .77 for the PJFS, .90 for the POFS, and .93 for both the PGFS and the PSFS. The test-retest reliability coefficients were .92, .94, .93, .90, respectively (n= 55). Additionally, composite reliability (C.R.) values of the scales were calculated, and presented in Table 2. These values of the scales were .80, .90, .93, and .94, respectively.

## 5. Study 2

The aim of Study 2 is to show that each measure of fit is related to an organizational outcome in its relevant field, in order to provide additional evidence for the construct validity of the PPEFS-TR. There are many studies showing that the variables about job, organization, workgroup and manager are related to person-job (e.g., Cai et al., 2018; Leng & Chin, 2016; Peng & Mao, 2015), person-organization (e.g., Chi, & Pan, 2012; Demir, Demir & Nield, 2015; Huang, Cheng & Chou, 2005; Ju-i-Chen, Yin-Ling & Mei-Man, 2014), person-group (e.g., Abdalla et al., 2018; Bednarska, 2017; Kristof-Brown et al., 2014; Yang, Feng & Feng, 2020) and person-supervisor fit (e.g., Chuang, Shen & Judge, 2016; Marstand, Martin & Epitropaki, 2017; Sung, Seong & Kim, 2020; Zhang et al., 2015). However, since each fit dimension relates to fit in different contexts, they are expected to be more correlated to specific constructs. Therefore, in line with previous findings, when other dimensions are controlled, it is expected that there will be significant relationships between person-job fit and work engagement (e.g., Lu et al., 2014), person-organization fit and organizational identification (e.g., Demir, Demir & Nield, 2015), person-group fit and group cohesion (e.g., Seong et al., 2015), and person-supervisor fit and LMX (e.g., Engle & Lord, 1997). Thus, Hypothesis 4 to 7 were expressed as below:

*Hypothesis 4: Controlling for PO, PG and PS fit; PJ fit is related to work-engagement.*

*Hypothesis 5: Controlling for PJ, PS and PJ fit; PO fit is related to organizational identification.*

*Hypothesis 6: Controlling for PJ, PO and PS fit; PG fit is related to group cohesion.*

*Hypothesis 7: Controlling for PJ, PO and PG fit; PS fit is related to LMX.*

### 5.1. Method

#### 5.1.1. Participants and Procedure

For this study undergraduate student volunteers from two universities in Turkey were asked to distribute the scales to employed people from their social network. They were informed about the scales and the procedures, and were not offered any credit. Total of 308 employees filled the surveys as a paper-pencil form. All of the data were collected between April and November 2019.

The participants' average age was 34.4 (s.d.= 9.7), and the proportion of women was 51%. While 80.5% of the participants were from Istanbul, a significant proportion of the rest were from the other major cities of the country, and the remainder were from various regions of Turkey. In terms of educational status, 9.7% of the participants were educated to primary or secondary level, 16.9 % of them were educated to high school level, 57.5% had at least an undergraduate degree and 15.9% had graduate degree. The average lengths of experience in years is as follows: in the same institution 6.2, in the same position, 4.6, working with the same manager, 3.8, total professional experience, 12.6.

## **5.1.2. Measures**

### **5.1.2.1. Perceived Person-Environment Fit Scale**

As in the first study, PPEFS's (Chuang, Shen & Judge, 2016) Turkish version was used in this study. For this study, Cronbach Alpha coefficients were .77 for the PJFS, .89 for the POFS, and .92 for both the PGFS and the PSFS.

### **5.1.2.2. Utrecht Work Engagement Scale**

The construct validity of the PJFS was tested using the employee engagement scale developed by Schaufeli et al. (2002). It has 17 items (e.g. "Time flies when I am working", "I am proud on the work that I do", "At my work, I feel bursting with energy") with 5-point Likert type response scale ranging from "not suitable" (1) to "completely suitable" (5). The scale consists of three factors: Vigor, Dedication and Absorption. The scale was adapted to Turkish by Eryilmaz and Dogan (2012). The Turkish version contains the same three-factor structure as the original scale. The reliability coefficients were found to be .94 for Cronbach Alpha, and .85 for test-retest method. In this study the Cronbach Alpha coefficient was .95.

### **5.1.2.3. Organizational Identification Scale**

This scale, which developed by Mael and Ashforth (1992), adapted to Turkish by Bayazit et al. (2006) and Goncu (2006), was utilized to test the construct validity of the POFS. There are 6 items in the scale with a 5-point Likert type response scale ranging from "totally agree" to "totally disagree". Some sample items of the scale are "When I talk about this organization, I usually say 'we' rather than 'they'", "This organization's successes are my successes". As Goncu (2006) indicated, the scale has a single factor structure. The reliability coefficient of the scale in the study was determined as .84. In this study, the Cronbach Alpha coefficient was .89.

