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## Turkish Adaptation of the Juhnke–Balkin Life Balance Inventory

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### ABSTRACT

This study investigated the factor structure of the Juhnke–Balkin Life Balance Inventory (JBLI) with a sample of 429 Turkish participants. Confirmatory factor analysis indicated that the validated 10-factor model of JBLI did not fit the Turkish data. Therefore, a parallel analysis and an exploratory factor analysis were used to create the JBLI Turkish form.

### KEYWORDS

Life balance; exploratory factor analysis; parallel analysis; instrument adaptation

Globalization gives researchers and counselors opportunities to transfer and integrate Eastern and Western counseling philosophies and approaches to different cultures. More than 30 years ago, professional counseling wellness models were first introduced and evolved from a theoretical to an empirical base (Myers & Sweeney, 2008). Turkish researchers and practitioners embraced the construct of wellness and introduced wellness to the Turkish people at the beginning of the 2000s (Dogan, 2006). In a similar vein, life-balance-related studies have gone through a parallel developmental process. Life balance is related to the wellness construct, but is distinctly different. **Life balance is a process of feeling, perceiving, doing, being, and changing as part of life.** Researchers stated that the life balance process can change within the time and gain different meaning for each individual, which points out an element of agency (Davis, Balkin, & Juhnke, 2014; Gropel & Kuhl, 2006). Although there is a plethora of wellness-related research in Turkish culture, the dearth of life-balance-related studies in the Turkish literature is evident. For example, the Turkish JournalPark Academic electronic database was reviewed and results showed that only one article (Pekdemir & Koçoğlu, 2014) addressed work–life balance. This study indicated that there was a need for validated life balance instruments and life balance research for the Turkish population.

Life balance is not a static state. The goal of life balance is wholeness and wellness. Life balance is an important concept in regard to wellness and well-being. Moreover, life balance was seen as a bridge between these terms (Davis et al., 2014). In the literature, there has been confusion on the terms of balance and life balance. Greenhaus, Collins, and Shaw (2003) stated that because the measurement of balance was problematic and definitions of balance were not consistent with each other, it was hard to draw out the impact of balance-related studies on individuals' well-being. The term *balance* reflects different life roles in people's lives. It can be seen as an umbrella covering work–family balance and work–life balance (Greenhaus et al., 2003). On the other hand, life balance reflects a more specific meaning when compared to balance. Kuhnle, Hofer, and Kilian (2010) stated that life balance was the amount of time a person devotes to multiple domains of life. In a comprehensive way, Christiansen and Matuska (2006) defined life balance as “a satisfying pattern of daily activity that is healthful, meaningful, and sustainable to an individual within the context of his or her current life circumstances” (p. 11).

There has been increasing interest in how people manage the multiple demands of work, home, and personal life, and the consequences that failure to achieve balance between these domains might have on health (Schluter, Turner, Huntington, Bain, & McClure, 2011). According to the Centers for Disease Control and Prevention (2013), 51.7% of causes of death and illness of people who were 20 years old and above were heart diseases, cancer, and accidents. Previous studies (Askegaard, 2000; Garrett, 1999) showed that the main reasons for death in this age group was related to people's lifestyle, life balance, and self-disruptive behaviors. Researchers (Cagle, 2000; Cheng & Lam, 1997) found that a balanced and healthy lifestyle, which included physical activity, balanced nutrition, and the ability to cope with stress, prevented many health problems.

The Juhnke–Balkin Life Balance Inventory (JBLI) was created to assess life balance and determine areas of imbalance, concern, and dissatisfaction (Davis et al., 2014). Davis et al. (2014) conducted an initial validation of the JBLI, demonstrating compliance with the *Standards of Educational and Psychological Testing* (American Educational Research Association [AERA], American Psychological Association, & National Council on Measurement in Education, 2014). Preliminary evidence of internal structure, using exploratory factor analysis (EFA), was demonstrated along with evidence of test content, internal structure, and relationships to other variables.

