

# Implicit Leadership Prototypes in Türkiye: A Turkish Adaptation and Validation of the Offermann and Coats Implicit Leadership Theory Scale

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## Abstract

Implicit leadership theories (ILTs) are cognitive schemas that shape how followers perceive and evaluate leaders. Most existing ILT measurement evidence comes from English-language samples in Western contexts, which limits cross-cultural comparison and the cumulative development of the construct. The present research adapted the Offermann and Coats (2018) ILT scale into Turkish across two studies. In Study 1 ( $N = 502$  employed adults), exploratory factor analysis yielded a 35-item, seven-factor structure (sensitivity, dedication, strength, intelligence, well-groomed, masculinity, tyranny), with evidence of configural and metric invariance across gender and age, and partial structural invariance across organizational tenure. In Study 2 ( $N = 436$  university students), the seven-factor structure was supported by confirmatory factor analysis and showed theoretically meaningful associations with personality (agreeableness, conscientiousness) and self-construal (independent, interdependent). Findings provide initial reliability and validity evidence for the Turkish ILT scale and suggest partial structural continuity with the original scale alongside differences in factor and item compositions. To our knowledge, this study represents the first Turkish adaptation and validation of the Offermann and Coats (2018) Implicit Leadership Theory scale, providing initial evidence for its reliability and validity in Turkish ILT research. It can further be utilized in cross-cultural research to evaluate the scale's invariance across diverse cultures.

## Türkiye'de Örtük Liderlik Prototipleri: Offermann ve Coats Örtük Liderlik Teorisi Ölçeğinin Türkçe Uyarlaması ve Geçerliği

Örtük liderlik kuramları (Implicit Leadership Theories; ILTs), çalışanların liderleri nasıl algıladığını ve değerlendirdiğini şekillendiren bilişsel şemalardır. ILT ölçümüne ilişkin mevcut kanıtların büyük bölümü, Batı bağlamındaki İngilizce konuşan örneklemelerden elde edilmiş olup, bu durum kültürler arası karşılaştırmaları ve kavramın gelişimini sınırlamaktadır. Bu araştırmada Offermann ve Coats (2018) tarafından geliştirilen ILT ölçeği iki ayrı çalışma kapsamında Türkçe'ye uyarlanmıştır. Birinci çalışmada ( $N = 502$  çalışan yetişkin), açımlayıcı faktör analizi sonucunda duyarlılık, işine adanmışlık, güçlülük, zekilik, bakımlılık, erkeksilik ve zorbalık olmak üzere yedi faktörden oluşan 35 maddelik bir yapı elde edilmiştir. Bulgular ayrıca cinsiyet ve yaş grupları arasında yapılandırma ve metrik değişmezliği, örgütsel kıdem açısından ise kısmi yapısal değişmezliği desteklemiştir. İkinci çalışmada ( $N = 436$  üniversite öğrencisi), doğrulayıcı faktör analizi yedi faktörlü yapıyı doğrulamış ve ölçeğin kişilik özellikleri (uyumluluk ve sorumluluk) ile benlik kurgusu (bağımsız ve karşılıklı bağımlı benlik) değişkenleriyle kuramsal beklentiler doğrultusunda anlamlı ilişkiler gösterdiği bulunmuştur. Genel olarak bulgular, ILT ölçeğinin Türkçe versiyonunun güvenilirliğini ve geçerliğini desteklemekte; aynı zamanda orijinal modelle önemli ölçüde yapısal süreklilik gösterirken faktör ve madde yapısında kültüre özgü farklılıklar içerdiğini ortaya koymaktadır. Bildiğimiz kadarıyla bu çalışma, Offermann ve Coats (2018) Örtük Liderlik Kuramı Ölçeği'nin Türkçe'ye ilk uyarlama ve geçerlik-güvenirlilik çalışmasıdır. Ölçeğin Türkçe versiyonu, örtük liderlik kuramları üzerine gelecekte yapılacak araştırmalar için bir temel oluşturmada ve farklı kültürler arasında ILT'lerin karşılaştırmalı olarak incelenmesini kolaylaştırmaktadır.

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Prior research has shown that the leadership process is determined not only by leader characteristics but also by followers' perceptions of the leader (Lord & Maher, 1991). According to this view, early socialization experiences and interactions with leader figures (parents, teachers, work peers) are internalized as cognitive schemas that facilitate social information processing (Shondrick et al., 2010). These schemas, known as implicit leadership theories (ILTs), are automatically activated in the presence of a leader and trigger leadership categorization by accessing relevant knowledge from semantic memory (Lord et al., 2001; Shondrick et al., 2010). ILTs operate as heuristic patterns of leader identification, simplifying the information processing required of individuals in organizations: with reduced cognitive load, attentional resources can be directed toward task-related demands rather than the more effortful work of categorizing leaders and selecting responses to them (Fiske & Taylor, 2008).

ILTs are important because they shape leadership perceptions in ways that have consequences for organizational behavior. Previous studies have shown that ILTs are related to the quality of leader–member exchange (LMX; Engle & Lord, 1997; Epitropaki & Martin, 2005), job satisfaction and organizational commitment (Martin & Epitropaki, 2001), and the motivation to lead (Schyns et al., 2020). Measuring ILTs is crucial for understanding how leadership perceptions shape leader–member relations as well as work outcomes. However, most ILT measurement evidence comes from English-language samples in Western contexts. Offermann's widely used scale (Offermann et al., 1994; Offermann & Coats, 2018) has not been translated and validated across non-Western languages. Instead, cross-cultural ILT research has largely relied on locally developed instruments rather than a common measure that can be applied across different cultural contexts. The result is little systematic evidence on how ILT structure operates across cultures, which limits the development of a generalizable construct.

The present research addresses these gaps by adapting the ILT scale (Offermann & Coats, 2018) into Turkish and evaluating its factor structure, measurement invariance, and convergent validity across two independent samples. The central question is one of measurement: whether an established ILT measure developed in a Western context retains its structure when adapted for use in a Turkish cultural and linguistic context, and where the structure may diverge. In the following sections, we review the theoretical foundations and measurement of ILTs, situate the present study within cross-cultural ILT research, and consider features of the Turkish context relevant to interpreting our adaptation findings.

### **Implicit Leadership Theories**

Leader categorization can be understood as an extension of prototype theory (Rosch, 1978). Prototype theory holds that category membership is graded rather than all-or-none. Members vary in how representative they are of the category, with the prototypical member judged most central. For instance, a robin is more typical of the bird category than a chicken (Rosch, 1978). Applied to leadership, individuals are perceived as more or less representative of the leader category depending on the traits they display, with some traits being more salient than others in shaping perceptions of a person as prototypically a leader.