### **5.1.2.4. Group Cohesion Scale**

The examination the construct validity of the PGFS made use of the scale developed by Price and Mueller (1986, as cited in Alsancak, 2010) measuring the level of compliance of individuals in the group. It has 5 items with a 5-point Likert scale ranging from "none" to "very much". This scale was adapted to Turkish by Alsancak (2010). The unidimensionality of the scale indicated in the confirmatory factor analysis. In addition, the Cronbach Alpha coefficient was found to be .92. The expression "teammates" in the original was replaced with "department friends", and also, past tense was replaced with present. Thus, two example questions are "How much do you trust your department friends?", "How much would you like to work again with your department friends in the future?". Cronbach Alpha coefficient was .90 in this study.

### **5.1.2.5. Leader-Member Exchange Scale**

The scale developed by Liden and Maslyn (1998), was utilized for testing the construct validity of the PSFS. It consists of 12 expressions within four-factor (Affect, Loyalty, Contribution, Professional

Respect), each consisting of three expressions. Two example items from the scale are “My supervisor would defend me to others in the organization if I made an honest mistake”, “My supervisor is a lot of fun to work with”. In this study the Turkish form of the scale adapted by Ucler (2018) was used. It has a 6-point Likert type response scale ranging from “Strongly disagree” (1) to “Strongly agree” (6). The Cronbach Alpha coefficient of the scale was reported as .94, whereas it was .95 in this study.

### 5.1.3. Data Analysis

SPSS 22 package program was used for the analysis. For construct validity, the relationships between the each PPEFS-TR scale and other related constructs were examined. In relation to reliability analysis, Cronbach Alpha coefficients were calculated for each dimensions of the PPEFS-TR.

### 5.1.4. Results

For the construct validity, the relations between the PPEFS-TR dimensions and other related structures were examined by four different hierarchical linear regression analysis, and the results are presented in Table 4. When PO, PG and PS fit were controlled; PJ fit was related to work engagement significantly. In the second step, although the coefficients of PO and PG fit remained significant, it was observed that the PJ fit exhibited the highest correlation with work engagement. Moreover, when PJ, PG and PS fit were controlled; only PO fit was related to organizational identification significantly. Similarly, when PJ, PO and PS fit were controlled; only PG fit was related to group cohesion significantly. Lastly, when PJ, PO and PG fit were controlled; PS fit was related to LMX significantly. Although PG was significantly related to LMX, the coefficient was small and has low significance. All of these results support Hypothesis 4 to 7.

**Table 4.** Hierarchical Linear Regression Analysis Results for the Outcome Variables as Dependent Variables in Study 2

	Types of Fit				Model $\Delta R^2$	Model $\Delta F$	$\beta$
	PJFS	POFS	PGFS	PSFS			
Work Engagement	<u>.29***</u>	.20**	.16*	.10	.06	26.38***	
Organizational Identification	.13	<u>.28***</u>	.07	.13	.03	12.92***	
Group Cohesion	-.01	-.16*	<u>.66***</u>	-.01	.19	69.11***	
LMX	-.04	-.03	.13*	<u>.69***</u>	.24	163.91***	

**Note:** n= 308. All  $\beta$  values recruited from Step 2. \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$ . Underlined cells represent hypothesized relationships.

PJFS = Person–Job Fit Scale; POFS = Person–Organization Fit Scale; PGFS = Person–Group Fit Scale; PSFS = Person–Supervisor Fit Scale. Internal reliability analyses were also conducted in Study 2. The Cronbach Alpha coefficients were .77 for the PJFS, .89 for the POFS, .92 for the PGFS, and .92 for the PSFS.

## 6. Discussion

As it is based on multiple theories, the PPEFS (Chuang, Shen & Judge, 2016) allows multidimensional evaluation of person-environment fit, and thus is frequently used in this field (e.g., Andela & Van Der Doef, 2019; Krishnan, Wesley & Bhaskaran, 2017; Nyarko-Sampson, Amponsah & Asamani, 2019). The scale enables measurement of the fit with the structural aspects of the work environment in terms of organization and work, on the one hand, and the human aspects, such as group and supervisor, on the other. Building on the contribution of the scale to the person-environment fit literature, this research aimed to adapt the PPEFS (Chuang, Shen & Judge, 2016) into Turkish, and thus, to provide a resource for future studies with Turkish samples.

The confirmatory factor analysis revealed four measures of fit – PJFS, POFS, PGFS, and PSFS. The results of the analysis for each scale indicated that while the one-factor model fits well for the PJFS and the PSFS, there is a better fit for the two-factor model (goals and values fit) for the POFS, and the second-order model for the PGFS (goals, values and attributes fit). Moreover, the results indicated good fit for the second-order model that supports convergent validity of the PPEFS. Additionally, the good fit of the second-order and superordinate models of the PPEFS-TR implies that person-environment fit can be conceptualized as a superordinate multidimensional construct. All these results support the previous literature (Chuang, Shen & Judge, 2016; Seong et al. 2015), and confirm the factorial structure of the PPEFS.

