

## **Validation of Arabic State Self-Esteem and Satisfaction with Life Scales among Married Individuals from the United Arab Emirates**

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### **Abstract**

*Research on life satisfaction and self-esteem from the Arab culture is limited due to unavailability of culturally relevant measures. This study aims at establishing the psychometric properties of two widely used measures of subjective well-being translated to Arabic, using a sample from the United Arab Emirates. Four hundred and ten married Emiratis participated in this investigation. The factor structure of SWLS replicated earlier findings of SWLS developers. With regard to SSES, four factors (i.e., social, personal, appearance, and performance) were found to fit the data well as opposed to three factors reported by developers of SSES. Correlations and significant gender differences were observed within the expected directions. Findings are discussed within the context of UAE's culture and implications for future research and practice are deliberated.*

**Keywords:** State self-esteem, satisfaction with life, marital well-being, Arabic well-being scales, Emirati culture

### **1. Introduction**

Self-esteem and life satisfaction are two important and widely used measures in psychological studies that have greatly enhanced our understanding of wellbeing, mental health, personality and developmental outcomes. Due to the centrality of these constructs to 'subjective wellbeing' (e.g., Bardasi, & Francesconi, 2003; Diener, 2000; Diener, Suh, Lucas, & Smith, 1999) as well as a range of other psychological variables, researchers in different national and cultural settings often rely on translated versions of scales measuring these constructs. Establishing the psychometric properties of these translated instruments which measure such critical human dispositions such as life satisfaction and self-esteem is essential prior to its application in mental health practices or research (Brink, Louw, & Grimmer-Somers, 2011).

A widely used measure of life satisfaction is the Satisfaction with Life Scale (SWLS) which was developed by Diener, Emmons, Larsen, & Griffin (1985) to measure global life satisfaction of individuals based on an overall judgment of their life. With regard to self-esteem, Heatherton & Polivy's (1991) State Self-esteem Scale (SSES) which measures momentary fluctuations in self-esteem is often considered to be a stable measure with sound psychometric properties. Unlike general self-esteem which is stable over time (Neff & Vonk, 2009), state self-esteem can be altered (Heatherton & Polivy, 1991), and fluctuates according to how individuals feel approved by others in the moment (Thomas, Reijntjes, Orobio de Castro, Bushman, Poorthuis, & Telch, 2010).

The above mentioned scales have been developed for use with Western samples (Diener et al., 1985; Heatherton & Polivy, 1991). Although they have been previously translated into many languages (eg. Abdallah, 1998; Diener & Diener, 2009), they could not be used directly with an Emirati sample owing to linguistic and cultural differences among various Arabic geographical regions. The obvious differences observed in the spoken dialect, life styles, social norms, and traditions (Al-Krenawi, 2010; Rashad, Osman & Roudi-Fahmi, 2005) as well as the subtle differences that exist within cultures may render possible differences in the perceived satisfaction with life and state self-esteem of different cultural groups in the Arab region. The lack of culturally-appropriate measures to examine satisfaction with life and state self-esteem of Emiratis is indeed a cause for concern among researchers and practitioners (Alqashan, 2008; Balderrama-Dubin, Snyder, Semmar, 2011). Therefore, validating these instruments is necessary to ensure their appropriateness for use with Emirati samples before they could be used in future research.

While studies have established the relationship between life satisfaction and self-esteem in different cultures (e.g., Diener & Diener, 2009), research on this topic from the Arab culture is limited. In general literature suggests that subjective well-being is related to the variables of satisfaction with life, self-esteem, and global well-being (Cohen, Geron, & Farchi, 2009; Pavot & Diener, 2008). To our knowledge, there are no studies on life satisfaction in relation to state self-esteem in the UAE context. In addition, no research was found on validating the SWLS and SSES for use with Emirati population. Given these backgrounds, the purpose of the study was three-fold: 1) To identify the factor structure of SSES and SWLS based on a sample of married Emiratis; 2) to provide additional evidence for the validity of these instruments through examining the correlation between the mean scores of SSES and SWLS and 3) to investigate whether there are any significant gender differences in the mean scores of SSES and SWLS.

The deliberate choice of a married sample in this study is to be considered in light of the variables as well as the cultural context of the study. Satisfying marital relationships as has been pointed out by many studies over and over again is of central importance to the well-being of individuals (Diener, Suh, Lucas, & Smith, 1999; Pavot & Diener, 2008) and this is particularly true in collective societies where marriage is considered a religious duty and social necessity (Alqashan, 2008; Lev-Weisel & Al-Krenawi, 1999). In the Emirati cultural context, marriage is the only acceptable and recognized source of intimacy and emotional support and thus often works as a moderator for self-esteem and life satisfaction. This alerts us to the potential importance of considering a married sample while examining variables such as self-esteem and life –satisfaction.