Beyond the prototype view, the exemplar view holds that people may also evaluate a target against a specific leader they have known rather than a typical category member (Lord et al., 1984). Although the two views differ in the memory structures they emphasize, both treat leader categorization as a graded, largely automatic process in which a target's characteristics are compared to internal mental representations of leaders. According to the socio-cognitive approach, the prototypes and exemplars that anchor this process are developed through early socialization, cultural influences, and accumulated experiences with leader figures (Epitropaki et al., 2013; Shondrick & Lord, 2010). These experiences shape followers' schemas of the traits a leader should possess, and the resulting cognitive representations, that is, ILTs, operate largely unconsciously

to distinguish leaders from non-leaders (Lord & Maher, 1991; Shondrick & Lord, 2010) and to regulate interactions with them (Engle & Lord, 1997). Because socialization experiences occur within specific cultural contexts, ILT structures can be expected to vary across cultures.

### **Measurement of Implicit Leadership Theories**

Early empirical work on leadership attributes focused on single traits such as consistency and experimentation (Staw & Ross, 1980) and gender (Schein, 1973). The first widely cited ILT scale was Lord et al.'s (1984) 59-item list of leader attributes, generated through a free-form narrative procedure. Lord et al. found that some attributes, such as intelligence, honesty, and understanding, showed high leader prototypicality, whereas others, such as authoritarianism and dishonesty, showed low prototypicality. Building on these findings, Offermann et al. (1994) conducted a seminal study in which university students generated leader-trait descriptors that were subsequently reduced through exploratory and confirmatory factor analyses in additional student and working-adult samples. The resulting scale identified eight ILT factors: sensitivity, dedication, charisma, attractiveness, intelligence, strength, tyranny, and masculinity.

Epitropaki and Martin (2004) cross-validated the Offermann et al. (1994) scale in a multiple-organization setting and replicated six factors: sensitivity, intelligence, dedication, dynamism, tyranny, and masculinity. Their 21-item version did not recover an attractiveness factor, and strength and charisma loaded onto a single dedication factor. More recently, Offermann and Coats (2018) revisited the original scale using additional samples of college students and working adults and proposed a nine-factor structure: the original eight factors, with attractiveness split into creativity and well-groomed. Although there is considerable overlap in the ILT factors recovered across studies, each study has identified a slightly different structure, with variation likely attributable to differences in sampling, cultural and temporal context, and the dynamic nature of leadership perceptions. Because Offermann and Coats (2018) provides the most recent content-revised version of the original scale, it offers a theoretically and empirically appropriate source measure for the present adaptation.

### **Cross-Cultural Variability in ILTs and the Measurement Gap**

Although the prototype and exemplar processes underlying leader categorization may be shared across human cognition, the content of ILTs is culturally shaped and varies across societies. Cross-cultural research on leadership perceptions has consistently documented this variation. For example, Hofstede (1993) argued that cultural values constrain which leadership styles are seen as legitimate, and Gerstner and Day (1994) reported both commonalities and country-specific differences across eight countries on 59 leadership traits. The GLOBE project, drawing on data from 62 national cultures, found that charismatic/value-based and team-oriented leadership attributes were broadly endorsed, whereas narcissistic, participative, humane, and autonomous leadership showed substantial cross-cultural variation (House et al., 2004). At the organizational level, Ayman et al. (2000) compared work-related cultural dimensions across ten countries and identified systematic differences in paternalism, power distance, fatalism, and loyalty to community, with paternalism showing the largest cross-country variation. Together, these findings indicate that any general claim about how people perceive leaders must account for substantial cultural variability in the content of leader prototypes.

Despite well-documented cultural variation in leadership perceptions, systematic cross-cultural comparison of ILT structures has been limited by methodological limitations. Many cross-cultural studies have relied on locally developed assessment tools rather than a common measure, producing factor structures that cannot be directly aligned across studies. For instance, Ling et al. (2000) identified four ILT factors in a Chinese sample: personal morality, goal effectiveness, interpersonal competency, and versatility. In contrast,

Offermann et al. (1994) reported eight factors in an American sample, and Abdalla and Al-Homoud (2001) identified yet another set of dimensions in an Arabian context. Although these studies all tap leadership prototypes, their factor structures cannot be directly compared because the items, response formats, and analytical procedures differ. The cross-cultural ILT literature therefore documents that leadership prototypes vary across societies but does not establish how they vary in a standardized way. A Turkish adaptation of a widely used ILT measure addresses this measurement gap by providing a directly comparable instrument for future cross-cultural work. Rather than developing a new local Turkish scale, the present study prioritizes comparability across cultural contexts.

### **Implicit Leadership Theories in the Turkish Context**

Türkiye provides a meaningful cultural context for adapting an ILT scale developed in the United States. Its cultural and organizational profile differs in important respects from the English-language and Western contexts in which the original scale was developed, and prior Turkish ILT research has relied on locally developed instruments rather than a cross-culturally comparable measure. Cross-cultural work consistently characterizes Türkiye as high in power distance and collectivistic in orientation, particularly in-group collectivism (Hofstede, 1993; House et al., 2004). Turkish organizational culture has been described as paternalistic, with leaders expected to combine hierarchical authority with personal interest in subordinates' welfare and the maintenance of in-group cohesion (Aycaan et al., 2000; Paşa et al., 2001). In a 10-country comparison, Aycaan et al. (2000) found that paternalism was the cultural dimension most strongly differentiating Türkiye from low-paternalism contexts; Wasti (2003) similarly documented how in-group collectivism shapes employee commitment and leader–follower relations in Turkish work settings. Prior Turkish ILT research has examined leadership prototypes using local scales (Berber & Rofcanin, 2012; Tabak et al., 2013), but has not adapted a cross-culturally comparable ILT measure, leaving open the question of how the structure of Turkish leadership prototypes compares to prior findings from Western and other cultural contexts.

Although cultural differences in leadership perceptions are well documented, to our knowledge, no previous study has examined the revised Offermann and Coats (2018) ILT scale outside its original English-language and Western context. The present study addresses this gap by adapting the scale into Turkish and evaluating how its factor structure compares with the original nine-factor model. Prior research using the same measurement tradition has not produced a single fixed factor structure. Offermann et al. (1994), Epitropaki and Martin (2004), and Offermann and Coats (2018) each identified overlapping but non-identical ILT structures, even though these studies were conducted within Western and English-language contexts. Given this variability, the key question is not whether the original model replicates exactly, but how the Turkish factor structure corresponds to and diverges from the Offermann and Coats (2018) model.

### **The Present Research**

The present research adapted the Offermann and Coats (2018) ILT scale into Turkish across two studies. Following prior ILT scale research (Epitropaki & Martin, 2004; Offermann et al., 1994; Offermann & Coats, 2018), Study 1 examined the factor structure of the Turkish ILT scale and tested its invariance across employee subgroups. Study 2 cross-validated the resulting structure in an independent sample and examined its convergent validity with personality and self-construal. Together, the two studies provide initial adaptation and invariance evidence for the Turkish ILT scale and support its use in future cross-cultural comparisons.

## Study 1

Study 1 examined the factor structure of the Turkish adaptation of the Offermann and Coats (2018) ILT scale in a sample of full-time working adults. Exploratory factor analysis was used to evaluate how the Turkish version compared with the original model in factor number, item retention, and item composition. Study 1 also tested whether the resulting factor structure was invariant across employee subgroups defined by gender, age, and organizational tenure.