In this study, the findings of the positive correlations between all measures can be considered as a construct validity evidence. Among these relations, lower level correlations were found between the PJFS and other scales, and higher level, among the POFS, the PGFS and the PSFS. This result is not surprised, since while the PJFS's content is very different from other scales, while the organization concept covers groups and supervisors, so these three scales are more closely related, especially, the POFS and the PGFS, which have very high correlation. This finding can be discussed from a cultural point of view. As known Turkey has a collectivistic culture (House et al., 2004), and in this type of cultures the employee-employer relationship put more emphasis on relationships rather than tasks, and also on value congruence as well as individual and group attractiveness (Lee & Ramaswami, 2013; Parkes, Bochner & Schneider, 2001). Thus, the high relations between organization, group and supervisor fit may be due the fact that employees in Turkey give more importance to fit in relationships, unlike people in individualistic cultures who may focus more on person-job fit.

In relation to convergent validity, AVE values above .50 and lower than CR values were considered as evidence for validity (Hair, Ringle & Sarstedt, 2011). When the relations of the PPEFS-TR and the PFS was investigated with respect to convergent validity, as with Chuang, Shen and Judge (2016), moderate correlations were observed between these two scales, which measure the same construct. Among these relations, the highest correlation of Demand-Abilities factor of the PFS is with the PJFS, which has the same content. On the other hand, Person-Organization Fit factor of the PFS is most highly correlated with the same type of fit oriented the POFS, it also moderately correlated with

the PGSF and PSFS, which also focus on groups and managers in organizations. Nevertheless, Need and Supplies factor of the PFS has medium level correlation with all dimensions of the PPEFS-TR. Since all scales to some extent measure the fit by focusing on some aspects of a person's ideal, and the reality, these similar coefficients seem reasonable. As expected, based on the previous findings (Chuang, Shen & Judge, 2016; Liao & Chuang, 2004), the PPEFS-TR measures have negligible correlations with age and gender, providing evidence for divergent validity.

In addition, incremental validity tests were conducted for the each PPEFS-TR measures. Firstly, similar to previous research (Afsar & Badir, 2016; Andela & Van Der Doef, 2019; Nyarko-Sampson, Amponsah & Asamani, 2019; Stone et al., 2019; Yu, 2016), the analysis revealed that all the PPEFS-TR dimensions have significant low to moderate correlations with these constructs. Furthermore, it was observed that the PPEFS-TR explained above and beyond the PFS (Cable & DeRue, 2002) on these organizational outcomes. Especially, the PSFS was the dimension that most contributed to the PFS for all outcomes. The PFS, used extensively in person-environment fit literature in organizational research, does not cover person-supervisor fit. This key finding underlines the importance of measuring this fit dimension in future research. Additionally, while the PJFS and the POFS contributed to the explained variance on job satisfaction and organizational citizenship respectively, the PGFS has no significant effects on these outcomes. Although this result shows the PGFS does not explain more variance above the PFS on these outcomes, it can be expected that this scale might have greater contribution on constructs that are more group related. In future, incremental validity of the PGFS can be explored using variables concerning groups in organizations, such as group commitment, communication quality in groups, or group performance.

As another construct validity evidence, controlling the other scale, the correlation of each scale with theoretically-related construct were investigated. For the POFS, its relation to organizational identification was significant, and moreover, was higher than the relations of the other scale in the PPEFS-TR to organizational identification. Similarly, for the PGFS, the relationship between the scale and group cohesion was significant, and also was higher than the correlations of this validity construct with other measures in the PPEFS-TR. There is a similar pattern for the PSFS, since its relation with LMX was high, in fact, higher than the relations of LMX with the other PPEFS-TR dimensions. Although the relation of the PJFS with work engagement was significant, and the correlation coefficient for this relationship was higher than the other scales of the PPEFS-TR have, it was observed that these correlation coefficients were similar. This similarity might stem from the fact that work engagement is different from other validity constructs, because rather than being specific only to job fit, may be affected by the other fit dimensions, such as organization, group and supervisor. All of these results concur with the previous studies revealing relationships between person-job fit and work engagement (Lu et al., 2014), person-organization fit and organizational identification (Vondey, 2010), person-group fit and social cohesion (Seong et al., 2015), and person-supervisor fit and LMX (Engle & Lord, 1997), and can be regarded as validity evidence.

In terms of reliability, internal consistency analyses were conducted for each scale. All of the Cronbach' Alpha values imply that the measurements were reliable – particularly for the POFS, the PGFS and the PSFS, which are above .89 –, and also, the coefficients of the PJFS is .77, relatively lower than other scales. Additionally, CR values in the measurement model were higher than .70 which indicates high reliability (Hair, Ringle & Sarstedt, 2011). Similarly, the lowest value was belonging to PJFS. This result might be due to the contents of the PJFS items, each of which focus on different aspects of fit in relation to job, such as qualifications, personality, interests and needs, i.e., the fit in these aspects are rather unrelated. However, the fact that all test-retest reliability coefficients were above .90 indicates that these measurements are not only consistent but also stable over time.