There was not an adapted or validated instrument to assess multiple domains of life balance in Turkey. Thus, the aim of this study was to adapt the JBLI to Turkish culture, specifically focusing on the internal structure (AERA et al., 2014). The researchers used the following questions to guide the study:

1. Is the JBLI appropriate for the Turkish population?
2. Is the JBLI Turkish version valid and reliable?

## Method

### Data Preparation

A total of 485 participants engaged in this study. The data were collected via online and paper-and-pencil procedures. A total of 156 individuals began the online survey, and 92 completed the entire survey (59% completion rate). Paper-and-pencil data were obtained from 391 participants. Three steps were followed to clean the data. First, the data set was examined and 46 cases were removed due to unanswered subscales. Among these cases, 12 were from the online data set and 34 were from the paper-and-pencil data set. The second step was to evaluate and either omit or replace missing data. Bivariate correlations of replaced data were conducted and compared to each untransformed variable to determine whether the data were missing completely at random (MCAR) or missing at random (MAR). The bivariate analyses and the percentage of missing data showed that the data were missing completely at random (MCAR). As a result, missing values were replaced with the series mean. The third step was to analyze distributions to achieve normality. A graph analysis was conducted to detect outliers and determine the values needing to be deleted. A Mahalanobis distance was conducted to detect multivariate outliers. First, linear regression was run to obtain Mahalanobis distance. A critical chi-square value ( $df = 8, \alpha = .05$ ) of 15.51 was identified. Based on the chi-square critical value, nine cases were removed from the paper-and-pencil data set and one case from online data set, reducing the initial sample to  $n = 429$ . No additional adjustments were made to the data set.

An independent  $t$  test was conducted to evaluate whether online participants' total score of subscales were significantly different than paper-and-pencil participants' scores or not. The independent  $t$  test analyses showed that there were significant differences ( $p < .05$ ) between online data set and paper-and-pencil data set participants in four subscale mean scores: Positive orientation, Quality of relationships, Sleep disturbance, and Career (see Table 1). However, the online data set included only 79 participants compared to 350 participants in the paper-and-pencil data set. Therefore, we calculated effect sizes (Cohen's  $d$ ) to determine the practical significance of  $t$  test results (Cohen, 1988). The results showed effect sizes were small for four subscale scores, demonstrating a low level of practical significance (see Table 1).

**Table 1.** Descriptive and Comparative Statistics for the Juhnke–Balkin Life Balance Inventory–Turkish Scale Items.

Scale	Online Data Set ( <i>n</i> = 79)		Paper-and-Pencil Data Set ( <i>n</i> = 350)		<i>t</i> Test	<i>p</i> Value	Cohen's <i>d</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			
Global health	35.86	5.94	36.34	5.67	−.684	.494	.08
Quality of relationships	23.44	5.37	25.89	5.43	−3.63	.000	.45
Positive orientation	28.67	5.17	28.01	5.09	1.03	.301	.12
Depression	21.70	4.39	23.96	4.88	−3.76	.000	.48
Spiritual support	23.50	5.52	24.19	4.24	−1.22	.221	.14
Friendship/intimacy	19.72	2.90	19.89	3.03	−.468	.640	.05
Career	18.96	3.33	17.59	3.89	2.88	.004	.37
Sleep disturbance	18.19	4.95	19.59	4.61	−2.40	.017	.29

## Participants

Four hundred twenty-nine persons participated in this study: 231 males (54%) and 198 females (46%). The mean age of the participants was 33.85 years ( $SD = 12.57$ , range = 18–70 years), and six participants failed to respond to the demographic query. Participants reported their level of education as middle school ( $n = 11$ , 2.0%), high school ( $n = 133$ , 31.0%), some college ( $n = 45$ , 10.5%), bachelor's degree ( $n = 189$ , 44.1%), or graduate degree ( $n = 51$ , 11.9%). Responses to the marital status query were as follows: single, 47.1% ( $n = 202$ ); married, 48.3% ( $n = 207$ ); divorced, 3.5% ( $n = 15$ ); and separated or widowed, 1.0% ( $n = 4$ ). One participant failed to respond to the demographic query.

