

# **Research Article**

# The Convergent, Discriminant, and Concurrent Validity of Scores on the Abbreviated Self-Leadership Questionnaire

Kendi Kendine Liderlik Ölçeği Kısa Formunun Benzeşim, Ayrışım ve Yordayıcı Geçerliliği

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#### ARTICLE INFO

#### ABSTRACT

ÖΖ

Keywords: Self-leadership, Self-efficacy, Task Performance

Article history: Received 24 May 2015 Received in revised form 15 June 2015 Accepted 27 July 2015 The present study reports the psychometric properties of a short measure of self-leadership in the Turkish context: the Abbreviated Self-Leadership Questionnaire (ASLQ). The ASLQ was examined using two samples and showed sound psychometric properties. Confirmatory factor analysis showed that nine-item ASLQ measured a single construct of self-leadership. The results supported the convergent and discriminant validity of the one-factor model of the ASLQ in relation to the 35-item Revised Self-Leadership Questionnaire and General Self-Efficacy scale, respectively. With regard to internal consistency and test-retest reliability, the ASLQ showed acceptable results. Furthermore, the results provided evidence that scores on the ASLQ positively predicted individual's self-reported task performance and self-efficacy mediated this relationship. Taken together, these findings suggest that the Turkish version of the ASLQ is a reliable and valid measure that can be used to measure self-leadership as one variable of interest in the future studies.

#### MAKALE BİLGİSİ

Anahtar Kelimeler: Kendi Kendine Liderlik, Özyeterlilik, Görev Performansı

Tarihler : Geliş 24 Mayıs 2015 Düzeltme geliş 15 Haziran 2015 Kabul 27 Temmuz 2015 Bu çalışma, Kendi Kendine Liderlik Ölçeği (KKLÖ) kısa formunun Türkçe versiyonuna ait psikometrik özellikleri sunmaktadır. KKLÖ kısa formu iki ayrı örneklem üzerinde test edilmiş ve oldukça iyi psikometrik özelliklere sahip olduğu bulunmuştur. Doğrulayıcı faktör analizi sonuçları, dokuz maddelik KKLÖ kısa formunun kendi kendine liderliğin tek faktörlü yapısını ölçtüğünü göstermiştir. Araştırma bulguları, 35 maddelik Kendi Kendine Liderlik Ölçeği ve Genel Özyeterlilik ölçeği ile karşılaştırıldığında, tek faktörlü KKLÖ kısa formunun benzeşim ve ayrışım geçerliliğini taşıdığını desteklemiştir. İçsel tutarlılık ve test-yeniden test güvenilirliği açsısından, KKLÖ kısa formunun yeterli güvenilirliğe sahip olduğu bulunmuştur. Ayrıca, araştırma bulguları, KKLÖ kısa formundan elde edilen puanların bireylerin görev performansını yordadığını ve öz-yeterliliğin bu ilişkiye aracılık ettiğini ortaya koymuştur. Kısaca, bu bulgular, KKLÖ kısa formunun Türkçe versiyonunun, kendi kendine liderlik kavramını tek bir değişken olarak ölçmede geçerli ve güvenilir olduğunu göstermiştir.

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# 1. INTRODUCTION

In today's global and competitive business world, individuals' characteristics are becoming more important in the determination of an organizations success or failure. Organizations encourage their workforce to take greater responsibility for their own work-related behaviors and actions (Pearce & Manz 2005). Moreover organizations have recognized that work-related behaviors and actions are not just an outward process, but an internal process as well. The concept of self-leadership, the process of influencing oneself to perform more effectively, presents a strong initiative for the development and effectiveness in both individuals and organizations. It has proved to be important to understand the nature of work-related behavior, of how it is activated, of why it takes a direction and continues to keep it (Stewart, Courtright, & Manz, 2011). Since the first introduction of the concept by Manz and Sims (1980), there has been a growing body of literature that examines self-leadership skills over three decades and studies has indicated that that self-leadership is associated with improved performance, improved effectiveness, and increased organizational contributions (Alves, Lovelace, Manz, Matsypura, Toyasaki, & Ke, 2006; Andressen, Konradt, & Neck, 2012; Manz, 1986; Neck & Houghton, 2006; Stewart et al., 2011; Prussia, Anderson, & Manz, 1998).

Self-leadership is described as cognitive and behavioral strategies individuals use as a means for "the self-motivation and self-direction we need to perform" (Manz & Sims, 1991, p. 23). Selfleadership is the influence of oneself to achieve the self-motivation and self-direction needed to behave in desirable ways (Manz, 1986; Manz & Neck, 2004). Self-leadership has its philosophical roots in social cognitive theory (e.g., Bandura, 1986) and intrinsic motivation theory (e.g., Deci & Ryan, 1985). Specifically, building on these theoretical foundations, self-leadership comprises three distinct but complementary sets of strategies: (1) behavioral focused strategies, (2) natural reward strategies, and (3) constructive thought patterns (Anderson & Prussia, 1997; Houghton & Neck, 2002; Manz & Neck, 2004; Manz & Sims, 2001; Neck & Houghton, 2006; Prussia et al., 1998).