## **2. Method**

### **2.1 Participants**

Five hundred Emirati married men and women were recruited through UAE University students who were given extra credit for participating in the study either by filling out the survey themselves (married students only) or by asking a friend or a family member to fill out the survey (snowball technique). Four hundred and ten men (37%;  $n = 151$ ), women (62%;  $n = 253$ ), and 0.7% ( $n = 3$ ) who did not indicate their gender, provided complete and usable surveys. The overall response rate was more than 80%. The average age of the respondents was 29 years. Fifty four percent of the respondents were college graduates, 28% had high school education, and only 8% had less than high school education.

Forty-eight percent were employed and the remaining 52% were unemployed. Ninety one percent were married to Emirati citizens and 53% of all participants had family arranged marriages. About 47% of the respondents were married to their relatives while 53% were not married to relatives.

### **2.2 Measures**

**2.2.1 State Self-Esteem Scale.** State Self-esteem Scale (SSES; Heatherton & Polivy, 1991) assesses fluctuations in self-esteem and, therefore, it fits with the purpose of measuring state self-esteem in this investigation.

It consists of 20 items of which seven were positively constructed and thirteen (items 2, 4, 5, 7, 8, 10, 13, 15, 16, 17, 18, 19, and 20) were in negative form. Sample items are “I feel confident about my abilities”, and “I feel as smart as others”. The items were distributed in three dimensions or subscales namely: Performance, Social, and Appearance self-esteem. Items are rated using 5-point Likert scale, ranging from 1 (Not at all true) to 5 (Extremely true). The total score for SSES is 100, with higher scores indicating high state self-esteem (Heatherton & Polivy, 1991). In five studies (Heatherton & Polivy, 1991), the SSES was found to be related to other measures of psychological variables such as trait self-esteem, trait anxiety, depression, hostility, body size estimation, satisfaction with height, and social desirability. It is psychometrically sound with concurrent and discriminant validity (Heatherton & Polivy, 1991). The scale has strong internal consistency as indicated by Cronbach's coefficient alpha  $\alpha = .92$ .

The SSES was translated into Arabic language for the purpose of this study with permission from the American Psychological Association (October 7, 2010). The procedures suggested by Mallinckrodt and Wang (2004) and Guillemín, Bombardier & Beaton (1993) while carrying out cross-cultural adaptation of health-related quality of life measures were applied in translating the scale. Accordingly, two bilingual experts in psychology independently translated the SSES into Arabic. The scale was later back-translated independently to English by two bilinguals who were not in the field of psychology, and lastly submitted to three bilingual experts in psychology for face validation of the Arabic version of this instrument. The feedback from three experts showed that the scale had adequate face validity and, thus, it can be used in this investigation.

**2.2.2 Satisfaction with Life Scale.** The Satisfaction with Life Scale (SWLS; Diener et al., 1985) measures levels of overall satisfaction with life. It is designed to ask subjects for an overall judgment of their life, in order to measure the concept of life satisfaction. It is a five-item scale that uses a 7-point Likert-type response format (1= strongly disagree to 7 = strongly agree). Scores range from 5 to 35 with higher scores (between 31-35) indicating greater life satisfaction. Sample items are: Item 1 “In most ways my life is close to ideal” and item 2 “The conditions of my life are excellent”. Diener et al. (1985) found a coefficient alpha of .87 and a test-retest correlation coefficient of .82 with a two-month interval, indicating the scale internal consistency and stability. Similar findings were reported by Pavot, Diener, Colvin, & Sandvik (1991) and Yardley and Rice (1991 as cited in Shevlin, Brunnsdena, & Miles, 1998).

This scale is widely used in cross cultural research and its reliability and validity for use with diverse population have been established (Abdallah, 1998; Diener & Diener, 2009 ;). Relevant to the present study, for example, Arabic translated version of the SWLS was used with a Palestinian college student sample (e.g., Abdallah, 1998). He reported a Cronbach alpha of  $\alpha=.79$  and a test-retest correlation of .83. Overall, Abdallah's (1998) study showed that the SWLS has considerable evidence for reliability, one-dimensional factor structure, and concurrent validity.

### 2.3 Procedure

A survey package including a consent form was given to the recruited participants. For the comfort of participants and to avoid any conflict, spouses of the participants were not asked to fill out the questionnaire. Recruiters were instructed to give the survey to only one member of each family to avoid effect on the responses. Confidentiality of responses was ensured by placing a sticker on the survey envelope asking each participant to seal it before submitting it to the research assistant. The total time for filling out the survey was about 15 minutes.