Some limitations of this research should be noted. First of all, self-report data from a single source was used. Future research should utilize a more objective criterion variable, such as job performance, and also data from different sources, such as managers or colleagues. In future, it will be important to test criterion-related validity, as an alternative validity method. Secondly, as discussed in the sample and procedure sections, various strategies were used to diversify the demographic characteristics (e.g., education, tenure, sector, department or job type) and reach more representative employee sample. The aim was to reach more generalizable results. However, the construct of the scale might be re-examined in more specific samples to allow cross-validity checks. Finally, it was possible to test the superordinate model, but not the aggregate model. Although the aggregate model was not previously supported (Chuang, Shen & Judge, 2016), in future, this model should be tested specifically for the PPEFS-TR, to determine whether or not the scales can be combined into a general fit concept.

As Chuang, Shen and Judge (2016) stated, by integrating various theories on fit, the PPEFS is able to measure person-environment fit with psychometrically strong qualities, in a full spectrum of dimensions. It is valuable, in particular, to include PG fit and PS fit measures into the assessment of fit. The Turkish form of the PPEFS-TR also seems as psychometrically sound as the original. Thus, it has potential for studies conducted on person-environment fit field in Turkish samples. The PPEFS-TR can be also utilized by organization for various process, for example in employee selection and professional development, and in redesigning the job.

## References

- Abdalla, A., Elsetouhi, A., Negm, A., & Abdou, H. (2018). Perceived person-organization fit and turnover intention in medical centers: The mediating roles of person-group fit and person-job fit perceptions. *Personnel Review*, 47(4), 863-881.
- Afsar, B., & Badir, Y. F. (2016). Person-organization fit, perceived organizational support, and organizational citizenship behavior: The role of job embeddedness. *Journal of Human Resources in Hospitality & Tourism*, 15(3), 252-278.
- Alsancak, D. (2010). *Bilgisayar destekli işbirlikli öğrenme ortamlarında geçmişken bellek ile grup uyumu, grup atmosferi ve performansı arasındaki ilişkinin incelenmesi* (Yayınlanmamış Yüksek Lisans tezi). Hacettepe Üniversitesi, Ankara.

- Andela, M., & Van Der Doef, M. (2019). A comprehensive assessment of the person–environment fit dimensions and their relationships with work-related outcomes. *Journal of Career Development, 46*(5), 567-582.
- Andela, M., Van Der Doef, M., & Lheureux, F. (2019). Transcultural validation of the perceived person-environment fit scale in a French context. *LeTravail Humain, 83*(4), 271-291.
- Ballout, H. I. (2007). Career success: The effects of human capital, person-environment fit and organizational support. *Journal of Managerial Psychology, 22*(8), 741-765.
- Bayazit, M., Aycan, Z., Aksoy, E., Goncu, A., & Oztekin, T. (2006, June). *Contextual performance: Antecedents and motivational processes operating among blue-collar employees* [Paper presentation]. 10th ISSWOV International Conference on Work Values and Behavior, Tallinn, Estonia.
- Beaton, D. E., Bombardier, C., Guillemin, F., & Ferraz, M. B. (2000). Guidelines for the process of cross-cultural adaptation of self-report measures. *Spine, 25*(24), 3186-3191.
- Bednarska, M. A. (2017). Does the effect of person-environment fit on work attitudes vary with generations? Insights from the tourism industry. *International Journal of Management and Economics, 53*(1), 65-83.
- Behram, N. K., & Dinc, E. (2014). Algılanan kişi-örgüt uyumunun kişilerarası çatışma ve işten ayrılma niyeti üzerine etkisi. *Aksaray Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi, 7*(1), 115-124.
- Bennis, W. G. & Townsend, R. (1989). *On becoming a leader* (Vol. 36). New York: Addison-Wesley.
- Brkich, M., Jeffs, D., & Carless, S. A. (2002). A global self-report measure of person – job fit. *European Journal of Psychological Assessment, 18*(1), 43-51.
- Cable, D. M. & DeRue, D. S. (2002). The convergent and discriminant validity of subjective fit perceptions. *Journal of Applied Psychology, 87*(5), 875-884.
- Cable, D. M., & Edwards, J. R. (2004). Complementary and supplementary fit: A theoretical and empirical integration. *Journal of Applied Psychology, 89*(5), 822-834.
- Cable, D. M., & Judge, T. A. (1996). Person–organization fit, job choice decisions, and organizational entry. *Organizational Behavior and Human Decision Processes, 67*(3), 294-311
- Cai, D., Cai, Y., Sun, Y., & Ma, J. (2018). Linking empowering leadership and employee work engagement: The effects of person-job fit, person-group fit, and proactive personality. *Frontiers in Psychology, 9*, 1304.
- Chatman, J. A. (1989). Improving interactional organizational research: A model of person-organization fit. *Academy of Management Review, 14*(3), 333-349.
- Chen, C. Y., Yen, C. H., & Tsai, F. C. (2014). Job crafting and job engagement: The mediating role of person-job fit. *International Journal of Hospitality Management, 37*, 21-28.
- Chen, P., Sparrow, P., & Cooper, C. (2016). The relationship between person-organization fit and job satisfaction. *Journal of Managerial Psychology, 31*(5), 946-959.
- Chi, N. W., & Pan, S. Y. (2012). A multilevel investigation of missing links between transformational leadership and task performance: The mediating roles of perceived person-job fit and person-organization fit. *Journal of Business and Psychology, 27*(1), 43-56.
- Chuang, A., & Sackett, P. R. (2005). The perceived importance of person-job fit and person-organization fit between and within interview stages. *Social Behavior and Personality: An International Journal, 33*(3), 209-226.
- Chuang, A., Shen, C. T., & Judge, T. A. (2016). Development of a multidimensional instrument of person–environment fit: The Perceived Person–Environment Fit Scale (PPEFS). *Applied Psychology: An International Review, 65*(1), 66-98.