## Measure

The JBLI (Davis et al., 2014) was developed to measure the life balance construct along 10 factors (positive orientation, stress/anxiety, substance use/abuse, spiritual support, friendship, sleep disturbance, career, sex/intimacy, global health, and quality of relationships). The JBLI was designed for people 18 years and older. The inventory is a self-report instrument that estimates the levels of life balance with 72 items using a 5-point Likert-type response format with responses ranging from 1 = *strongly disagree* to 5 = *strongly agree*.

The Positive orientation scale describes characteristics of happiness, optimism, future expectations, and positivity. The Global health scale includes elements of mental and physical health. The Substance use/abuse scale refers to the use or abuse of drugs and alcohol. The Sleep disturbance and Stress/anxiety scales are tied to physical and psychological health. The Sex/intimacy, Quality of relationships, and friendships scales are measures of interpersonal relationships. The Career scale includes work satisfaction and interpersonal relationships. Finally, the Spiritual support scale includes beliefs, practices, and both traditional Western concepts and nontraditional concepts.

The reliability and validity of JBLI was evaluated with a sample of 346 adults. The JBLI was administered in clinical settings (e.g., counseling centers) and nonclinical settings (e.g., colleges and universities), and included a diverse population: 47.1% Hispanic, 36.7% White, 8.4% Black, 1.4% Native American, 1.2% Asian, and 5.0% other. The reliability of JBLI was assessed by Cronbach's alpha coefficients, which ranged from .77 on the Career subscale to .92 on the Positive orientation subscale (Davis et al., 2014). There is not a reliability score for the total subscale because the instrument does not have an overall score for life balance. Davis et al. (2014) reported that concurrent validity was evaluated by comparing JBLI subscale scores with the Outcome Questionnaire–45.2 (OQ–45.2) subscale scores. Statistically significant relationships were evident between five of the JBLI scales (Positive orientation, Global health, Substance use/abuse, Sleep disturbance, and Stress/anxiety) and the OQ–45.2 symptom distress scale ( $p \leq .001$ ); between JBLI Quality of relationships and Friendship scales and the OQ–45.2 interpersonal relations scale ( $p \leq .001$ ); and finally between three of the JBLI scales (Spiritual support, Sex/intimacy, and Career) and the OQ–45.2 social role scale ( $p \leq .001$ ; Davis et al., 2014).

**Table 2.** Correlations Between the Subscales, Means, and Standard Deviations of the Juhnke–Balkin Life Balance Inventory–Turkish.

Scale	<i>M</i>	$\alpha$	<i>SD</i>	1	2	3	4	5	6	7
Global health	3.62	.80	.24							
Quality of relationships	3.63	.81	.23	.38*						
Positive orientation	3.51	.81	.32	.56*	.30*					
Depression	3.36	.77	.55	.38*	.43*	.40*				
Spiritual support	4.01	.83	.18	.27*	.16*	.28*	.28*			
Friendship/intimacy	3.97	.78	.14	.44*	.39*	.45*	.31*	.24*		
Career	3.57	.81	.07	.39*	.30*	.50*	.38*	.21*	.46*	
Sleep disturbance	3.22	.77	.28	.41*	.26*	.37*	.51*	.30*	.25*	.32*

\* $p < .01$ .

## Procedure

The university institutional review board approved this study (#02–114). Forward and backward translation methods were used during the translation process of the JBLI. Five independent forward translations of the original inventory were obtained from five Turkish counselor education doctoral students who have continued their education in the United States. The five independent translated documents were compared and analyzed, and a final version of survey was created by the lead researcher. The lead researcher consulted two Turkish language experts who were faculty members in the Turkish language and literature department for grammar and language proficiency. The final version of the JBLI–Turkish (JBLI–T) was reverse translated by an expert who held a doctoral-level degree in psychological counseling and guidance. The JBLI–T consisted of 72 items with responses arranged on a Likert-type scale. Possible responses are *strongly agree*, *agree*, *neither agree or disagree*, *disagree*, and *strongly disagree*. In addition, the researcher collected basic demographic information from participants in the study: age, sex, location, marital status, income level, and education.