**Research Question 1.** How does the factor structure of the Turkish ILT scale compare with the Offermann and Coats (2018) structure in terms of factor number, item retention, and item composition?

**Hypothesis 1.** The factor structure of the Turkish ILT scale will show evidence of measurement invariance across employee subgroups defined by gender, age, and organizational tenure.

## Method

### Participants and Procedure

The study was approved by the Ethics Review Board of Istanbul Bilgi University (Approval Date: January 7, 2019; Project No. 2019-20024-03). All participants provided informed consent prior to participation. Participants were recruited from full-time white-collar employees of various Turkish companies and organizations using convenience sampling. The online survey was distributed via SurveyMonkey. The presentation order of the ILT items was randomized for each participant. Data collection lasted approximately two months.

The final analytic sample comprised 502 employees (209 men, 41.6%; 293 women, 58.4%; mean age 41.38 years,  $SD = 9.04$ , range 23–74). Regarding educational attainment, 54.3% of the participants held a bachelor's degree and 42.1% held a master's or doctoral degree, whereas 3.3% had completed high school and 0.4% had completed secondary school. In terms of hierarchical position, 35.5% were clerks, 27.7% held middle management positions, 19.4% were executives, and 17.4% reported other positions. Most participants (73.0%) had more than 10 years of overall work experience, while 13.1% had 1–5 years, 11.7% had 6–10 years, and 2.2% had less than one year of experience. Regarding seniority, 34.0% had worked in their current occupational field for more than 10 years, 33.8% for 1–5 years, 18.9% for 6–10 years, and 13.3% for less than one year. Organizational tenure showed a similar distribution, with 38.4% of participants having worked in their current organization for 1–5 years, 31.4% for more than 10 years, 19.3% for 6–10 years, and 10.9% for less than one year. Missing data per variable ranged from 0 to 1.2%, well below the conventional 5% threshold (Schafer, 1999). Missing demographic responses resulted in different sample sizes across subgroup analyses. Accordingly, each analysis was conducted using all available cases for the relevant grouping variable. The corresponding sample sizes are reported in the Results section and table notes where applicable.

### Materials and Measures

**ILT scale:** The 46-item ILT scale developed by Offermann and Coats (2018) was used in the present study. Permission to adapt the scale was obtained from the original author prior to the translation process. The Turkish version was prepared using a standard translation and back-translation procedure. Seven bilingual translators participated: four translated the items from English into Turkish, and three independently translated the Turkish items back into English. All seven translators were fluent in both languages; the team included one professional translator and one psychology professor who was a native English speaker, and all translators were blind to the purpose of the study. Discrepancies between the original and back-translated versions were resolved through discussion until conceptual and linguistic equivalence was achieved, resulting in the final

Turkish version of the scale. Participants rated each leadership trait using a 10-point Likert-type scale ranging from 1 ("Not at All Characteristic") to 10 ("Extremely Characteristic"), consistent with the original instrument.

The original Offermann and Coats (2018) scale consists of nine factors: sensitivity, dedication, tyranny, charisma, strength, well-groomed, masculinity, intelligence, and creativity. Participants rated each leadership trait on a 10-point Likert scale indicating how characteristic they considered it of a leader. Composite scores for prototypical and antiprototypical leadership were computed based on the emerging Turkish factor structure (see Results).

**Demographics:** Participants reported their age, gender, education level, work experience, position, seniority, and tenure.

### Analysis Plan

The psychometric properties of the Turkish ILT scale were evaluated in two steps. First, an exploratory factor analysis (EFA) was conducted to identify the factor structure of the Turkish version. Principal axis factoring was used as the extraction method, with an oblique rotation to allow correlated factors. Sampling adequacy was verified using Bartlett's test of sphericity and the Kaiser–Meyer–Olkin (KMO) measure. Parallel analysis was used to determine the number of factors to retain, rather than relying on visual inspection of the scree plot. Items with primary loadings below .40 or substantial cross-loadings (cross-loadings  $\geq .30$  or loading differences  $< .20$ ; Tabachnick & Fidell, 2007) were removed iteratively until the remaining items showed clean loadings on a single factor.

Second, the resulting factor structure was tested for structural stability across three planned employee subgroups, chosen based on prior ILT research (Epitropaki & Martin, 2004) and sample composition: gender (women vs. men), age (younger vs. older, formed by a median split), and organizational tenure (low: 5 years or fewer vs. high: 6 years or more). For each subgroup comparison, two complementary analyses were performed: (a) Welch's *t*-tests comparing subgroup means on the ILT factors and on the prototypical and antiprototypical leadership composite scores, with a Bonferroni-corrected alpha of .0055 to control for family-wise error across the nine comparisons; and (b) multi-group confirmatory factor analyses comparing three nested models reflecting increasing levels of structural constraint: Model 1 imposed the same factor structure across groups (configural invariance); Model 2 additionally constrained factor loadings to equality (metric invariance); and Model 3 additionally constrained factor covariances to equality (factor covariance invariance). The Satorra–Bentler scaled chi-square test was used to compare nested models; non-significant chi-square differences between models were taken as evidence for invariance at the given level. Model fit was evaluated using CFI and TLI  $\geq .90$ , RMSEA  $< .08$ , and a chi-square-to-*df* ratio  $\leq 3$  (Kline, 2016).

## Results

### Exploratory Factor Analysis

Bartlett's test of sphericity was significant ( $\chi^2(1035) = 12,580, p < .001$ ), and the Kaiser–Meyer–Olkin measure of sampling adequacy was .910, indicating that the correlation matrix was suitable for factor analysis. Bartlett's test was conducted on the initial 46-item correlation matrix, prior to item removal during the exploratory factor analysis; the degrees of freedom therefore correspond to the 46-item solution. Parallel analysis indicated a seven-factor solution explaining 55.30% of the variance. After iterative removal of items with low primary loadings or substantial cross-loadings, 11 items were dropped: items 5 (empathetic), 9 (motivated), 16 (controlling), 22 (risky), 24 (charismatic), 25 (sociable), 26 (dynamic), 30 (authoritative), 34 (creative), 35 (innovative), and 36 (clever). The final EFA on the remaining 35 items yielded a seven-factor

structure explaining 58.00% of the variance (see Table 1 for factor loadings). The seven retained factors were sensitivity, dedication, strength, intelligence, well-groomed, masculinity, and tyranny. Relative to the original nine-factor structure (Offermann & Coats, 2018), the Turkish solution retained seven of the nine factors, with divergence in factor number and item composition; no distinct charisma or creativity factors emerged. Together, these findings address Research Question 1 by showing that the Turkish factor structure corresponds to the original model in several respects while diverging in factor number and item composition.