- Demir, M., Demir, S. S., & Nield, K. (2015). The relationship between person-organization fit, organizational identification and work outcomes. *Journal of Business Economics and Management*, 16(2), 369-386.
- DeRue, D.S., & Hollenbeck, J.R. (2007). The search for internal and external fit in teams. In C. Ostroff, & T.A. Judge (Eds.), *Perspectives on organizational fit* (pp. 259–285). New York: Lawrence Erlbaum.
- Edwards, J. R., Caplan, R. D., & Harrison, R. V. (1998). Person-environment fit theory: Conceptual foundations, empirical evidence, and directions for future research. In C. L. Cooper (Ed.), *Theories of organizational stress* (pp. 28-67). New York: Oxford University Press.
- Edwards, J. R., & Shipp, A. J. (2007). The relationship between person-environment fit and outcomes: An integrative theoretical framework. In C. Ostroff & T. A. Judge (Eds.), *Perspectives on organizational fit* (pp. 209-258). New York: Lawrence Erlbaum.
- Edwards, J. R. (1991). Person-job fit: A conceptual integration, literature review, and methodological critique. In C. L. Cooper & I. T. Robertson (Eds.), *International review of industrial and organizational psychology*, Vol. 6, pp. 283–357). Chichester: John Wiley & Sons.
- Ekehammar, B. (1974). Interactionism in personality from a historical perspective. *Psychological Bulletin*, 81(12), 1026 – 1048.
- Engle, E. M., & Lord, R. G. (1997). Implicit theories, self-schemas, and leader-member exchange. *Academy of Management Journal*, 40(4), 988-1010.
- Eryilmaz, A., & Dogan, T. (2012). Subjective well-being at work: Investigating of psychometric properties of Utrecht work engagement scale. *Turkish Journal of Clinical Psychiatry*, 15(1), 49-55.
- Goncu, A. (2006). *Motivational processes involved in the relationship between leadership and organizational citizenship behaviors* (Yayınlanmamış Yüksek Lisans Tezi). Koç Üniversitesi, İstanbul.
- Hair, J. F., Ringle, C. M., & Sarstedt, M. (2011). PLS-SEM: Indeed a silver bullet. *Journal of Marketing Theory and Practice*, 19(2), 139-152.
- Hoffman, B. J., & Woehr, D. J. (2006). A quantitative review of the relationship between person–organization fit and behavioral outcomes. *Journal of Vocational Behavior*, 68(3), 389-399.
- House, R. J. (1971). A path goal theory of leader effectiveness. *Administrative Science Quarterly*, 16(3), 321-339.
- House, R. J., Hanges, P. J., Javidan, M., Dorfman, P. W., & Gupta, V. (Eds.). (2004). *Leadership, culture and organizations: The Globe study of 62 societies*. Thousand Oaks, CA: Sage.
- Huang, M. P., Cheng, B. S., & Chou, L. F. (2005). Fitting in organizational values: The mediating role of person-organization fit between CEO charismatic leadership and employee outcomes. *International Journal of Manpower*, 26(1), 35-49.
- Je, M. J., & Kim, Y. G. (2010). Effects of person-organization fit and person-job fit on occupational commitment, organizational commitment, and turnover intentions of cooks. *Culinary Science and Hospitality Research*, 16(5), 50-63.
- Jui-Chen, P., Yin-Ling, L., & Mei-Man, T. (2014). Person–organization fit and turnover intention: Exploring the mediating effect of work engagement and the moderating effect of demand–ability fit. *Journal of Nursing Research*, 22(1), 1-11.
- Kim, M.S., Kim, S.Y., & Shin, Y. (2010). Effects of gender similarity on relationships between person–group value fit and work attitudes. *Asian Journal of Social Psychology*, 14(1), 1–14.
- Krishnan, D. S. G., Wesley, D. J., & Bhaskaran, R. (2017). Perceived person-environment fit and employees' turnover intention. *International Journal of Current Advanced Research*, 6(8), 5218–5224.