Behavioral focused strategies aims to improve selfawareness so that individuals can be encouraged to manipulate their behaviors to needed, specifically the behaviors related to necessary but unpleasant tasks. Behavioral focused strategies include selfobservation, self-goal setting, self-reward, selfpunishment and self-cueing (Manz & Neck, 2004; Neck & Houghton, 2006). Natural reward strategies focus on incorporating more enjoyable attributes into the specific tasks which need to be accomplished, so that the task itself becomes naturally rewarding. The two main natural reward strategies consist of building more naturally enjoyable features into activities and focusing intentionally on the naturally rewarding aspects of activities (Anderson & Prussia, 1997; Manz & Neck. 2004: Manz & Sims. 2001: Neck & Houghton, 2006). Finally, constructive thought pattern strategies involve identification and modification of dysfunctional beliefs and assumptions, the use of mental imagery and positive self-talk. Through constructive thought pattern strategies, individuals develop and facilitate more constructive and adaptable thought patterns, minimizing destructive and ineffective thinking for personal effectiveness (Manz, 1986; Manz & Neck, 2004; Manz & Sims, 2001; Neck & Manz, 1992, 1996). Overall, self-leadership strategies are designed to influence personal effectiveness positively by helping individuals to be conscious of their own behavior and thought (Manz & Neck, 2004; Neck & Houghton, 2006; Stewart et al., 2011).

In recognition of its importance, self-leadership has attracted considerable attention worldwide and across academic literature (Houghton, Carnes, & Ellison, 2013). Specifically, publication of a valid and reliable questionnaire for measurement of self-Self-Leadership leadership (the Revised Questionnaire - RSLQ; Houghton & Neck, 2002) initiated more empirical studies. Based on the nine factors, Houghton and Neck (2002) developed an initial questionnaire (the RSLQ) to measure the three general self-leadership strategies. Over the past several years, the RSLQ has been validated across a number of samples and multiple countries, including China (Ho & Nesbit, 2009; Neubert & Wu, 2006), Germany (Andreßen & Konradt, 2007), Israel (Carmeli, Meitar & Weisberg, 2006), Portugal (Marques-Quinteiro, Curral, & Passos, 2011), Turkey (Doğan & Şahin, 2008; Şahin, 2011; Tabak, Sığrı, & Türköz, 2013), and South Africa (Mahembe, Engelbrecht, & De Kock, 2013; Van Zyl, 2008). A recent study suggests support for the cross-cultural validity of the hierarchical factor structure of self-leadership (Houghton et al., 2013). Moreover, an increasing amount of research has demonstrated the positive associations between selfleadership and beneficial outcomes (Neck & Houghton, 2006; Stewart et al., 2011).

The RSLQ assesses a range of self-leadership strategies with 35 items, however this questionnaire is relatively long and therefore time consuming which may cause some data collection challenges to researchers. Recently, Houghton, Dawley and DiLiello (2012) developed an Abbreviated Self-Leadership Questionnaire (ASLO), a nine-item questionnaire which may be used as a general assessment of the global self-leadership construct. In their research exploratory factor analysis yielded three factors. Nine items converged into three distinct factors, labeled as behavior awareness and task motivation, and constructive volition cognition. The first factor, behavior awareness and volition, contains three items from the selfobservation and self-goal setting sub-dimensions of the RSLQ and represents the behavioral focused strategies dimension. The second factor, task motivation, contains three items from the visualizing successful performance and self-reward sub-dimensions of the RSLQ. The task motivation factor reflects both the behavioral focused and constructive thought strategies dimensions. Finally, the constructive cognition factor contains three items from the self-talk and evaluating beliefs and assumptions sub-dimensions of the RSLQ and represents the constructive thought pattern strategies dimension. Subsequent confirmatory factor analysis demonstrated good fit of the threefactor model to the data. The nine-item ASLQ has an acceptable internal consistency (overall alpha coefficients 0.73).

Although preliminary findings on the development of the abbreviated version (ASLQ) of the widely used 35-item RSLQ were promising, further examination of its association with related constructs and assessment instruments is warranted. This has implications not only for the validity of the ASLQ scores across studies, but also for the evaluation of the contribution of self-leadership research to the investigation of individual and organizational effectiveness. The main aim of the current research is to evaluate the robustness and utility of Houghton et al.'s (2012) ASLQ. The first study tests the factorial structure of the Turkish version of the ASLQ. Moreover, it explores the relationships between the Turkish version of the ASLQ and conceptually related constructs to provide information on the convergent, divergent validity of the instrument. The second study investigates the concurrent validity of the ASLQ scores in the prediction of self-efficacy and task performance.