**Table 1**  
*Item Loadings of the Turkish ILT*

| Item                | Tyranny | Sensitivity | Dedication | Strength | Masculinity | Well-groomed | Intelligence |
|---------------------|---------|-------------|------------|----------|-------------|--------------|--------------|
| Domineering         | .88     |             |            |          |             |              |              |
| Coercive            | .80     |             |            |          |             |              |              |
| Intimidating        | .80     |             |            |          |             |              |              |
| Commanding          | .72     |             |            |          |             |              |              |
| Demanding           | .66     |             |            |          |             |              |              |
| Power-hungry        | .64     |             |            |          |             |              |              |
| Pushy               | .57     |             |            |          |             |              |              |
| Compassionate       |         | .83         |            |          |             |              |              |
| Caring              |         | .78         |            |          |             |              |              |
| Selfless            |         | .71         |            |          |             |              |              |
| Friendly            |         | .69         |            |          |             |              |              |
| Sensitive           |         | .65         |            |          |             |              |              |
| Sympathetic         |         | .62         |            |          |             |              |              |
| Kind                |         | .50         |            |          |             |              |              |
| Focused             |         |             | .89        |          |             |              |              |
| Determined          |         |             | .77        |          |             |              |              |
| Goal oriented       |         |             | .66        |          |             |              |              |
| Dedicated           |         |             | .60        |          |             |              |              |
| Handles stress      |         |             | .52        |          |             |              |              |
| Good decision maker |         |             | .51        |          |             |              |              |
| Tough               |         |             |            | .82      |             |              |              |
| Strong              |         |             |            | .67      |             |              |              |
| Firm                |         |             |            | .61      |             |              |              |
| Bold                |         |             |            | .51      |             |              |              |
| Courageous          |         |             |            | .48      |             |              |              |
| Assertive           |         |             |            | .47      |             |              |              |
| Male                |         |             |            |          | .87         |              |              |
| Tall                |         |             |            |          | .79         |              |              |
| Masculine           |         |             |            |          | .69         |              |              |
| Attractive          |         |             |            |          | .57         |              |              |
| Well-groomed        |         |             |            |          |             | .94          |              |
| Well-dressed        |         |             |            |          |             | .89          |              |
| Educated            |         |             |            |          |             |              | .77          |
| Intellectual        |         |             |            |          |             |              | .74          |
| Intelligent         |         |             |            |          |             |              | .51          |

*Note.*  $N = 502$ . Principal axis factoring with oblique rotation was used. Loadings below .40 are not shown. Column headings are the seven factors retained in the Turkish solution.

Means, standard deviations, internal reliabilities, and intercorrelations of the seven factors are presented in Table 2. Correlations ranged from small to medium. The five prototypical factors (sensitivity, dedication, strength, intelligence, well-groomed) generally correlated positively with one another, and the two antiprototypical factors (tyranny and masculinity) correlated positively with each other. Cross-valence correlations were mixed in direction: notably, sensitivity correlated negatively with tyranny, whereas strength and well-groomed correlated positively with both tyranny and masculinity. Internal consistency was high for tyranny, sensitivity, dedication, strength, masculinity, and well-groomed, and acceptable for intelligence.

**Table 2**

*Means, Standard Deviations, Reliabilities, and Intercorrelations Among Turkish ILT Dimensions for the 35-Item Scale*

|                 | 1       | 2      | 3      | 4      | 5     | 6      | 7     |
|-----------------|---------|--------|--------|--------|-------|--------|-------|
| 1. Sensitivity  | (.88)   |        |        |        |       |        |       |
| 2. Dedication   | .26***  | (.86)  |        |        |       |        |       |
| 3. Strength     | .17***  | .51*** | (.83)  |        |       |        |       |
| 4. WG           | .24***  | .25*** | .35*** | (.92)  |       |        |       |
| 5. Intelligence | .29***  | .41*** | .39*** | .42*** | (.76) |        |       |
| 6. Tyranny      | -.22*** | -.01   | .37*** | .14**  | -.05  | (.90)  |       |
| 7. Masculinity  | .10*    | -.15** | .23*** | .33*** | .12*  | .41*** | (.85) |
| <i>Mean</i>     | 7.09    | 8.86   | 7.53   | 7.43   | 8.49  | 4.47   | 3.43  |
| <i>SD</i>       | 1.62    | 1.11   | 1.54   | 2.13   | 1.45  | 2.02   | 2.31  |

*Note.* N = 466. Values in parentheses are Cronbach's alpha reliability estimates. WG = well-groomed. *p* values: \*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$ .

### Subgroup Comparisons

Subgroup sample sizes are reported for the participants included in each respective analysis. Accordingly, the sample sizes differ across subgroup analyses because they reflect the available data for each grouping variable. Subgroup *ns* were as follows: gender (women,  $n = 266$ ; men,  $n = 197$ ), age (younger,  $n = 224$ ; older,  $n = 239$ ; median age = 44 years), and *organizational tenure* (low,  $n = 217$ ; high,  $n = 247$ ). All subgroups except the male sample exceeded the  $n \geq 200$  minimum often recommended for CFA (Kline, 2016); given the relatively large male sample ( $n = 197$ ), male employees were retained in all analyses.

Age and tenure subgroups did not differ significantly on any factor or composite score. Gender differences were limited to small effects: women rated dedication, strength, intelligence, and prototypical leadership higher than men, whereas men rated masculinity and antiprototypical leadership higher than women. Specifically, women rated dedication ( $M = 9.02$ ,  $SD = 1.01$ ) higher than men ( $M = 8.59$ ,  $SD = 1.27$ ),  $t(384) = 4.04$ ,  $p < .001$ ,  $d = 0.38$ , 95% CI [0.20, 0.56]; strength (women:  $M = 7.70$ ,  $SD = 1.55$ ; men:  $M = 7.26$ ,  $SD = 1.47$ ),  $t(455) = 3.22$ ,  $p = .001$ ,  $d = 0.29$ , 95% CI [0.11, 0.47]; and intelligence (women:  $M = 8.65$ ,  $SD = 1.37$ ; men:  $M = 8.18$ ,  $SD = 1.59$ ),  $t(401) = 3.44$ ,  $p < .001$ ,  $d = 0.32$ , 95% CI [0.14, 0.50]. Men rated masculinity higher than women (men:  $M = 3.81$ ,  $SD = 2.28$ ; women:  $M = 3.09$ ,  $SD = 2.24$ ),  $t(439) = -3.47$ ,  $p < .001$ ,  $d = -0.32$ , 95% CI [-0.50, -0.14]. For the composite scores, women rated prototypical leadership higher than men (women:  $M = 8.01$ ,  $SD = 1.02$ ; men:  $M = 7.69$ ,  $SD = 1.11$ ),  $t(409) = 3.20$ ,  $p = .001$ ,  $d = 0.30$ , 95% CI [0.12, 0.48], whereas men rated antiprototypical leadership higher than women (men:  $M = 4.17$ ,  $SD = 1.68$ ; women:

$M = 3.71$ ,  $SD = 1.87$ ),  $t(439) = -2.85$ ,  $p = .005$ ,  $d = -0.26$ , 95% CI  $[-0.44, -0.08]$ . No significant gender differences emerged for tyranny, sensitivity, or well-groomed.