- Kristof, A. L. (1996). Person-organization fit: An integrative review of its conceptualizations, measurement, and implications. *Personnel Psychology, 49*(1), 1-49.
- Kristof-Brown, A. L., Zimmerman, R. D., & Johnson, E. C. (2005). Consequences of individuals' fit at work: A meta-analysis of person-job, person-organization, person-group, and person-supervisor fit. *Personnel Psychology, 58*(2), 281-342.
- Kristof-Brown, A. L., Seong, J. Y., Degeest, D. S., Park, W. W., & Hong, D. S. (2014). Retracted: Collective fit perceptions: A multilevel investigation of person-group fit with individual-level and team-level outcomes. *Journal of Organizational Behavior, 35*(7), 969-989.
- Lamm, M. S., Shaw, G. E., Kuyumcu, D., & Dahling, J. (2010). The effect of person-organization fit on the display of organizational-citizenship behaviors. *TCNJ Journal of Student Scholarship, 12*, 1-8.
- Lauver, K. J., & Kristof-Brown, A. (2001). Distinguishing between employees' perceptions of person-job and person-organization fit. *Journal of Vocational Behavior, 59*(3), 454-470.
- Lee, Y. T., & Ramaswami, A. (2013). Fitting person-environment fit theories into a national cultural context. In A.L. Kristof-Brown & J. Billsberry (Eds.), *Organizational fit: key issues and new directions* (pp. 222-240). Chichester: JohnWiley & Sons.
- Leng, G. E., & Chin, M. L. C. (2016). Person-job fit, personality, organizational commitment and intention to stay among employees in marketing departments. *Jurnal Psikologi Malaysia, 30*(1), 80-89.
- Lewin, K. (1951). *Field theory in social science: Selected theoretical papers* (D. Cartwright, Ed.). New York: Harper & Brothers.
- Li, C. K., & Hung, C. H. (2010). An examination of the mediating role of person-job fit in relations between information literacy and work outcomes. *Journal of Workplace Learning, 22*(5), 306-318.
- Li, C. S., Kristof-Brown, A. L., & Nielsen, J. D. (2019). Fitting in a group: Theoretical development and validation of the Multidimensional Perceived Person-Group Fit scale. *Personnel Psychology, 72*(1), 139-171.
- Liao, R., & Chuang, A. (2004). A multilevel investigation of factors influencing employee service performance and customer outcomes. *Academy of Management Journal, 47*(1), 41-58.
- Liden, R. C., & Maslyn, J. M. (1998). Multidimensionality of leader-member exchange: An empirical assessment through scale development. *Journal of Management, 24*(1), 43-72.
- Liu, B., Liu, J., & Hu, J. (2010). Person-organization fit, job satisfaction, and turnover intention: An empirical study in the Chinese public sector. *Social Behavior and Personality: An International Journal, 38*(5), 615-625.
- Lu, C. Q., Wang, H. J., Lu, J. J., Du, D. Y., & Bakker, A. B. (2014). Does work engagement increase person-job fit? The role of job crafting and job insecurity. *Journal of Vocational Behavior, 84*(2), 142-152.
- Mael, F., & Ashforth, B. E. (1992). Alumni and their alma mater: A partial test of the reformulated model of organizational identification. *Journal of Organizational Behavior, 13*(2), 103-123.
- Marstand, A. F., Martin, R., & Epitropaki, O. (2017). Complementary person-supervisor fit: An investigation of supplies-values (SV) fit, leader-member exchange (LMX) and work outcomes. *The Leadership Quarterly, 28*(3), 418-437.
- Muchinsky, P. M., & Monahan, C. J. (1987). What is person-environment congruence? Supplementary versus complementary models of fit. *Journal of Vocational Behavior, 31*(3), 268-277.
- Netemeyer, R. G., Boles, J. S., McKee, D. O., & McMurrian, R. (1997). An investigation into the antecedents of organizational citizenship behaviors in a personal selling context. *The Journal of Marketing, 61*(3), 85-98.