### 2.4 Data Analysis

Data were analyzed in several steps. First, the SSES, and SWLS were factor analyzed to establish their factor structures. Second, correlation coefficients were obtained to examine the relationship between SSES, and SWLS. Third, T-test was utilized to investigate gender differences in the mean scores of the psychological variables.

## 3. Results

### 3.1 Factor Analysis

**3.1.1 State Self-Esteem Scale.** The appropriateness of factor analysis was examined using two measures: the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy and the Bartlett's test of sphericity. The Kaiser-Meyer Olkin measure of sampling adequacy test indicated an acceptable level of .88 (values above .70 are acceptable).

Bartlett's test of sphericity tests the hypothesis that the correlation matrix is an identity matrix which means that all of the variables are uncorrelated. Bartlett's test of sphericity was found to be significant ( $p < .001$ ) which means rejecting this null hypothesis so the data meet this requirement. Following the procedure used by Heatherton & Polivy (1991), a principal component analysis with an Oblique rotation was used to identify the underlying factors in SSES, and to examine its replicability in the UAE culture using an Emirati married sample. An eigen value greater than 1.00 and loading of .40 or above were basic criteria for inclusion of an item in a factor (Green, Salkind, & Akey, 2000). Based on these criteria, all the 20 items loaded on one of the four factors with exception of item 10, "I feel displeased with myself", which cross-loaded on factors 3 and 4 (Table 1) The amount of variance accounted for by the four factors was 53.2%, which is a little bit higher than what the developers of the scale reported (50.4%).

With an eigen value of 5.9, six items (i.e., 2, 13, 15, 16, 17, and 20) measuring others' perceptions of self in social situations loaded on the first factor, and, therefore, it is named "Social". With an eigenvalue of 2.1, six items (i.e., 1, 6, 8, 9, 11, and 14) assessing self-regard loaded on the second factor, therefore, it is called "Personal". With an eigenvalue of 1.4, items 3, 7, 10, and 12 tapping the person's view of his/her appearance loaded on the third factor. Thus, this factor is named "Appearance". The fourth factor with an eigenvalue of 1.2 accounted for 4.9% of the total variance. Items 4, 5, 10, 18, and 19 loaded on this factor that assesses the individual perceptions of his/her performance, and, therefore, it is named "Performance". Item 10 "I feel displeased with myself" was removed from SSES in the second part of this study (reported elsewhere) in order to ensure that each item of the scale fits in one specific factor. Therefore, the final version of SSES comprises 19 items. Scores on the SSES can range from 19-95. In this study the mean scores of SSES was 75.5 (SD = 10.4), indicating relatively high state self-esteem. These results partially replicated the earlier findings reported by Heatherton & Polivy (1991). The SSES and its four subscales were found to have considerably moderate to acceptable reliabilities. The Cronbach's Alpha coefficient was .86 for the 19- item scale. These reliabilities are satisfactory and were consistent with previous findings by Heatherton & Polivy (1991).

**3.1.2 Satisfaction with Life Scale.** The result of the Kaiser-Meyer Olkin measure of sampling adequacy test indicated an acceptable level of .84. Bartlett's test of sphericity was found to be significant ( $p < .001$ ) which means that the data met this requirement. Following the procedure used by Pavot et al. (1991), principal axis factor analysis was used to investigate the replicability of SWLS factor structure in the UAE culture. With an eigen value greater than 1.00 and loading of .40 or above for inclusion of an item in a factor (Costello & Osborn, 2005), all the five items of the scale loaded highly on a single factor (Table 2). Alpha coefficient obtained in this study was higher than the one reported by Abdullah (1998). The mean score for SWLS was 26.96 (SD = 5.67), suggesting that participants were satisfied with life. Overall, findings revealed that the SWLS is suitable for use in this research and the current factor structure replicates the original unidimensionality of the SWLS as found by Pavot et al. (1991).

### 3.2 Correlations Coefficients

Positive associations were found between SWLS and SSES ( $r = 0.29$ ) at the significant level  $p < 0.01$ , suggesting that those who reported high satisfaction with life also reported high state self-esteem.