### Factor Invariance

The seven-factor CFA model showed acceptable fit for each subgroup by relative chi-square and RMSEA criteria, with relative chi-square values between 1.00 and 3.00 and RMSEA values below .08 (Table 3). CFI and TLI values fell below the .90 threshold across subgroups but were comparable to those obtained in the full sample.

**Table 3**

*CFA Fit Indices for Employee Groups for the Seven-Factor Model of Implicit Leadership Theories*

| Group                     | $\chi^2$ | $\chi^2/df$ | CFI  | TLI  | RMSEA |
|---------------------------|----------|-------------|------|------|-------|
| Full sample ( $n = 466$ ) | 1517.02* | 2.81        | .868 | .854 | .067  |
| Age                       |          |             |      |      |       |
| Younger ( $n = 224$ )     | 1109.54* | 2.06        | .843 | .826 | .075  |
| Older ( $n = 239$ )       | 1087.95* | 2.02        | .855 | .840 | .070  |
| Gender                    |          |             |      |      |       |
| Female ( $n = 266$ )      | 1181.61* | 2.19        | .851 | .836 | .072  |
| Male ( $n = 197$ )        | 987.19*  | 1.83        | .849 | .833 | .071  |
| Organizational tenure     |          |             |      |      |       |
| Low ( $n = 217$ )         | 1079.32* | 2.00        | .849 | .833 | .073  |
| High ( $n = 247$ )        | 1082.73* | 2.01        | .861 | .846 | .069  |

*Note.*  $df = 539$  for all groups. CFI = comparative fit index; TLI = Tucker–Lewis index; RMSEA = root-mean-square error of approximation. \*  $p < .001$ .

Multigroup invariance results are presented in Table 4. Across all subgroup comparisons, model fit was acceptable by relative chi-square ( $\leq 2.00$ ) and RMSEA ( $\leq .072$ ) criteria; CFI ranged from .847 to .857 and TLI from .834 to .848. Nested-model comparisons supported invariance across the tested levels for gender and age, with non-significant chi-square differences between Models 1, 2, and 3. For organizational tenure, configural and metric invariance were supported, but factor covariances differed between low- and high-tenure employees,  $\Delta\chi^2(21) = 34.64$ ,  $p = .03$ . Together with the  $t$ -test results above, these findings support Hypothesis 1 by showing that the seven-factor structure was stable across gender and age and partially stable across organizational tenure.

**Table 4**  
*Factor Invariance of ILTs Across Employee Groups*

| Group                 | $\chi^2$ | df   | $\chi^2/df$ | $\Delta\chi^2$ | $\Delta df$ | CFI  | TLI  | RMSEA |
|-----------------------|----------|------|-------------|----------------|-------------|------|------|-------|
| Age                   |          |      |             |                |             |      |      |       |
| Model 1               | 2158.94  | 1078 | 2.00        | -              | -           | .850 | .834 | .072  |
| Model 2               | 2183.41  | 1113 | 1.96        | 24.47          | 35          | .851 | .841 | .071  |
| Model 3               | 2211.23  | 1134 | 1.95        | 27.82          | 21          | .850 | .843 | .070  |
| Gender                |          |      |             |                |             |      |      |       |
| Model 1               | 2139.53  | 1078 | 1.98        | -              | -           | .850 | .834 | .071  |
| Model 2               | 2185.91  | 1113 | 1.96        | 46.38          | 35          | .848 | .837 | .071  |
| Model 3               | 2214.68  | 1134 | 1.95        | 28.77          | 21          | .847 | .839 | .070  |
| Organizational tenure |          |      |             |                |             |      |      |       |
| Model 1               | 2116.48  | 1078 | 1.96        | -              | -           | .857 | .842 | .070  |
| Model 2               | 2140.86  | 1113 | 1.92        | 24.38          | 35          | .857 | .847 | .069  |
| Model 3               | 2175.50  | 1134 | 1.92        | 34.64*         | 21          | .855 | .848 | .069  |

*Note.* CFI = comparative fit index; TLI = Tucker–Lewis index; RMSEA = root-mean-square error of approximation. Model 1 constrained equal factor structure; Model 2 constrained equal factor structure and factor loadings; Model 3 constrained equal factor structure, factor loadings, and factor covariances. \*  $p = .03$ .

## Discussion

Study 1 yielded a 35-item, seven-factor Turkish ILT structure: sensitivity, dedication, strength, intelligence, well-groomed, masculinity, and tyranny. This structure showed correspondence with seven of the nine factors in the original Offermann and Coats (2018) model. However, creativity and charisma did not emerge as distinct factors, and several items shifted between factors. For example, *commanding* loaded on tyranny rather than strength, whereas *bold* and *courageous* loaded on strength rather than charisma and creativity. The well-groomed factor retained its original item composition, whereas the masculinity and intelligence factors showed substantial correspondence to the original structure despite minor changes in item composition. Specifically, the masculinity factor additionally included *attractive*, whereas the *clever* item was not retained in the intelligence factor.

The seven-factor structure demonstrated evidence of configural and metric invariance across gender and age and partial structural invariance across organizational tenure. Mean leadership ratings did not differ by age or tenure. Gender differences were consistent with patterns reported in prior research: women rated dedication, strength, intelligence, and prototypical leadership higher than men (Deal & Stevenson, 1998; Epitropaki & Martin, 2004), whereas men rated masculinity and antiprototypical leadership higher than women (Epitropaki & Martin, 2004; Schein et al., 1996). A more detailed interpretation of these patterns is provided in the general discussion.

## Study 2

Study 2 had two aims. The first was to cross-validate the seven-factor Turkish ILT structure identified in Study 1 by testing its fit in an independent sample. Although the Study 1 invariance analyses provided evidence that the structure was stable across employee subgroups, cross-validation in a different population offers a stronger test of structural stability (Kline, 2016). The second aim was to examine the convergent validity of the Turkish scale by testing its associations with personality traits and self-construal.

**Hypothesis 2.** The seven-factor structure identified in Study 1 will show acceptable model fit when tested in an independent student sample.

Prior research has linked ILT factors to personality traits. Babyak (2014) and Keller (1999) reported positive associations between agreeableness and sensitivity and between conscientiousness and dedication in samples of university students. These associations are conceptually consistent with the content of the factors: sensitivity captures interpersonal warmth and concern, attributes aligned with agreeableness, whereas dedication captures effort and engagement, attributes aligned with conscientiousness. We therefore expected agreeableness to correlate positively with sensitivity and conscientiousness to correlate positively with dedication.

Self-construal, or the way individuals understand themselves in relation to others, is also theoretically relevant to leadership perceptions (Singelis, 1994), because leadership prototypes are anchored in expectations about leader–follower relations. Ehrhart (2012) examined self-construal in relation to a subset of ILT factors and found that interdependent self-construal correlated moderately with sensitivity, whereas both independent and interdependent self-construal showed weak positive associations with charisma and dedication. Because Ehrhart's analyses covered only three factors, namely sensitivity, dedication, and charisma, the present study extends this work by examining correlations between self-construal and all seven Turkish ILT factors. Drawing on Ehrhart's findings, we expected interdependent self-construal to correlate most strongly with sensitivity and both self-construal dimensions to show small-to-moderate positive associations with prototypical ILT factors more broadly.