# 2. STUDY I

Houghton et al. (2012) developed the ASLQ, a nine-item and three-factor questionnaire which may be used as a general assessment of the global self-leadership construct. This structure has been confirmed with student sample and government

agency workforce sample in the United States. Due to the recent addition of the ASLO to literature, there is scarce research on the measurement. For example, using the ASLQ, AbuShmais (2013) conducted research on the relationship between self-leadership and organizational commitment of U.S. Information Technology (IT) employees. He found that there was a small correlation between the two variables. Wilson (2014) used the ASLO in his research to examine the relationships among selfleadership, psychological empowerment, performance, and job satisfaction of U.S. employees. The results of his research indicated a significant positive relationship between selfleadership and job satisfaction. Self-leadership was found to predict either self-reported or objective job performance. Moreover, self-leadership moderated relationship between psychological the empowerment and self-reported job performance, such that this relationship was stronger for those who engage in self-leadership strategies. Pandelica (2014) conducted research on the relationship between self-leadership, innovation culture and innovative behavior among U.S. engineers, using the ASLQ. Self-leadership was found to moderate the relationship between innovation culture and innovative behavior. Rice (2014) used the ASLQ in his research to examine the relationships between self-leadership and self-efficacy of U.S. employees. He found that behavior awareness and volition and constructive cognition sub-dimensions of the ASLO were predictors of general self-efficacy. The ASLQ has been recently tested in a sample outside the United States. Nel and van Zyl (2015) examined the psychometric properties of the ASLQ within a sample of working adults in South Africa. Their study indicated that the one-factor model fitted the data well, and, thus, the ASLQ can be conceptualized as measuring an overall selfleadership.

As mentioned above, few attempts have been made to use the ASLQ for measuring self-leadership. In addition, these studies were mostly conducted in the U.S., which may lead to the misapplication of the research findings in different cultural context. Therefore, I was interested in confirming the factor structure with Turkish sample. Moreover, I explored the convergent and divergent validity of the Turkish version of the ASLQ. Convergent validity occurs if a measure captures what it really is supposed to measure, scores on that measure should be more related to scores on other similar constructs. Discriminant validity occurs if scores on that measure should not be, or less, related to scores on dissimilar constructs (Campbell & Fiske, 1959).

Convergent validity of the ASLQ was examined by calculating correlations between the ASLQ and the

RSLQ. It was hypothesized that the ASLQ subdimensions should differentially correlate with the sub-dimensions of the RSLQ. The following is a list of the sub-dimensions measured by the ASLQ and in parentheses are the sub-dimensions of the RSLQ which are similar in meaning: (1) behavior awareness and volition (RSLO-behavioral focused strategies: self-observation and self-goal setting sub-dimensions), (2) task motivation (RSLQbehavioral focused and constructive thought strategies: visualizing successful performance and self-reward sub-dimensions), and (3) constructive cognition (RSLQ- constructive thought pattern strategies: self-talk and evaluating beliefs and assumptions sub-dimensions). Evidence of strong correlations with the ASLQ sub-dimensions and the similar sub- dimensions of the RSLQ and weaker correlations between the other sub- dimensions, will be taken to support the convergent validity of the ASLQ.

Discriminant validity of the ASLQ was examined by calculating correlations between the ASLQ and the General Self-Efficacy Scale. Self-efficacy refers to an individual's judgments about his or her capabilities to successfully perform specific tasks and behaviors (Bandura, 1986). On the other hand, generalized self-efficacy is a more trait-like version of the concept and refers to stable and global beliefs in the ability to deal efficiently with a wide range of challenging situations (Eden, 2001; Jerusalem & Schwarzer, 1992). Previous research found that self-leadership is distinct from related classic motivation constructs, including general selfefficacy (e.g., Furtner, Rauthmann, & Sachse, 2015). However, a recent research, which used the ASLQ for measuring self-leadership (Rice, 2014), indicated that general self-efficacy had positive correlation with behavior awareness and volition (r = .58), task motivation (r = .61), and constructive cognition (r = .59). Hence, Rice's (2014) findings may raise a question as to whether the ASLQ and general self-efficacy scale measure sufficiently distinct constructs. Self-leadership concept has been subject to some degree of criticism which questioned its construct as a unique and distinguishable one relative to other related theories. However, the existing body of empirical studies demonstrates the construct validity of selfleadership (e.g., Neck & Houghton, 2006; Stewart et al., 2011). Therefore, it was hypothesized that the ASLQ sub-dimensions should not be, or less, related to scores on the General Self-Efficacy Scale.

Finally, to test the stability of the ASLQ, it was administered twice with an interval of one month. I measured test–retest reliability of the ASLQ via a correlation coefficient calculated by the scores on repeated administrations.

### 2.1.Method

**Participants** 2.1.1. and procedure: Data were collected from undergraduate college students enrolled in introductory business administration courses at a public university in Turkey. All students were volunteers and received no credit for their participation in the study. I distributed the survey questionnaires to a total of 500 students who agreed to participate in the study. 176 students failed to provide the necessary data or did not respond to the survey. As a result, 324 participants filled out the questionnaires, which resulted in a response rate of 64.8%. Of the 324 undergraduate students, 58.9% were female and 40.1% were male. The mean age of the participants was 23.11 years (SD = 1.15). A total of 204 participants (56.3% female and 43.7% male) completed a test-retest for the ASLQ after a period of one month. I tested whether non-respondents at the second administration were significantly different on any characteristics at the first administration. No significant difference was found on any sample characteristics from the participants at the initial and follow-up assessment.