### 3.3 Gender Differences

*T*- test results revealed that the mean scores of life satisfaction for Emirati men ( $M = 27.5$ ;  $SD = 5.6$ ) was slightly higher than the mean scores of life satisfaction for their women counterparts ( $M = 26.6$ ;  $SD = 5.8$ ), yet not statistically significant ( $t = 1.44$ ,  $p = .150$ ). Results also indicated that the mean scores of state self-esteem for Emirati men ( $M = 76.9$ ,  $SD = 10.3$ ) was significantly higher than the mean scores for Emirati women ( $M = 74.6$ ,  $SD = 10.4$ ), ( $t = 2.25$ ,  $p = .025$ ; Cohen's  $d = .23$ ). These differences are significant at  $p < .05$ , suggesting that Emirati married men has higher state self-esteem than women.

## 4. Discussion

This study aimed at establishing the psychometric properties of the Arabic versions of SSES and SWLS using an Emirati community sample. Overall, results provided adequate evidence to the soundness of both the translated scales with satisfactory indices of internal consistency, reliable factor structures and correlations between the two psychological variables in the expected direction. The Arabic version of the SSES demonstrated adequate psychometric properties. In addition to the strong internal consistency of the scale, the significant positive correlations that it was found to have with Life Satisfaction measure substantiated the scale's convergent validity.

While these results were in line with our expectations, the factor analysis results revealed four factors instead of the original three factors found by Heatherton & Polivy, (1991). This finding was surprising, given that most studies that validated the SSES in different contexts had replicated the original three factor structure with minimal inconsistencies (e.g., Linton & Marriott, 1996). The cultural context and the specific sample (i.e., married individuals) used in this research may well explain the divergence of the factor structure from that presented originally by Heatherton and Polivy (1991).

However, this calls for some discussion as we believe that the finding represents a factor structure unique to the Emirati/Arab population. The results of the Arabic SSES factor analysis are thus significant not merely due to the presence of an additional factor (i.e., Personal), other than the original three factors (i.e., Social, Appearance, and Performance), but due to the meaning and the underpinning cultural implications that the fourth factor may represent. Taken together, the content of these items seemed to represent an important Arab value of *Haya* (self-respect) which also encompasses one's sense of dignity, pride, honor of self etc. Indeed, the importance Arabs place on "Haya" seems to tell us why it is a significant source of one's self esteem, as has been represented in these findings. At this point, it has to be mentioned that to our knowledge, the translated version of the SSES presented in this study is so far, the only available Arabic scale measuring self-esteem as a 'multidimensional' 'state' construct. Hence, a confirmatory factor analysis is needed to evaluate the stability of this factor structure and further studies in this line may shed more light on the subtle cultural meanings embedded in the construct of state self-esteem.

The Arabic version of the SWLS reported in this study adds to the steady stream of 26 + validated translations of the scale (e.g, Pavot & Diener, 2004; Pavot et al., 1991) that have been published, since the introduction of the scale by Diener et al. (1985). As has been the case in almost all of these translations, the unidimensional factor structure of the scale is once again well demonstrated in this study. While confirming the validity of the construct, this result also substantiates Diener et al.'s. (1985) supposition that the single factor structure remains stable across cultures and ethnically diverse groups. However, results contrary to this supposition have been reported in at least a few studies which theorize a tendency for the last two items in the scale to load on a second factor, due to their reference to reflection on the past (e.g., Daniel & Petter, 2008). Hence, even as the present findings provide ample support for the single - factor hypothesis of SWLS, further studies may keep open to the possibility of a multidimensional SWLS within groups and across population subsets, while attempting to draw any definite conclusions. Further support for the psychometric properties of the Arabic version of the SWLS may be noted from the strong internally consistency measured by Cronbach's alpha, which is quite higher than that reported in a previous validation study by Abdallah (1998) and the significant positive correlation found between SWLS and SSES attests to the scale's criterion validity.

Drawing on Pavot and Diener's (1993) review of SWLS research in the past decades, the construct's positive correlation with life satisfaction is well attested findings which also provide construct validity for the SWLS. The mean SWLS score for the Emirati sample in this study falls in the range of 23±28, classified as slightly satisfied to satisfy as reported in Pavot and Diener (1993). It may be noted that on the SWLS, a score of 20 represents the neutral point, at which a respondent may be equally satisfied and dissatisfied with life (Pavot & Diener, 1993, p. 165). Given this reference and a normative data of mean scores for samples across the world ranging from 16.1 – 25.2, the mean score reported in this study indicated a population highly satisfied with their life. This result is consistent with previous findings from different cultures (Diener & Diener, 2009), and supporting the findings that individuals from wealthy nations are more satisfied with life (Diener, 2000). The finding on the gender differences in the mean scores of SWLS is consistent with previous research (Shevlin et al., 1998).