**Hypothesis 3.** Turkish ILT dimensions will show theoretically meaningful associations with agreeableness, conscientiousness, and independent and interdependent self-construal, consistent with prior findings (Babyak, 2014; Ehrhart, 2012; Keller, 1999).

## Method

### Participants and Procedure

Participants were recruited from undergraduate students at two universities in Istanbul: a psychology department at one university ( $n = 411$ , 94.3%) and a law faculty at a second university ( $n = 25$ , 5.7%). Students at the larger contributing university received course credit for participation. The online survey was distributed via SurveyMonkey through course announcements. As in Study 1, before data collection, ethics approval was obtained from the Ethics Review Board of Istanbul Bilgi University (Approval Date: January 7, 2019; Project No. 2019-20024-03), all participants provided informed consent before beginning the survey, and the presentation order of the ILT items was randomized for each participant.

The final analytic sample comprised 436 students: 345 women (79.3%) and 90 men (20.7%), with a mean age of 21.7 years ( $SD = 3.7$ , range = 18–52). One participant did not report gender; therefore, gender

frequencies sum to 435 rather than the total sample size of 436. The missing-data rate per variable did not exceed 1.6%. Analyses were conducted using listwise deletion; the analytic *n* is therefore reported separately for each analysis and in the table notes. Of the final sample, 268 participants reported prior work experience, such as part-time work or internships, and 167 reported no prior work experience. Because the subgroup of law students was relatively small (*n* = 25), the study was not designed or sufficiently powered to examine disciplinary differences in implicit leadership perceptions.

### Materials and Measures

**ILT scale:** The Turkish ILT scale developed in Study 1 was used (see Study 1).

**NEO Five-Factor Inventory.** Agreeableness and conscientiousness were measured using the relevant subscales of the NEO Five-Factor Inventory (NEO-FFI; Costa & McCrae, 1992). The Turkish adaptation developed by Sunar (1996) was used in the present study. The NEO-FFI is a 60-item inventory assessing the Big Five personality factors, with 12 items per factor, rated on a 5-point Likert scale ranging from strongly disagree to strongly agree. Only the agreeableness and conscientiousness subscales were used in the present analyses. In the present sample, Cronbach's alpha coefficients were .73 for agreeableness and .83 for conscientiousness.

**Self-Construal Scale.** Independent and interdependent self-construal were measured using the Self-Construal Scale (Singelis, 1994). The Turkish adaptation reported by Wasti and Erdil (2007) was used in the present study. The scale includes 15 items for each subscale rated on a 7-point Likert scale ranging from strongly disagree to strongly agree. In the present sample, Cronbach's alpha coefficients were .72 for independent self-construal and .73 for interdependent self-construal.

**Demographics:** Participants reported their age, gender, and work experience.

## Results

### Confirmatory Factor Analysis

To evaluate Hypothesis 2, four alternative CFA models were compared (Table 5): (a) a one-factor model in which all items loaded onto a single latent factor, (b) a two-factor model in which items loaded onto either prototypical leadership (sensitivity, dedication, strength, intelligence, well-groomed) or antiprototypical leadership (tyranny, masculinity), consistent with Epitropaki and Martin (2004), (c) the seven-factor model specified from the Study 1 EFA solution, and (d) a second-order model in which a higher-order factor accounted for the correlations among the first-order factors. Latent factors were allowed to covary in the two-factor and seven-factor models, whereas first-order factor correlations were accounted for by the higher-order factor in the second-order model.

The seven-factor model showed the best fit among the alternatives,  $\chi^2/df = 2.49$ , RMSEA = .068, 90% CI [.063, .073], SRMR = .078, although CFI = .870 and TLI = .856 remained below .90. These findings provide support for Hypothesis 2 and suggest that the seven-factor model represents the best-fitting and most theoretically interpretable solution among the models examined.

**Table 5**

*Goodness-of-Fit Statistics of the CFA Models of the Turkish ILT for the Student Sample (Study 2) and the Working Sample (Study 1)*

| Model                        | S-B $\chi^2$ | df  | $\chi^2/df$ | CFI         | TLI         | RMSEA [90% CI]           | SRMR        |
|------------------------------|--------------|-----|-------------|-------------|-------------|--------------------------|-------------|
| Study 2 ( $n = 397$ )        |              |     |             |             |             |                          |             |
| One factor                   | 4930.09      | 560 | 8.80        | .320        | .280        | .152 [.148, .156]        | .172        |
| Two correlated factors       | 3558.91      | 559 | 6.37        | .527        | .497        | .127 [.123, .131]        | .150        |
| Seven correlated factors     | 1343.96      | 539 | <b>2.49</b> | <b>.870</b> | <b>.856</b> | <b>.068 [.063, .073]</b> | <b>.078</b> |
| Second-order (seven factors) | 1592.74      | 555 | 2.87        | .833        | .821        | .076 [.072, .080]        | .151        |
| Study 1 ( $n = 466$ )        |              |     |             |             |             |                          |             |
| Seven correlated factors     | 1517.02      | 539 | <b>2.81</b> | <b>.868</b> | <b>.854</b> | <b>.067 [.063, .071]</b> | <b>.085</b> |
| Second-order (seven-factors) | 1749.19      | 554 | 3.16        | .839        | .827        | .073 [.069, .077]        | .119        |

*Note.* S-B  $\chi^2$  = Satorra–Bentler scaled  $\chi^2$  statistic; CFI = comparative fit index; TLI = Tucker–Lewis index; RMSEA = root-mean-square error of approximation; CI = confidence interval for RMSEA; SRMR = standardized root-mean-square residual. An additional constraint was imposed on the second-order CFA model for Study 1 to ensure model convergence, resulting in one fewer degree of freedom than the second-order CFA model for Study 2.

### Descriptives, Reliabilities, and Convergent Validity

Means, standard deviations, internal reliabilities, and intercorrelations of the seven factors in the student sample are presented in Table 6. The overall pattern was broadly consistent with Study 1. Prototypical factors generally correlated positively with one another, the two antiprototypical factors were strongly correlated with each other, *tyranny–masculinity*  $r = .49$ ,  $p < .001$ , and strength and well-groomed showed positive cross-valence correlations with both tyranny and masculinity. Sensitivity showed a narrower pattern than in Study 1, correlating positively only with well-groomed,  $r = .22$ ,  $p < .001$ , and negatively with tyranny,  $r = -.23$ ,  $p < .001$ . Internal consistency was high for sensitivity, dedication, strength, well-groomed, masculinity, and tyranny,  $\alpha s = .81-.91$ , and adequate for intelligence,  $\alpha = .65$ .