- Nyarko-Sampson, E., Amponsah, M. O., & Asamani, L. (2019). Person-environment fit and turnover intentions of senior high school teachers in Ghana. *International Journal of Education & Psychology in the Community*, 9(1&2), 149-172.
- Ostroff, C., Shin, Y., & Kinicki, A. J. (2005). Multiple perspectives of congruence: Relationships between value congruence and employee attitudes. *Journal of Organizational Behavior*, 26, 591-623.
- O'Reilly, C. A., Chatman, J., & Caldwell, D. F. (1991). People and organizational culture: A profile comparison approach to assessing person-organization fit. *Academy of Management Journal*, 34(3), 487-516.
- Özalp Türetgen, I. (2020). *Örgütsel psikoloji bakış açısıyla iş stresi: İş Stresi Bataryası – örgütsel değişken ölçüm araçları*. Ankara: Nobel.
- Parkes, L., Bochner, S., & Schneider, S. (2001). Person-organisation fit across cultures: An empirical investigation of individualism and collectivism. *Applied Psychology*, 50(1), 81-108.
- Peng, J. C., & Chiu, S. F. (2010). An integrative model linking feedback environment and organizational citizenship behavior. *The Journal of Social Psychology*, 150(6), 582-607.
- Peng, Y., & Mao, C. (2015). The impact of person-job fit on job satisfaction: the mediator role of self efficacy. *Social Indicators Research*, 121(3), 805-813.
- Piasentin, K. A., & Chapman, D. S. (2006). Subjective person-organization fit: Bridging the gap between conceptualization and measurement. *Journal of Vocational Behavior*, 69(2), 202-221.
- Podsakoff, P. M., MacKenzie, S. B., Moorman, R. H., & Fetter, R. (1990). Transformational leader behaviors and their effects on followers' trust in leader, satisfaction, and organizational citizenship behaviors. *The Leadership Quarterly*, 1(2), 107-142.
- Price, J. L., & Mueller, C. W. (1986). *Absenteeism and turnover of hospital employees*. Greenwich: JAI Press.
- Rietveld, L. (2015). *Exploring the future development in employee involvement: Person-environment fit and the future of job crafting* [Unpublished master's thesis]. University of Twente, Drienerlolaan.
- Schaubroeck, J., & Lam, S. S. (2002). How similarity to peers and supervisor influences organizational advancement in different cultures. *Academy of Management Journal*, 45(6), 1120-1136.
- Schaufeli, W. B., Salanova, M., González-Romá, V., & Bakker, A. B. (2002). The measurement of engagement and burnout: A two sample confirmatory factor analytic approach. *Journal of Happiness Studies*, 3(1), 71-92.
- Schermelleh-Engel, K., Moosbrugger, H., & Müller, H. (2003). Evaluating the fit of structural equation models: Tests of significance and descriptive goodness-of-fit measures. *Methods of Psychological Research Online*, 8(2), 23-74.
- Schneider, B. (1987). The people make the place. *Personnel Psychology*, 40(3), 437-453.
- Sekiguchi, T. (2004). Person-organization fit and person-job fit in employee selection: A review of the literature. *Osaka Keidai Ronshu*, 54(6), 179-196.
- Seong, J. Y., Kristof-Brown, A. L., Park, W. W., Hong, D. S., & Shin, Y. (2015). Person-group fit: Diversity antecedents, proximal outcomes, and performance at the group level. *Journal of Management*, 1(4), 1184-1213.
- Sertel Berk, H. O., Özalp Türetgen, I., Unsal, P., & Basbug, G. (2010, March 29-31). *Job Stress Battery: Scales of job control and occupational outcome variables* [Poster presentation]. 9th Conference of the European Academy of Occupational Health Psychology, Rome, Italy.
- Sigri, U. & Gurbuz, S. (2014). *Örgütsel davranış*. İstanbul: Beta.
- Simsek, Ö. F. (2007). *Yapısal eşitlik modellemesine giriş: Temel ilkeler ve LISREL uygulamaları*. Ankara: Ekinoks.

- Stone, R. P., Leuty, M. E., Rayburn, R., & Wu, B. H. (2019). Person–environment fit at work: Relationships with workplace behaviours. *Australian Journal of Career Development*, 28(3), 234-244.
- Strauss, J. P., Barrick, M. R., & Connerley, M. L. (2001). An investigation of personality similarity effects (relational and perceived) on peer and supervisor ratings and the role of familiarity and liking. *Journal of Occupational and Organizational Psychology*, 74(5), 637-657.
- Sung, S. H., Seong, J. Y., & Kim, Y. G. (2020). Seeking sustainable development in teams: Towards improving team commitment through person-group fit. *Sustainability*, 12(15), 6033.
- Tajfel, H., & Turner, J. C. (1979). An integrative theory of intergroup conflict. In W. G. Austin, & S. Worchel (Eds.), *The social psychology of intergroup relations* (pp. 33– 47). Monterey, Calif: Brooks/Cole.
- Tak, J. (2011). Relationships between various person–environment fit types and employee withdrawal behavior: A longitudinal study. *Journal of Vocational Behavior*, 78(2), 315-320.
- Tatli, M., & Cakmak, A. F. (2019). Kişi-çevre uyumunun farklı kavramsal yaklaşımlar açısından çok düzeyli ölçümü; hemşirelerin uyum algıları ile çalışma tutum ve davranışları arasındaki ilişkilerin incelenmesi. *Business & Management Studies: An International Journal*, 7(5), 2464-2488.
- Thomson, R., & Thomson, A. (2002). *Managing people* (3th ed.). London: Routledge.
- Ucler, C. (2018). *Investigating the relations of psychological contract, organizational transparency and leader member exchange with employee performance behaviors* [Unpublished doctoral dissertation]. Marmara University, Istanbul.
- Unsal, P., Özalp Türetgen, I., Sertel Berk, O., & Basbug, G. (2008, September 3-5). *İşte stres!* [Stress in the job] [Paper presentation]. 15<sup>th</sup> National Psychology Congress, Istanbul, Turkey.
- Verquer, M. L., Beehr, T. A., & Wagner, S. H. (2003). A meta-analysis of relations between person–organization fit and work attitudes. *Journal of Vocational Behavior*, 63(3), 473-489.
- Vondey, M. (2010). The relationships among servant leadership, organizational citizenship behavior, person–organization fit, and organizational identification. *International Journal of Leadership Studies*, 6(1), 3-27.
- Werbelt, J. D., & Johnson, D. J. (2001). The use of person–group fit for employment selection: A missing link in person–environment fit. *Human Resources Management*, 40(3), 227-240.
- Yang, J. F., Feng, C. C., & Feng, P. H. (2020). Linking ethical leadership to work engagement: the effects of person–group fit and person–job fit. *WSEAS Transactions on Business and Economics*, 17 (66), 682-691.
- Yılmaz, H. & Özalp Türetgen, İ. (2014, April 9-12). *İş Stresi Bataryası'nın Genel İş Doyumu Ölçeği'nin revize edilmesi* [The revision of General Job Satisfaction Questionnaire of the Job Stress Battery] [Paper presentation]. 18<sup>th</sup> National Psychology Congress, Bursa, Turkey.
- Yu, K. Y. T. (2016). Inter-relationships among different types of person–environment fit and job satisfaction. *Applied Psychology*, 65(1), 38-65.
- Zhang, J. C., Ling, W. Q., Zhang, Z. Y., & Xie, J. (2015). Organizational commitment, work engagement, person–supervisor fit, and turnover intention: A total effect moderation model. *Social Behavior and Personality*, 43(10), 1657-1666.