### 2.1.2. Measures:

Self-leadership measures. Two measures were used for the current study: the RSLQ (Houghton & Neck, 2002), and the ASLQ (Houghton et al., 2012). The RSLQ is a 35-item nine-factor scale which measures an individual's level of self-leadership behaviors manifested in three core strategies. Participants rated items on a five-point Likert-type scale ranging from 1 (*not at all accurate*) to 5 (*completely accurate*). Doğan and Şahin (2008) showed that the Turkish version of the RSLQ has good psychometric properties.

I assessed the abbreviated version (ASLQ) of the RSLQ with Houghton et al.'s (2012) nine-item and three-factor questionnaire. The questionnaire included three items for behavior awareness and volition, three items for task motivation, and three items for constructive cognition (see Appendix for listing of nine items of the ASLQ in Turkish). Participants indicated the applicability of characteristics and behaviors to themselves on a five-point Likert-type scale ranging from 1 (strongly disagree) to 5 (strongly agree). English version of the ASLQ was translated into Turkish by the translation and back-translation method (Brislin, 1970).

*Self-Efficacy.* Schwarzer and Jerusalem's (1995) General Self-efficacy Scale (GSE) was used to measure participants' self-efficacy beliefs. The GSE scale consists of 10 items rated on a five-point Likert-type scale ranging from 1 (not at all rue) to 5 (exactly true). The GSE scale has been adapted for 28 languages, including Turkish (Yeşilay, Schwarzer, & Jerusalem, 1997). Previous research has suggested that the scale has good psychometric properties and can be used as a single-factor measure (e.g., Scholz, Gutiérrez-Doña, Sud, & Schwarzer, 2002).

#### 2.2. Results

Confirmatory factor analysis (CFA) was utilized to confirm the three-factor structure of the ASLQ. I evaluated the internal consistency of the ASLQ scale, by calculating the Cronbach's alpha coefficients for the total ASLQ scale and for each of the factors and test–retest correlations. Moreover, I studied relationships among the ASLQ, the RSLQ, and GSE.

2.2.1. Factorial Validity: CFA was performed using the Maximum Likelihood (ML) Robust estimation method. I tested two models: one-factor model of the ASLQ suggested by Houghton et al. (2012) as an overall measure of self-leadershipand three-factor model of the ASLQ. Results for onefactor model of the ASLQ indicate that the model was a good fit to the data for the sample:  $\chi^2$  (27) = 79.33, p < .01; goodness-of-fit (GFI) = .98; (Bentler's) comparative fit index (CFI) = .98; nonnormed fit index (NNFI) = .98; root mean square error of approximation (RMSEA) = 0.059, 90%confidence interval (CI) [0.048-0.070] and standardized root mean square residual (SRMR) = 0.70. All of the standardized factor loadings were statistically significant (see Figure 1). I compared relative fit of the one-factor model with three-factor model. The three-factor model yielded a relatively poor fit:  $\chi^2$  (24) = 235.57, p < .01; GFI = .86; CFI = .90; NNFI = .85; RMSEA = 0.17, and SRMR = 0.058 (Browne & Cudeck, 1993; Hoyle, 1995). In sum, the one-factor model provided the best fit compared to the three-factor model and supported Houghton et al.'s (2012) recommendation for the use of the ASLQ as an overall measure of selfleadership.

2.2.2. Reliability Indices: The psychometric properties of the scores are reported in Table 1. The internal consistencies (Cronbach's alpha) were computed for the three sub-dimensions and the total ASLQ scale in Study 1. As shown in Table 1, coefficient alphas for each of the three sub-dimensions of the ASLQ ranged from .42 to .76. However, the scores for the total ASLQ scale produced acceptable reliability level of .75 (Nunnally, 1978) as an overall measure of self-leadership. I used Pearson's correlation coefficients to examine test-retest reliability. The one month test-retest reliability for the total ASLQ scale was

Figure 1: Confirmatory Factor Analysis of 9-Item ASLQ model (Study 1, n = 324)



Note. BAV = Behavior Awareness and Volition; TM = Task Motivation; CC = Constructive Cognition.

Scale	Number of Items	Mean	SD	Cronbach Alpha	Test- Retest ª
ASLQ	9	4.13	0.46	.75	.76**
Behavior awareness and volition	3	4.35	0.54	.76	.80**
Task motivation	3	4.13	0.68	.66	.79**
Constructive cognition	3	3.91	0.59	.42	.69**
RSLQ	35	3.97	0.37	.73	
Self-goal setting	5	4.40	0.47	.76	
Self-reward	3	4.26	0.59	.68	
Self-punishment	4	3.63	0.79	.74	
Self-observation	4	3.99	0.59	.80	
Self-cueing	2	3.53	1.08	.86	
Natural rewards	5	3.86	0.58	.75	
Visualizing successful performance	5	4.27	0.56	.78	
Self-talk	3	3.61	1.12	.68	
Evaluating beliefs and assumptions	4	4.15	0.56	.76	
GSE	10	3 80	0.51	.81	

 Table 1: Psychometric Properties of Scores on the Measures in Study 1

Note. ASLQ = The Abbreviated Self-Leadership Questionnaire; RSLQ = The Revised Self-Leadership Questionnaire; GSE = General Self-Efficacy Scale.