**Table 6***Means, Standard Deviations, Reliabilities, and Intercorrelations Among Turkish ILT Dimensions in Study 2*

|                 | 1       | 2      | 3      | 4      | 5     | 6      | 7     |
|-----------------|---------|--------|--------|--------|-------|--------|-------|
| 1. Sensitivity  | (.86)   |        |        |        |       |        |       |
| 2. Dedication   | -.05    | (.91)  |        |        |       |        |       |
| 3. Strength     | -.02    | .55*** | (.86)  |        |       |        |       |
| 4. WG           | .22***  | .11*   | .32*** | (.88)  |       |        |       |
| 5. Intelligence | .07     | .36*** | .34*** | .37*** | (.65) |        |       |
| 6. Tyranny      | -.23*** | .15**  | .47*** | .20*** | .08   | (.89)  |       |
| 7. Masculinity  | -.10*   | -.11*  | .20*** | .37*** | .13** | .49*** | (.81) |
| Mean            | 7.5     | 8.65   | 7.55   | 7.20   | 8.46  | 4.52   | 3.27  |
| SD              | 1.69    | 1.6    | 1.75   | 2.46   | 1.53  | 2.14   | 2.22  |

*Note.* N = 397. Values in parentheses are Cronbach's alpha reliability estimates. WG = well-groomed. \*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$ .

Correlations with personality and self-construal provided evidence of convergent validity (Table 7). Agreeableness correlated positively with sensitivity,  $r = .24$ ,  $p < .001$ , and negatively with tyranny,  $r = -.33$ ,  $p < .001$ , and masculinity,  $r = -.24$ ,  $p < .001$ . Conscientiousness correlated positively with dedication,  $r = .32$ ,  $p < .001$ , and more weakly with strength, well-groomed, and sensitivity. Independent self-construal correlated positively with all ILT factors except intelligence, with small-to-medium associations and the strongest association with strength. Interdependent self-construal correlated positively with sensitivity,  $r = .30$ ,  $p < .001$ , and well-groomed,  $r = .13$ ,  $p < .05$ , with its strongest association with sensitivity, consistent with Ehrhart (2012). Overall, the strongest associations within each domain, agreeableness and tyranny, conscientiousness and dedication, and interdependent self-construal and sensitivity, were in line with prior findings (Babyak, 2014; Ehrhart, 2012; Keller, 1999).

**Table 7***Correlations of the Turkish ILT Dimensions With Other Measures*

|              | Agreeableness | Conscientiousness | Independent SC | Interdependent SC |
|--------------|---------------|-------------------|----------------|-------------------|
| Sensitivity  | .24***        | .16*              | .13*           | .30***            |
| Dedication   | .06           | .32***            | .15**          | -.01              |
| Strength     | -.04          | .20**             | .26***         | .06               |
| WG           | -.05          | .17**             | .16**          | .13*              |
| Intelligence | .06           | .06               | .10            | -.08              |
| Tyranny      | -.33***       | -.00              | .17***         | .07               |
| Masculinity  | -.24***       | -.11              | .12*           | .06               |

*Note.* *ns* range from 226 to 430. WG = well-groomed; SC = self-construal. \*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$ .

Composite scores for prototypical and antiprototypical leadership were computed, and their correlations with ILT factors and external measures are reported in Table 8. Prototypical leadership showed medium-to-large positive correlations with its constituent factors and small positive correlations with the two antiprototypical factors. Antiprototypical leadership showed large positive correlations with tyranny and masculinity, medium positive correlations with strength and well-groomed, a small positive correlation with intelligence, and a small negative correlation with sensitivity. The two composites were positively correlated in both samples, Study 2:  $r = .25, p < .001, n = 397$ ; Study 1:  $r = .19, p < .001, n = 466$ . Prototypical leadership correlated positively with conscientiousness,  $r = .29, p < .001$ , independent self-construal,  $r = .26, p < .001$ , and interdependent self-construal,  $r = .14, p < .01$ . Antiprototypical leadership correlated positively with independent self-construal,  $r = .17, p < .001$ , and negatively with agreeableness,  $r = -.32, p < .001$ .

**Table 8**

*Correlations of Prototypical and Antiprototypical Leadership With the ILT Dimensions*

|              | Prototypical<br>Leadership | Antiprototypical<br>Leadership |
|--------------|----------------------------|--------------------------------|
| Sensitivity  | .40** (.59**)              | -.19** (-.05)                  |
| Dedication   | .59** (.65**)              | .03 (-.11*)                    |
| Strength     | .69** (.69**)              | .39** (.35**)                  |
| WG           | .73** (.74**)              | .33** (.29**)                  |
| Intelligence | .67** (.73**)              | .12* (.02)                     |
| Tyranny      | .23** (.09)                | .86** (.82**)                  |
| Masculinity  | .20** (.22**)              | .87** (.86**)                  |
| <i>Mean</i>  | 7.86 (7.88)                | 3.89 (3.77)                    |
| <i>SD</i>    | 1.13 (1.07)                | 1.88 (1.83)                    |

*Note.* Values in parentheses are from Study 1 (working sample). WG = well-groomed. *ns* range from 397 to 432 for Study 2 and from 466 to 498 for Study 1. \*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$ .

Correlation patterns were similar across the employee and student samples, with a few exceptions. In Study 1, the correlations between prototypical leadership and tyranny and between antiprototypical leadership and sensitivity and intelligence were weaker, whereas the correlation between antiprototypical leadership and dedication was stronger. Together, these findings provide initial support for Hypothesis 3. The hypothesized associations were generally consistent with prior research, whereas the remaining correlations should be interpreted as exploratory.

### Discussion

Study 2 cross-validated the seven-factor Turkish ILT structure identified in Study 1 using an independent sample of undergraduate students. Among four alternative CFA models, namely one-factor, two-

factor, seven-factor, and second-order models, the seven-factor model showed the best fit, supporting Hypothesis 2.

Initial convergent-validity evidence was obtained from correlations between the seven Turkish ILT factors and measures of personality and self-construal. Consistent with prior findings (Babyak, 2014; Keller, 1999), agreeableness correlated positively with sensitivity, and conscientiousness correlated positively with dedication. Self-construal correlations were also consistent with prior findings (Ehrhart, 2012), with interdependent self-construal showing its strongest association with sensitivity. Associations beyond these anticipated patterns were broader and less selective; therefore, they are best interpreted as exploratory observations. The hypothesized associations were replicated in line with previous research, whereas the additional correlations were not central to the original hypothesis and should therefore be interpreted as exploratory and with appropriate caution.

### General Discussion

The present research adapted the Offermann and Coats (2018) ILT scale into Turkish and evaluated its psychometric properties across two independent samples. Across studies, the Turkish adaptation showed evidence of reliability, a replicable seven-factor structure, partial structural continuity with the original scale and some divergence in factor number and item composition. In Study 1, exploratory factor analysis yielded a 35-item, seven-factor solution in a sample of full-time employees. This solution was invariant across gender and age and partially invariant across organizational tenure. In Study 2, model-comparison CFA supported the same seven-factor structure in an independent undergraduate sample, and correlations with personality and self-construal provided convergent-validity evidence. Taken together, these findings provide initial evidence supporting the Turkish adaptation as a coherent measurement tool, with its structure replicating across samples, its factors showing theoretically interpretable internal organization, and its associations with related constructs following patterns reported in earlier ILT research.