## APPENDIX

### PPEFS-TR ÖLÇEĞİ

Aşağıda işiniz, çalışma grubunuz, süpervizörünüz (ilk amiriniz) ve çalıştığınız kurum ile ilgili çeşitli sorular bulunmaktadır. Lütfen her bir soruyu okuyup, alttaki değerlendirme skalasını kullanarak sorunun yanında ayrılan parantezin içine 1 ile 7 arasında sizin için uygun olan sayıyı yazınız.

1	2	3	4	5	6	7
Hiç Uyumlu Değil						Tamamen Uyumlu

#### Kişi-İş Uyumu

- 1 ( ) Sizin profesyonel beceri, bilgi ve yetenekleriniz ile işinizin gerektirdiği beceri, bilgi ve yetenekler arasındaki uyumu nasıl tarif edersiniz?
- 2 ( ) Kişilik özellikleriniz (örneğin; dışadönük / içedönük, uyumlu / uyumsuz ve güvenilir / güvenilirmez) ile işinizin gerektirdiği kişilik özellikleri arasındaki uyumu nasıl tarif edersiniz?
- 3 ( ) İlgileriniz (örneğin; sosyal / asosyal, sanatsal / sanatsal olmayan ve geleneksel / geleneksel olmayan) ile bir iş için olmasını arzu ettiğiniz ilgiler arasındaki uyumu nasıl tarif edersiniz?
- 4 ( ) Şu anki işinizin özellikleri (örneğin; otonomi, önemlilik ve beceri çeşitliliği) ile bir iş için olmasını arzu ettiğiniz özellikler arasındaki uyumu nasıl tarif edersiniz?

#### Kişi – Örgüt Uyumu

Aşağıdaki değerlere sizin verdiğiniz önem ile örgütünüzün verdiği önem arasındaki uyumu nasıl tarif edersiniz?

- 1 ( ) Dürüstlük
- 2 ( ) Başarı
- 3 ( ) Adalet
- 4 ( ) Başkalarına yardım etme

Aşağıdaki boyutlar açısından sizin hedefleriniz ile örgütünüzün hedefleri arasındaki uyumu nasıl tarif edersiniz?

5. ( ) Ödül
6. ( ) Beklenen çaba miktarı
7. ( ) Diğer örgütlerle rekabet

#### Kişi – Grup Uyumu

Aşağıdaki değerlere sizin verdiğiniz önem ile grubunuzun verdiği önem arasındaki uyumu nasıl tarif edersiniz?

1. ( ) Dürüstlük
2. ( ) Başarı
3. ( ) Adalet
4. ( ) Başkalarına yardım etme

Aşağıdaki boyutlar açısından sizin hedefleriniz ile grubunuzun hedefleri arasındaki uyumu nasıl tarif edersiniz?

5. ( ) Ödül
6. ( ) Beklenen çaba miktarı
7. ( ) Diğer örgütlerle rekabet

Aşağıdaki özellikler açısından siz ve grubunuzun üyeleri arasındaki uyumu nasıl tarif edersiniz?

8. ( ) Kişilik
9. ( ) Çalışma tarzı
10. ( ) Yaşam tarzı

### **Kişi – Süpervizör Uyumu**

1. ( ) Hayatta sizin değer verdiğiniz şeyler ile süpervizörünüzün değer verdikleri arasındaki uyumu nasıl tarif edersiniz?
2. ( ) Sizin kişiliğiniz ile süpervizörünüzün kişiliği arasındaki uyumu nasıl tarif edersiniz?
3. ( ) Sizin çalışma tarzınız ile süpervizörünüzün çalışma tarzı arasındaki uyumu nasıl tarif edersiniz?
4. ( ) Sizin yaşam tarzınız ile süpervizörünüzün yaşam tarzı arasındaki uyumu nasıl tarif edersiniz?
5. ( ) Süpervizörünüzün liderlik tarzı ile sizin arzu ettiğiniz liderlik tarzı arasındaki uyumu nasıl tarif edersiniz?