\*\* p < .01.

 $^{a}N = 324$  at Time 1; N = 204 at Time 2.

.76, and the one month test–retest reliability for the three sub-dimensions of the ASLQ ranged from .69 to .80.

2.2.3. Convergent Validity: It was hypothesized that the ASLQ sub-dimensions should differentially correlate with the sub-dimensions of the RSLQ. Table 2 indicates the relationships between the subdimensions of the ASLQ and other constructs, namely the RSLQ sub-dimensions and GSE. It can be seen that for each sub-dimension of the ASLQ the strongest relationship is with the construct to which it is conceptually similar. As would be expected, behavior awareness and volition subdimension of the ASLQ was significantly related to self-observation (r = .66, p < .01) and self-goal setting (r = .76, p < .01) sub-dimensions of the RSLO. Task motivation sub-dimension of the ASLQ was significantly related to visualizing successful performance (r = .69, p < .01) and selfreward (r = .65, p < .01) sub-dimensions of the RSLQ. Finally, constructive cognition subdimension of the ASLQ was significantly related to self-talk (r = .64, p < .01) and evaluating beliefs and assumptions (r = .70, p < .01) sub-dimensions of the RSLQ. In addition, the correlations between the ASLQ and sub-dimensions of the RSLQ ranged from .10 to .73. Nonsignificant correlation (.10)

only existed between the ASLQ and selfpunishment sub-dimension of the RSLQ. In sum, the high correlations between the ASLQ subdimensions and the related RSLQ sub-dimensions provide evidence that the ASLQ has strong convergent validity.

2.2.4. Discriminant Validity: It was hypothesized that the ASLQ sub-dimensions should not be, or less, related to scores on the GSE. Table 2 contains the correlations between the ASLQ sub-dimensions and GSE. Correlational analysis showed that behavior awareness and volition (r = .18, p < .01), task motivation (r = .24, p < .01), and constructive cognition (r = .18, p < .01) were significantly correlated with GSE. Similarly, the ASLQ scores were significantly related to GSE (r = .21, p < .01). The patterns of intercorrelations between the ASLQ and GSE were low, demonstrating that the ASLQ has satisfactory discriminant validity.

# 2.3. Discussion

The Study 1 examined the factorial structure of the Turkish version of the ASLQ. Moreover, it explored the relationships between the Turkish version of the ASLQ and conceptually related constructs to provide information on the convergent, discriminant

Scales	ASLQ	Behavior awareness and volition	Task motivation	Constructive cognition
RSLQ	.79**	.66**	.65**	.82**
Self-goal setting	.72**	.76**	.51**	.55**
Self-reward	.55**	.22**	.65**	.23**
Self-punishment	.10	.14*	.05	.06
Self-observation	.57**	.66**	.42**	.38**
Self-cueing	.16**	.15*	13*	.33**
Natural rewards	.37**	.28**	.28**	.31**
Visualizing successful performance	.70**	.55**	.69**	.38**
Self-talk	.55**	.10	05	.64**
Evaluating beliefs and assumptions	.73**	.31**	.26**	.70**
GSE	.21**	.18**	.24**	.18**

 Table 2: Intercorrelations of the ASLQ Sub-dimensions and the Total ASLQ Score with the

 Image: Sub-dimensions of the RSLQ and the Total RSLQ Score (Study 1)

Note. ASLQ = The Abbreviated Self-Leadership Questionnaire; RSLQ = The Revised Self-Leadership Questionnaire; GSE  $^{\Box}$  = General Self-Efficacy Scale.

\* *p* < .05; \*\* *p* < .01.

validity of the instrument. The findings indicated that the one-factor model provided the best fit compared to the three-factor model of the ASLO, which supported Houghton et al.'s (2012) recommendation for the use of the ASLQ as an overall measure of self-leadership. The results also indicated that internal consistency (Cronbach's alpha) and test-retest reliability for the total ASLQ scale were satisfactory. Initial support was found for the convergent and discriminant validity of the ASLQ. I found that total score on the ASLQ correlated strongly with the RSLQ. In addition, the sub-dimensions of the ASLQ correlated differentially with the sub-dimensions of the RSLQ. The correlation between the total score on the ASLO and GSE was low which demonstrated that the ASLQ has discriminant validity. Evidence reported in the Study 1 has shown that the ASLQ has satisfactory reliability and assesses a single global construct of self-leadership.