#### **4.1 Limitations**

The sample used in this research was married individuals only, and therefore, the results should be interpreted with caution as married individuals may have different characteristics (e.g., their level of marital satisfaction and quality of their marriage) that may impact the way they responded to the scales. The generalizability of these findings requires using these measures with samples representing both married and non-married individuals to investigate whether there are differences in their level of state self-esteem and life satisfaction according to their marital status. In addition, the factor structure of the scales found in this study should be replicated through confirmatory factor analysis, and additional evidence of their psychometric properties should be obtained before they are used in future research with confidence.

The use of self-report measures may be influenced by the social desirability and the person's understanding and interpretations of the scales' items; therefore, the use of qualitative methods (e.g., interviews) may broaden our understanding of the individuals' evaluation of life satisfaction and state self-esteem.

## 4.2 Implications

The Arabic versions of two highly reliable and frequently used scales measuring two variables critical to research in the realm of psychological wellbeing were validated. The variables that these measures tap, i.e. self-esteem and life satisfaction are often considered as the two essential indicators of a person's sense of well-being. This study has some implications for future research in the Arab region. It is important to note here that, in recent years, research on mental health and psychological wellbeing has gained greater momentum in the Arab world (Jaalouk, Okasha, Salamoun, Karam, 2012). In a considerable number of these studies, self and well-being are commonly recurring themes treated either as the central variable or as variables that can predict or explain any given variable. With global concerns regarding human well-being and increasing awareness of the dearth of studies exploring the same in the Arab region, researchers are more likely to consider these variables and measures that tap into one's sense of wellbeing. Given that self-esteem is the most researched construct related to the concept of 'self', there also seems to be a great need for such an instrument, especially with its potential for use with adolescents and young adults. In this context, we believe that the translated scales presented in this study can serve as very important tools for social science researchers in the region who mostly always rely on an Arabic speaking sample. These scales can also be used in clinical setting where changes in the state self-esteem and satisfaction with life from pre- to post- treatment would give an indication of the effectiveness of treatment programs designed to boost the level of well-being of clients.

Similar considerations also apply to the construct of state self-esteem and in general, such studies can help analyze the variance of the Arab population scores from those obtained in other cultural contexts thereby providing possible insights into the cultural meanings ascribed to life satisfaction and self-esteem. Such compound studies, however, will require the establishment of norms [for the Emirati population subset as well as the larger Arab population] and confirmation of the properties of the scales. Further, the factorial invariance of the SWLS and the multi-factor structure of SSES need to be confirmed across the different groups [such as age, gender, ethnicity etc] within the population. Future studies may explore the properties of the scales for samples drawn from clinical contexts.

The Arabic versions of SSES and SWLS presented here are with adequate psychometric properties for use in subsequent research. More research is needed to extend and confirm our findings. We hope that these translated versions will be instrumental in promoting research on psychological well-being in the region.

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**Table 1: Factor analysis of the State Self-Esteem Scale (SSES)**

No	Items	Factors and factor loading			
		1	2	3	4
1	I feel confident about my abilities.		.75		
2	I am worried about whether I am regarded as a success or failure.	.73			
3	I feel satisfied with the way my body looks right now.			.78	
4	I feel frustrated or rattled about my performance.				.60
5	I feel that I am having trouble understanding things that I read.				.65
6	I feel that others respect and admire me.		.61		
7	I am dissatisfied with my weight.			.58	
8	I feel self-conscious.		.73		
9	I feel as smart as others.		.76		
10	I feel displeased with myself.			.55	.54
11	I feel good about myself.		.59		
12	I am pleased with my appearance right now.			.77	
13	I am worried about what other people think of me.	.75			
14	I feel confident that I understand things.		.65		
15	I feel inferior to others at this moment.	.59			
16	I feel unattractive.	.58			
17	I feel concerned about the impression I am making.	.78			
18	I feel that I have less scholastic ability right now than others.				.72
19	I feel like I'm not doing well.				.58
20	I am worried about looking foolish.	.71			
	Alpha coefficients ( $\alpha$ )	.79	.79	.65	.74
	Alpha for total SSES	.87			
	% Variance	29.74	10.54	7.05	5.87

Note. Factors 1, 2, 3, and 4 are the Social, Personal, Appearance, and Performance subscales of SSES.

**Table 2: Factor Analysis of Satisfaction with Life Scale (SWLS)**

No	Item	Factor loading
1	In most ways my life is close to ideal.	.87
2	The conditions of my life are excellent.	.76
3	I am satisfied with my life.	.86
4	So far, I have gotten the important things I want in life.	.76
5	If I could live my life over, I would change almost nothing.	.69
	Alpha	.83
	% Variance	62.89