Two methods were used to recruit participants. The researchers created an interface using Qualtrics online survey software to collect online data. The researchers sent out e-mail requests and online postings to recruit possible participants through Turkish Government Directorates' listservs, e-mail addresses, and Facebook pages (e.g., Amerikada yasayan Turkler [The Turkish who live in the United States]). The second method was paper-and-pencil data collection. Volunteer participants were recruited from among undergraduate students on a university campus in the east of Turkey and personnel who worked for a Turkish government directory. Analyses were conducted using ViSta 7.2, IBM SPSS 20.0, and *Mplus* version 6.

## Results

### Descriptive Statistics

The correlations between all subscales and subscale means and standard deviations for the JBLI–T are presented in Table 2. The Sleep disturbance subscale has the smallest mean ( $M = 3.22$ ,  $SD = 0.28$ ) and the Spiritual support subscale has the largest mean ( $M = 4.01$ ,  $SD = 0.18$ ). Descriptive statistics showed that individual subscale means were similar to Davis et al. (2014).

### Confirmatory Factor Analysis

Based on the results of the EFA conducted by Davis et al. (2014), the researchers hypothesized the 10-factor model would be an appropriate fit with the Turkish population. Thus, confirmatory factor analysis (CFA) was used to evaluate the model. CFA was chosen because the JBLI was a validated instrument and had a consistent theory (Davis et al., 2014). Indexes, including chi-square ( $\chi^2$ ), root mean square error of approximation (RMSEA), standardized root mean square residual (SRMR), comparative fit index (CFI), and Tucker–Lewis index (TLI), were used to examine model fit between the sample

covariance matrix and population covariance matrix (Dimitrov, 2012; Gnilka, Karpinski, & Smith, 2015). When inspecting these values, we used Dimitrov's (2012) standards in which an acceptable model fit is represented in values for the  $\chi^2$  ( $p > .05$ ), GFI  $> .90$ , CFI  $> .90$ , TLI  $> .90$ , SRMR  $< .08$ , and RMSEA [90% CI]  $< .08$ .

The *Mplus* Version 6.12 package program was used to compute CFA. From the values found in the CFA, the values  $\chi^2(2,043) = 5243.70$ ,  $\chi^2/df = 2.56$ , CFI = .70, TLI = .69, RMSEA [90% CI] = .06 [.05, .06], and SRMR = .07, were detected relating to the suggested 10-factor model. Based on the standardized values, 10 items that have factor loadings under .40 were removed and a second CFA was run. The results,  $\chi^2(1,297) = 3613.60$ ,  $\chi^2/df = 2.78$ , CFI = .74, TLI = .73, RMSEA [90% CI] = .06 [.06, .06], and SRMR = .07, indicated that the second model with item removals was not much different than the original model. The results of the CFA indicated an unacceptable fit based on cutoff values (Dimitrov, 2012). Given the failure of the CFAs to find a possible model that fit the data, a parallel analysis (PA) and an EFA were conducted to identify a different model of the JBLI-T.

### **Parallel Analysis and Exploratory Factor Analysis**

The poor fit of the CFA likely was the result of cultural differences between the normative sample and the Turkish sample. Previous measures developed by U.S. participant samples demonstrated a different factor structure when evaluated with Turkish samples (Korkut-Owen & Ogretmen, 2013; Ozer, Firat, & Bektas, 2009; Sahin & Yilmaz, 2011). Hence, we concluded that the factor structure of the JBLI should be reevaluated with the Turkish sample and chose to run a PA and an EFA.