# 3. STUDY II

Previous research has found that the application of self-leadership strategies may result in numerous predictable individual or organizational outcomes (Alves et al., 2006; Andressen et al., 2012; Manz, 1986; Neck & Houghton, 2006; Stewart et al., 2011; Prussia et al., 1998). For example, self-leadership has been shown to contribute to performance (e.g., Neck & Houghton, 2006; Prussia et al., 1998),

creativity and innovation (e.g., Carmeli et al, 2006; DiLiello & Houghton, 2006; Houghton & Yoho, 2005; Manz & Sims, 2001), team effectiveness (e.g., Hauschildt & Konradt, 2012; Houghton, Neck, & Manz, 2003; Konradt, Andreßen, & Ellwart, 2009). Research indicated that selfleadership has also been associated with selfefficacy (e.g., Manz, 1986; Manz & Neck, 2004; Neck & Manz, 1996), empowerment (e.g., Houghton & Yoho, 2005), job satisfaction (e.g., Neck & Manz, 1996), and reduced absenteeism (Frayne & Latham, 1987; Latham & Frayne, 1989). Studies has consistently demonstrated that increased self-leadership is associated with better affective responses and improved work performance (Stewart et al., 2011).

Due to the recent addition of the ASLQ as a short measure of self-leadership concept to literature, little is known about the usefulness of the ASLQ for predicting individual or organizational outcomes. To date, empirical self-leadership studies using the ASLQ has indicated that selfleadership was associated with organizational commitment (AbuShmais, 2013), job satisfaction and job performance (Wilson, 2014), and selfefficacy (Rice, 2014). In this research, I tested the concurrent validity of the ASLQ in the prediction of self-efficacy and performance.

Conceptual and empirical studies demonstrated positive relations of self-leadership with individual performance. For example, Prussia et al. (1998)

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Variables	М	SD	1	2	3	4	5	6	7
1. Gender	0.84	0.36							
2. Age	28.46	6.56	.06						
3. Education	2.93	1.16	.09	.57**					
4. Tenure	7.13	6.69	.05	.83**	.55**				
5. Self-leadership	3.26	0.87	.10	.11	.09	.12	(.81)		
6. General self-efficacy	3.45	0.49	.04	.08	01	.10	.24**	(.83)	
7. Self reported task performance	3.61	0.63	03	.13	06	.11	.18*	.45**	(.91)

 Table 3: Means, standard deviations, and scale reliabilities and inter-correlations (Study 2)

Note. N = 128. Gender is coded as 0 = female and 1 = male; Education is coded as 1 = primary education, 2 = high school, 3 = vocational school, 4 = college, and 5 = master degree and above.

\* p < .05; \*\* p < .01.

found that there was a significant and positive relationship between self-leadership and students' course performance and that this relationship was mediated by self-efficacy. Politis (2006) examined the relationship between behavioral focused strategies sub-dimension of self-leadership, job satisfaction and team performance. He found that job satisfaction mediated the relation between selfleadership behavioral focused strategies and team performance. Konradt et al. (2009) examined the relation of self-leadership on team members' motivation, satisfaction, and performance in organizational teams. Their results indicated that self-leadership was positively associated with performance at the individual level and that selfefficacy had a partial mediating role in this relationship. In a study into the relationship between employee goal orientation, self-leadership dimensions, adaptive and proactive work role performances, Marques-Quinteiro and Curral (2012) discovered a positive and significant relationship between behavioral strategies of selfleadership and job performance among workers at a software company. Recent studies, in which the ASLQ was used for measuring self-leadership, have demonstrated that self-leadership was significantly and positively related to job satisfaction and selfreported or objective job performance (Wilson, 2014), and self-efficacy (Pandelica, 2014). As a result, previous studies across varving contextual circumstances have supported the positive relationship between self-leadership and job performance. Moreover, self-efficacy was found to have a mediating role in this relationship (e.g., Konradt et al., 2009; Prussia et al., 1998).

In summary, this study evaluates the concurrent validity of the ASLQ scores in the prediction of individual task performance. In addition, it assesses the mediating role of self-efficacy in the relationship between self-leadership, as measured with the ASLQ, and individual task performance.

### 3.1. Method

3.1.1. Participants and procedure: Data was collected as part of larger study of employee attitudes from an automotive company in Turkey. The Human Resources Department of the company supplied list of employees. Participation in the study was voluntary. Three hundreds of the 411 employees of the target organization were randomly selected for inclusion in this research. A total of 128 responses were collected from the paper-based surveys, resulting in a response rate of 42.6%. Regarding sample characterization, 15.6% were female and 84.4% were male. The mean age of the participants was 28.46 years (SD = 6.56). In terms of education level, most of them (90.6%) have a college degree and below (e.g., vocational school), while 9.4% have master degree. Employees reported an average length of tenure within their organization of 7.13 years (SD = 6.69).

*3.1.2. Measures*: Each participant was asked to complete a questionnaire composed of three separate measures, namely, the ASLQ, the GSE scale, and self-reported task performance scale for in-role behaviors, as well as questions to obtain demographic data. The ASLQ and the GSE scale were described in the previous study.