Structural continuity with the original Offermann and Coats (2018) model was substantial. Seven of the nine original factors were recovered in the Turkish solution: sensitivity, dedication, strength, intelligence, well-groomed, masculinity, and tyranny. The masculinity, well-groomed, and intelligence subscales showed substantial correspondence to their original item compositions. The factor structure was cross-validated in the independent student sample in Study 2, with model-comparison CFA favoring the seven-factor solution over one-factor, two-factor, and second-order alternatives. Convergent-validity findings further extended this continuity to associations with related constructs: agreeableness correlated positively with sensitivity, and conscientiousness correlated positively with dedication, replicating patterns reported by Babyak (2014) and Keller (1999) in U.S. samples. Gender differences in mean leadership ratings also mirrored findings reported across multiple Western samples: women rated prototypical attributes, including dedication, strength, and intelligence, and the prototypical-leadership composite higher than men, whereas men rated masculinity and the antiprototypical-leadership composite higher than women (Deal & Stevenson, 1998; Epitropaki & Martin, 2004; Schein et al., 1996). Considered together, these findings suggest that several core features of the ILT measurement model, including its factor architecture, internal organization, and associations with related constructs, carried meaningfully into the Turkish context.

Where the Turkish adaptation departed from the original Offermann and Coats (2018) model, several patterns warrant careful interpretation. Charisma and creativity did not emerge as distinct factors; their items either loaded onto other factors or were removed during iterative refinement. Several items also shifted

between factors. For example, *commanding* loaded on tyranny rather than strength, whereas *bold* and *courageous* loaded on strength rather than charisma and creativity. Cross-valence correlations were also more pronounced than in the original model, with strength and well-groomed correlating positively with both tyranny and masculinity across both samples. These patterns may be interpreted in light of prior work on paternalistic leadership in Turkish organizational contexts, where authority, protection, and interpersonal obligation are closely intertwined (Aycan et al., 2000; Paşa et al., 2001; Wasti, 2003). In such a context, attributes such as commanding, bold, and courageous may carry connotations of both effective leadership and authority, making a clean prototypical versus antiprototypical distinction less evident. More broadly, these findings are consistent with descriptions of Turkish organizational culture in which relatively high power distance coexists with paternalistic leadership expectations. In this context, hierarchical authority may be accompanied by expectations that leaders will protect, guide, and care for their subordinates, suggesting that followers may integrate authority and benevolence within the same implicit leadership prototype rather than viewing them as opposing characteristics (Aycan et al., 2000; Paşa et al., 2001).

Two cross-sample observations are also worth noting. Sensitivity correlated with multiple prototypical factors in Study 1, which used an employee sample, but only with well-groomed in Study 2, which used a student sample. In addition, the separation between prototypical and antiprototypical composites was somewhat sharper in Study 1 than in Study 2. These differences may reflect leader-exposure and experience effects, as working adults are likely to have ongoing contact with multiple leader figures. However, these interpretations should remain cautious. The present design assessed factor structure and item composition, not cultural content variability or cultural causes of the observed patterns. Direct cross-cultural measurement-invariance studies are needed to test those explanations more fully.

These findings have several implications for ILT measurement and cross-cultural ILT research. First, although CFI and TLI values fell below conventional .90 thresholds, this pattern was not unique to the Turkish adaptation. Offermann and Coats (2018) similarly reported CFI values of .866 and .881 for their nine- and six-factor solutions, suggesting that lower incremental fit indices may partly reflect challenges associated with modeling multifactor ILT structures. For this reason, the present findings should be interpreted in relation to the full pattern of evidence, including the EFA structure, internal consistency estimates, model-comparison CFA, RMSEA and SRMR values, and convergent-validity findings, rather than through a single fit-index threshold. Second, the partial invariance observed for organizational tenure has implications for the use of the Turkish scale in tenure-diverse samples. Although the factor structure and loadings were stable, factor covariances differed between lower- and higher-tenure employees, suggesting that researchers should be cautious when interpreting between-factor associations as equivalent across tenure groups. More broadly, the present adaptation provides a basis for future cross-cultural comparisons using a common instrument and addresses the measurement inconsistency that has limited systematic cross-cultural ILT research to date. Accordingly, the seven-factor model should be interpreted as providing encouraging initial psychometric evidence rather than as a definitive representation of the latent structure. Further validation across independent and culturally diverse samples will help establish the robustness and generalizability of the model.

Several limitations qualify the conclusions of the present research. First, the study did not include a Western comparison sample, which precludes direct cross-cultural measurement-invariance testing between the Turkish adaptation and the original scale context. Although the Turkish factor structure cross-validated across two independent samples within Türkiye, the pattern of structural continuity and divergence documented here should be regarded as a basis for future cross-cultural comparison rather than as evidence of cross-cultural invariance. Second, the data were cross-sectional and based on self-report measures, which

limits causal inference. The convergent-validity correlations document associations between ILT factors and personality or self-construal, but they do not establish directionality or rule out shared-method variance. Third, the Study 1 employee sample was drawn from multiple organizations, but the analyses did not model workgroup or organizational nesting. Cluster effects may therefore have affected the multigroup invariance tests. Finally, sample-size variation in the Study 2 convergent-validity correlations, *with ns ranging from 226 to 430 depending on the measure*, reflected listwise deletion for missing personality and self-construal data; findings based on the smaller subsamples should therefore be interpreted with caution. Furthermore, although Study 2 successfully cross-validated the factor structure identified in Study 1, the validation sample consisted predominantly of female psychology students. Replication in more gender-balanced and academically as well as occupationally diverse samples would strengthen the generalizability of the present findings. The observed cross-valence correlations and cross-sample differences are consistent with prior work on Turkish organizational culture and leader-exposure differences, but they require direct testing in future research. Together with the modest CFI and TLI values discussed above, these limitations frame the present findings as an initial adaptation and validation of the Offermann and Coats (2018) ILT scale in Turkish.

Future studies can build on this foundation by testing the same instrument across Turkish, U.S., and other cultural samples using direct cross-cultural invariance designs. Multilevel studies that model employees nested within organizations would also clarify whether organizational context shapes ILT structure or factor covariation. In addition, multi-source designs combining follower and leader ratings could help separate perceiver-level leadership schemas from leader-level attributes and reduce shared-method bias. Finally, adapting the same instrument into additional cultural contexts would help establish whether the pattern observed here, namely partial structural continuity alongside meaningful divergence, generalizes beyond the Turkish adaptation.

### Declarations

**Ethical Approval.** This research was approved by the Ethics Review Board of Istanbul Bilgi University (Approval Date: January 7, 2019; Project No. 2019-20024-03). Informed consent was obtained from all participants prior to participation.

**Conflict of Interest.** The authors declare no potential conflict of interest.

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