PA is a Monte Carlo simulation technique to determine the number of factors to retain in EFA (Ledesma & Valero-Mora, 2007). PA, which was introduced by Horn (1965), compares the observed eigenvalues to account for more variance than the components obtained from random data (Ledesma & Valero-Mora, 2007; O'Connor, 2000). Before we run a PA, the Kaiser-Meyer-Olkin (KMO) was examined to determine if the data were appropriate for factor analysis. The KMO value of .88 indicated that the data were appropriate for analysis (Leech, Barrett, & Morgan, 2005). ViSta 7.2, which is a free statistical program conducting exploratory data analysis and statistical visualization methods (Young, Valero-Mora, & Friendly, 2006), was used to run PA.

We set a value of 1,000 for random data sets to compute mean eigenvalues. We used a large number of data sets to have more precise and reliable results (O'Connor, 2000). Actual data sets' eigenvalues were compared to the random data sets' eigenvalues and factors were retained as long as actual eigenvalues exceeded the eigenvalues from the random data sets. Based on PA analysis, nine factors were retained. Subsequently, an EFA using maximum likelihood with a promax rotation was conducted to identify nine factors. An oblique rotation was selected given the hypothesized correlated factors, particularly given that Davis et al. (2014) also used this method of analysis. Nine factors accounted for approximately 51% of the variance in the model. The identification of the nine factors was based on factor loadings of .32 or greater. Tabachnick and Fidell (2013) stated .32 is a good rule of thumb for the minimum loading of an item. Items that had loadings less than .32 were omitted. Of the 72 original items included on the JBLI-T, 14 were eliminated. We reviewed scales and items for consistency and realized that the ninth factor included items from the Substance use and Sex/intimacy subscales. By further examining these four items, Item 30 (i.e., "Family members and/or friends who rarely drink alcohol have recently expressed concerns about my drinking behaviors"), Item 31 (i.e., "My sexual experiences frequently are disappointing or nonexistent"), Item 47 (i.e., "During the last year my drinking or drug use has hurt others"), and Item 53 (i.e., "I generally find little sexual joy or satisfaction"), it was determined that they measured sex satisfaction and behaviors related to alcohol or drug use. We decided to remove this scale from the analysis because it did not measure a specific construct. An EFA with eight factors was conducted. Eight factors accounted for approximately 52% of the variance in the model. Table 3 includes factor loadings of the retained items. The resulting Turkish adaptation generated a different set of subscales that were identified as global health, quality of relationships, positive orientation, depressive mood, spiritual support, friendship/intimacy, career, and sleep disturbance.