Self-reported task performance was measured using seven in-role behavior items adapted from Williams and Anderson (1991). An example of the items include "Overall, I effectively fulfill my roles and responsibilities specified in the job description". These items appraise the tasks that individuals are expected to perform as a normal function of his or her job. Participants rated items on a five-point

Effects	ß	SE	t	р	
1. Effect of self-leadership on self-reported task performance	.18	.06	2.07	.040	
2. Effect of self-leadership on self-efficacy	.24	.05	2.82	.005	
3. Effect of self-efficacy on self-reported task performance	.45	.10	5.71	.000	
4. Effect of self-efficacy on self-reported task performance controlling self-leadership	.43	.10	5.31	.000	
5. Effect of self-leadership on self-reported task performance controlling self-efficacy	.07	.06	.91	.360	

Table 4: Direct and total effects for self-leadership (X), self-efficacy (M), and self-reported task performance (Y)

Likert-type scale ranging from 1 (*not at all*) to 5 (*all the time*). This scale is widely used instrument for measuring in-role behaviors and the Turkish version of the scale has good psychometric properties (e.g., Gürbüz, Ayhan, & Sert, 2014).

#### 3.2. Results

I conducted a CFA using the ML Robust estimation method, to assess the discriminant validity of the constructs measured in this study. Results of the proposed three-factor structure (the ASLQ, GSE, and self-reported task performance) demonstrated good fit with the data,  $\chi^2$  (296) = 445.74, p < .01; GFI = .89; CFI = .98; NNFI = .98; RMSEA = 0.063, 90% confidence interval (CI) [0.051-0.075]; and SRMR = 0.080 (Browne & Cudeck, 1993; Hoyle, 1995). To test for the discriminant validity of the constructs, I compared the three-factor model with two-factor model (the ASLQ and GSE combined, and self-reported task performance);  $\chi^2$ (298) = 623.20, p < .01; GFI = .73; CFI = .92;NNFI = .91; RMSEA = 0.093, 90% confidence interval (CI) [0.082-0.10]; and SRMR = 0.10) and one-factor model ( $\chi^2$  (299) = 924.62, p < .01; GFI = .64; CFI = .82; NNFI = .81; RMSEA = 0.13, 90% confidence interval (CI) [0.12-0.14]; and SRMR = 0.12). Nested model comparisons demonstrated that the three-factor model was superior to the twofactor model and one-factor model. Hence, the proposed three-factor model provided a better fit than plausible alternative models.

Table 3 presents the means, standard deviations, intercorrelations and Cronbach alphas of the variable in study 2. Correlational analysis showed that the self-leadership (r = .18, p < .05) and self-efficacy (r = .45, p < .01) were significantly correlated with self-reported task performance.

Self-leadership was significantly related to self-efficacy (r = .24, p < .01).

It was hypothesized that self-leadership, as measured with the ASLQ, should predict individual self-reported task performance. In addition, selfefficacy should have a mediating role in the relationship between self-leadership and individual self-reported task performance. To test the mediational model, I employed the bootstrapping procedure (Hayes, 2013), which was used to test whether self-efficacy mediated the relationship between self-leadership and individual self-reported task performance. Compared with the causal steps approach testing for empirical evidence of mediation (Baron & Kenny, 1986) or the Sobel test (Sobel, 1982), the bootstrapping procedure affords greater statistical power than the normal theory approach. In general, the bootstrapping procedure requires only that there exists an effect to be mediated (i.e.,  $c \neq 0$ ) and that the indirect effect to be statistically significant in the direction as described by the mediational model. 95% confidence intervals were computed to conclude whether the indirect effect is significantly different from zero at the significance level of .05 (twotailed). If the confidence interval did not contain zero, I concluded that there was a mediation effect; if the confidence interval contained zero, I concluded there was no indirect effect.

Table 4 presents the results for the linear regression analysis and Table 5 contains the results regarding bootstrapping analysis. As expected, self-leadership positively predicted both self-reported task performance ( $\beta = .18$ , p <.05) and self-efficacy ( $\beta =$ .24, p <.01). In addition, self-efficacy positively predicted self-reported task performance ( $\beta = .45$ , p <.01). However, when the effect of self-efficacy was controlled, the effect of self-leadership on self-

Direct effect of self-leadership (X) on self-reported task performance (Y)							
Effect	SE	t	р	Lower percentile 95% CI	Upper percentile 95% CI		
.0540	.0588	.9183	.3602	0624	.1705		
Indi	rect effect of	self-leadership	o (X) on self	-reported task perfo	mance (Y)		
Effect	SE	Z	р	Lower percentile 95% CI	Upper percentile 95% CI		
.0763	.0332	2.46	.013	.0198	.1495		

 Table 5: Direct and indirect effects for self-leadership (X), self-efficacy (M), and self-reported task performance (Y)

Note. 5000 bootstrap samples with bias corrected and accelerated.

reported task performance was not significant ( $\beta = .07$ , p = .36

Results of bootstrapping analysis in Table 5 revealed that the test of mediation was supported. I found support for the assertion that the relation between self-leadership and self-reported task performance is mediated by self-efficacy. The indirect effect through self-efficacy was significant (Effect = .07, SE = .03, 95% CI = 0.02 - 0.15). In addition, results from the Sobel tests support the mediating role of self-efficacy on the relations between self-leadership and self-reported task performance (z = 2.46, p < .05).