**Table 3.** Instrument Items and Factor Loadings.

	JBLI-T Items	GLH	QOR	PO	DEP	SPS	FRN	CAR	SLD
1	Item 57	<b>.69</b>	.04	-.07	.04	-.08	.02	-.01	.13
2	Item 62	<b>.65</b>	-.00	-.08	-.00	.03	.25	-.10	-.08
3	Item 34	<b>.57</b>	.08	-.05	.03	.04	-.12	.03	.00
4	Item 40	<b>.56</b>	.02	.18	-.10	-.04	.05	-.03	.02
5	Item 25	<b>.49</b>	.03	.01	.01	-.00	.19	-.06	-.14
6	Item 14	<b>.42</b>	-.04	-.09	.04	.18	.18	-.06	-.00
7	Item 58	<b>.41</b>	.16	-.04	.16	-.04	-.23	.08	.02
8	Item 59	<b>.40</b>	-.09	.11	.24	-.09	.00	.05	.09
9	Item 11	<b>.39</b>	-.02	.25	-.07	.10	.05	.01	.01
10	Item 56	<b>.37</b>	-.10	-.04	.01	.00	.18	.04	.05
11	Item 35	.04	<b>.85</b>	-.12	-.03	.02	.02	-.02	.00
12	Item 12	.12	<b>.84</b>	-.10	-.00	.02	-.05	-.02	-.11
13	Item 41	-.06	<b>.78</b>	.00	.03	.02	.02	-.02	-.01
14	Item 43	-.16	<b>.53</b>	.17	-.18	.00	.29	.05	.04
15	Item 15	.04	<b>.45</b>	-.06	.22	-.12	-.05	-.01	.04
16	Item 32	-.00	<b>.41</b>	-.17	.12	-.14	.11	-.03	.11
17	Item 60	.02	<b>.32</b>	-.00	.14	.15	-.01	.08	-.09
18	Item 9	.04	.01	<b>.75</b>	.19	-.04	.00	-.05	-.03
19	Item 10	-.01	.03	<b>.73</b>	.22	.00	.10	-.13	-.01
20	Item 1	-.08	-.05	<b>.59</b>	-.15	.01	.12	.04	.04
21	Item 8	-.01	-.17	<b>.57</b>	.00	-.02	.04	.04	.05
22	Item 2	-.05	-.04	<b>.49</b>	-.05	-.04	.17	.07	-.02
23	Item 21	.25	.00	<b>.40</b>	-.17	.02	-.32	.09	.02
24	Item 24	.23	-.09	<b>.38</b>	.00	-.01	.00	.02	.09
25	Item 22	.18	-.01	<b>.34</b>	.30	.02	.02	-.01	-.12
26	Item 45	-.02	.17	.10	<b>.65</b>	.07	-.12	-.00	-.04
27	Item 55	-.12	.04	.31	<b>.63</b>	.03	.08	-.08	-.07
28	Item 54	.02	.01	-.10	<b>.56</b>	-.07	-.09	-.00	.06
29	Item 36	.08	.18	-.02	<b>.46</b>	.08	.05	.00	.04
30	Item 26	.03	.09	-.22	<b>.44</b>	.07	.12	.07	.07
31	Item 5	.14	-.07	.12	<b>.43</b>	-.03	.14	-.03	-.02
32	Item 33	.02	-.10	-.01	<b>.43</b>	-.06	-.15	.06	.09
33	Item 70	-.02	-.05	-.16	.15	<b>.79</b>	-.02	.03	.04
34	Item 63	-.00	.00	-.01	-.01	<b>.73</b>	-.13	.02	.00
35	Item 42	.07	.11	.10	-.26	<b>.73</b>	.02	-.02	.06
36	Item 69	-.02	-.03	-.08	.26	<b>.71</b>	-.07	-.02	-.02
37	Item 13	.08	.01	.26	-.24	<b>.63</b>	-.00	-.02	-.04
38	Item 17	-.04	-.04	-.03	.03	<b>.46</b>	.14	-.04	.16
39	Item 44	-.02	.01	.17	-.18	.02	<b>.63</b>	.01	.12
40	Item 49	.00	.10	.14	.08	-.13	<b>.59</b>	-.05	.08
41	Item 46	.28	-.13	-.02	-.11	.00	<b>.56</b>	.13	-.08
42	Item 52	.24	.04	.02	.06	-.03	<b>.48</b>	.07	-.04
43	Item 38	-.05	.27	.10	.01	-.04	<b>.43</b>	.11	-.00
44	Item 37	-.07	.06	.06	.00	-.01	-.01	<b>.75</b>	-.04
45	Item 65	.08	-.00	-.09	-.02	.06	.15	<b>.75</b>	-.06
46	Item 28	-.02	-.07	.01	-.01	-.08	.06	<b>.73</b>	.01
47	Item 19	-.05	-.03	.31	.09	.02	-.06	<b>.48</b>	-.08
48	Item 68	-.10	-.03	.01	.30	.09	.13	<b>.41</b>	.06
49	Item 64	.20	.05	.01	-.07	.00	.05	-.05	<b>.71</b>
50	Item 18	-.04	-.08	.00	.12	.04	.01	-.07	<b>.60</b>
51	Item 39	.03	.19	.17	-.05	-.03	-.03	.11	<b>.53</b>
52	Item 6	-.07	-.10	-.12	.17	.10	.23	-.03	<b>.44</b>
53	Item 66	.05	.00	.11	.38	-.01	-.16	.08	<b>.39</b>
54	Item 61	-.10	-.04	.01	.21	.18	.02	-.06	<b>.34</b>

Note. Factor loadings > .32 are shown in bold and indicate scale loading. JBLI-T = Juhnke-Balkin Life Balance Inventory-Turkish; GLH = Global health; QOR = Quality of relationships; PO = Positive orientation; DEP = Depression; SPS = Spiritual support; FRN = Friendship/intimacy; CAR = Career; SLD = Sleep disturbance.

The internal consistency of the scores was evaluated. The scores ranged from .77 for Sleep disturbance to .83 for Spiritual support. Table 2 contains the descriptive statistics, intercorrelations of the scores from the respective subscales, and results from reliability analysis of the scores from each of the individual scales developed from the factor analysis of the JBLI-T.



## Discussion

The primary purpose of this study was to explore structure and reliability estimates for scores on the Turkish version of the JBLI with a sample of Turkish citizens. The JBLI is a 72-item instrument that was developed by Davis et al. (2014) to measure the life balance construct. The Turkish literature review showed that there was a dearth of life-balance-related research in the counseling field. In parallel with Greenhaus et al. (2003), one of the reasons is the lack of life balance instruments in Turkish literature. Therefore, it was important to adapt a valid and reliable instrument to Turkish. In addition, the research focused on one or two aspects of life balance. However, life balance is multidimensional and more complex than thought (Wagman, Hakanson, Jacobsson, Falkmer, & Bjorklund, 2012). Both the original JBLI and JBLI-T results reflected the multidimensional construct of life balance.

The CFA results did not support the 72-item and 10-factor model. In an attempt to create a valid and reliable instrument, we conducted a PA and an EFA using maximum likelihood with a promax rotation. Eight factors were extracted that accounted for approximately 52% of the variance. The Turkish version of the JBLI showed a different factor structure than the original JBLI. When we look at the previous studies that adapted measures developed by U.S. participant samples (Korkut-Owen & Ogretmen, 2013; Ozer et al., 2009; Sahin & Yilmaz, 2011), this study indicated similar results.

This study indicated cultural differences on understanding the life balance construct. Matsumoto (2000) stated that different cultures might produce different subscales on a given test (Cokley, 2015). For example, in an adaptation study of the Five Factor Wellness Inventory-Teen version (5F-Wel-T), Korkut-Owen and Ogretmen (2013) found a different model. The 5F-Wel-T was composed of five subscales with 99 items for the U.S. sample; however, the Turkish version generated five different subscales with 41 items. In this respect, the original JBLI had a 10-factor structure with 72 items, whereas the Turkish version was composed of a different eight-factor structure with 54 items. Three subscales were removed from the instrument. The two scales removed were the Sex/intimacy scale and the Substance use/abuse scale. The reasons those subscales did not have adequate psychometric values might be because of the social structure of Turkish culture, which is affected by Eastern values and religious differences. However, two Sex/intimacy items were loaded under the Friendship scale. Therefore, a new subscale was created with the label of Friendship/intimacy in the Turkish version of the instrument. The other removed subscale was Stress/anxiety. However, five items under the Stress/anxiety subscale were loaded under other subscales. Item 33 (i.e., "I worry that stressful events in my life will result in unhealthy decisions or negatively affect my health") and Item 54 (i.e., "I tend to overreact to stressful events") were loaded under a new subscale labeled Depression. Item 58 (i.e., "Within the last 6 months I have not had significant feelings of anxiety") and Item 59 (i.e., "I manage my stress well") were loaded under the Global health subscale. Furthermore, Item 68 (i.e., "I often become anxious or depressed when I think about my work") was loaded under the Career subscale. It was determined that those items measured similar constructs under their new subscales (e.g., Item 68 was related with Career). These results showed that phenomenology of anxiety and stress could vary in significant ways from one culture to another (Good & Kleinman, 1985). One possibility is that the Turkish sample, which has both individualistic and collectivistic values, was differentiated from the U.S. sample, which has more individualistic values. Thus, the Stress/anxiety subscale might not work as a subscale because of the different cultural structure of participants. In a similar vein, some of items under the Positive orientation subscale that are related to depressive mood were loaded under the Depression subscale. The remaining items under the Positive orientation scale included items related to future expectations and happiness. This showed that the Turkish sample differentiated positive and negative emotions under different subscales.