Evidence reported in the Study 2 has shown that the ASLQ has satisfactory concurrent validity in the prediction of individual task performance. Moreover, the results supported that self-efficacy fully mediated the relationship between self-leadership, as measured with the ASLQ, and individual task performance (given the direct effect).

# 3.3. Discussion

The Study 2 examined the concurrent validity of the ASLQ scores in the prediction of individual task performance. In addition, it explored the mediating role of self-efficacy in the relationship between self-leadership, as measured with the ASLQ, and individual task performance.

The evidence found in Study 2 can be split into two categories. First, additional support was found for the discriminant validity of the ASLQ. The correlation between the total score on the ASLQ and GSE was low and CFA results demonstrated that the proposed three-factor structure (the ASLQ, GSE, and self-reported task performance) demonstrated good fit with the data. In sum, the results showed that the ASLQ has discriminant validity and satisfactory reliability to assess a single global construct of self-leadership.

Second, the literature on self-leadership has indicated that increased self-leadership is associated with better affective responses and improved work performance (e.g., Neck & Houghton, 2006; Stewart et al., 2011), however, sparse empirical evidence has showed the usefulness of the ASLQ for predicting individual or organizational level outcomes. The results of Study 2 provided evidence that self-leadership, as measured with the ASLQ, positively predicted individual's self-reported task performance and self-efficacy mediated the effect of self-leadership on individual's self-reported task performance. The results were in line with previous studies (e.g., Konradt et al., 2009; Prussia et al., 1998), in which self-leadership was measured with the RSLQ. In sum, the Study 2 has indicated that the ASLQ has satisfactory concurrent validity in the prediction of individual task performance.

#### 4. GENERAL DISCUSSION

Due to its association with desirable individual and organizational level outcomes (Stewart et al., 2011),

the concept of self-leadership have attracted the attention of scholars over the past decades. Although the findings of studies across cultures has confirmed the RSLQ as an effective measure of self-leadership (e.g., Houghton et al., 2013), a short measure of self-leadership concept has been added to literature. Houghton et al. (2012) developed the Abbreviated Self-Leadership Questionnaire (ASLQ) and suggested that it may assess an overall selfleadership certain empirical for research applications. A new concise and general measure of self-leadership may prompt further research into the role of individual and organizational level outcomes. The primary goal of the present research was to evaluate the psychometric properties of the ASLQ scale in the Turkish context. The findings confirmed the one-factor model of the ASLQ, which is in line with the recommendation of Houghton et al. (2012) for the use of the ASLQ as an overall measure of self-leadership. The results also indicated the reliability, convergent, discriminant and concurrent validity of the Turkish version of the ASLO.

One of the most striking results of the present research was that the ASLQ, as an overall measure of self-leadership, is applicable to a nonWestern context, namely Turkish context. Early criticism of the self-leadership concept questioned the generalizability of the self-leadership construct to nonWestern cultures (e.g., Georgianna, 2007; Ho & Nesbit, 2009; Ho, Nesbit, Jepsen, & Demirian, 2012; Neubert & Wu, 2006). However, previous studies have found empirical evidence for the validity of the self-leadership construct across cultures, as measured with the RSLQ (e.g., Houghton et al., 2013). The findings of the present study are noteworthy because they show the generalizability of the self-leadership construct, as measured with the ASLQ, across cultures and countries. From a theoretical perspective, the results of the present study suggest that the ASLQ assesses single global construct of self-leadership. From a practical point of view, the results of the present study highlight the importance of providing information about the application of the ASLQ, such that scores on the ASLQ can predict desirable outcomes both to individual and organizational level.

Although I conducted the present study using two samples, several limitations remain. First, I examined discriminant validity of the ASLQ by calculating correlations between the ASLQ and the GSE Scale. Future research could investigate the associations between the ASLQ and several theoretically related constructs (i.e., self regulation, need for achievement) to provide additional information about discriminant validity of the ASLQ. Second, in the present study self-reported task performance was used as an individual level outcome of self-leadership. Research indicates that self-leadership does not only predict performance outcomes, but also predicts a variety beneficial outcome such as job satisfaction, empowerment, creativity / innovation, and team effectiveness, (Stewart et al., 2011). Future research could choose to test the other possible outcomes that are of central concern in studies of self-leadership. Third, as this research was conducted using Turkish samples, future studies are needed to replicate the findings in other samples, as well as across cultures.

In conclusion, the ASLQ holds promise as a measure of single global construct of self-leadership. Since the ASLQ is a short measure that is easy to administer and score, research on self-leadership seems to continue gaining momentum. I believe that the Turkish version of the ASLQ is reliable and valid instrument to measure self-leadership as one variable of interest in the future studies.

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