The scales that were retained in the JBLI-T are Depression, Global health, Positive orientation, Quality of relationships, Spiritual support, Friendship/intimacy, Sleep disturbance, and Career. The first scale of the instrument, Global health, includes physical and mental health aspects. Ten items were included in this scale. The second is Quality of relationships, which measures interpersonal relationships between couples, understood as satisfaction with the quality of significant relationships. The third is Positive orientation, which measures future orientation and positivity. The fourth scale of the instrument, the Depression scale, reflects the aspects of depressive mood. The fifth scale is Spiritual support, which measures the extent to which one is comfortable with his or her spiritual or religious beliefs. The sixth scale



is Friendship/intimacy, which was tied to quality of relationships as well. Friendship/intimacy includes the quality of existing friendships and level of intimacy. The seventh scale is Career, which measures aspects of work satisfaction, career success, and work efficacy. The last scale is Sleep disturbance, which measures the amount and quality of sleep a person has. In addition, this scale retained all the original items from the JBLI English version.

### **Implications**

Given the lack of life balance assessment instruments available to Turkish-speaking people and increased interest in their clients' level of life balance, the JBLI-T has broad application potential. Specifically, the JBLI-T can be used as an assessment tool to identify areas of concern and treatment goals for clients. Thus, counselors can use the JBLI-T to better understand their clients' life balance construct and to develop affective interventions to address areas of concern or dissatisfaction. The instrument might also have benefit in establishing a life balance baseline. Here, counselors could use the JBLI-T as a pretreatment instrument and compare later JBLI-T scores to pretreatment scores to determine progress as well as areas warranting continued counseling. Concomitantly, the JBLI-T provides researchers a new assessment tool to conduct research specific to life balance with Turkish-speaking people. The JBLI-T includes different aspects of life. Researchers can study variables that have a relationship with or predict life balance. Life-balance-related studies are stuck in the field of work-life balance or work-family balance (Evans, Carney, & Wilkinson, 2013; Greenhaus et al., 2003). This instrument can encourage people to explore themselves considering what is important for their life balance. The results of life-balance-related studies can show the difference between people, groups, or cultures. Consequently, new knowledge can be developed from national and cross-cultural studies (Wagman et al., 2012).

### **Limitations**

As is the case with all self-report inventories, the JBLI-T has potential limitations specific to inaccurate personal perceptions, individual bias, faulty responses, and intentional or unintentional responses that reflect social correctness. Although the sample used provided a relatively broad diversity of participants according to demographic characteristics such as sex, age, and educational levels, the sample contained an overrepresentation of persons with college training and degrees. Additionally, the sample was a non-clinical sample and did not include persons presenting with remarkable levels of psychopathology or emotional turmoil. Thus, the generalizability of the findings and the use of the JBLI-T might be limited to Turkish speakers who are functioning at levels at or above the general population at large.

### **Conclusion**

Turkey is a developing country with a dominantly young population. The structure of the society is changing with the wide opportunities of education for young adults, developing industry, increasing life expectancy, and a more developed workforce. For example, Organization for Economic Cooperation and Development (OECD, 2013) data showed that the amount of hours worked in Turkey was above average compared to other OECD countries. In light of the changes occurring in Turkish society, it is important to know people's balance of life changes as well (White, Hill, McGovern, Mills, & Smeaton, 2003). Davis et al. (2014) stated that life balance was linked with mental and physical well-being. Therefore, discussion of the construct in therapy sessions and research might be beneficial for clients.

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The author declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

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