

The Satisfaction with Life Scale: Psychometric Properties, Measurement Invariance, and Latent Mean Differences in a Sample of Special Education Teachers

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Abstract

A popular and globally recognized measure for assessing the cognitive components of subjective well-being is the Satisfaction with Life Scale (SWLS). The purpose of this study is to adapt and validate the SWLS for special education teachers using convenience sampling. An online survey was completed by a total of 232 special education teachers. The McDonald omega and Cronbach's alpha were used to evaluate internal consistency, while confirmatory factor analyses (CFAs) and multigroup analyses were used to assess the measurement invariance of the SWLS model. Correlations between the SWLS and other scales were determined using Pearson's correlation analysis. A single-factor model of the SWLS was used to obtain good-fit indices for special education teachers. Evaluation of the internal consistency of the SWLS yielded a McDonald omega coefficient of .78 and a Cronbach's alpha of .79. The Flourishing Scale (FS), Happiness Measures (HM), and Life Satisfaction (LS) were found to correlate with the SWLS, with Pearson correlational coefficient values ranging from .45 to .56,

indicating convergent validity. To assess the discriminant validity of the SWLS, the correlation between the SWLS and the Center for Epidemiological Studies-Depression (CES-D) scale was determined. The results of a measurement invariance assessment using a multigroup CFA indicate that all levels of measurement invariance were achieved for gender and marital status. An assessment of the latent mean differences in SWLS scores across gender and marital status shows that male participants had significantly higher scores than females.

Keywords: satisfaction, positive psychology, measurement invariance, latent mean differences, special education teachers

Introduction

Recently, a growing body of knowledge has emerged on how the subjective experience of well-being affects health and longevity (Diener et al., 2017b), socialization (Diener et al., 2017a), social problem-solving skills (Jiang et al., 2016), and the ability to successfully engage in academic pursuits (Antaramian, 2017). In view of the importance of subjective well-being to the physical, rehabilitative, social, psychological, and academic development of an individual, several valid, reliable, and psychometrically strong measures have been used to evaluate the subjective well-being (SWB) of individuals in collectivist and individualist societies (Areepattamannil & Bano, 2020).

SWB (Diener & Biswas-Diener, 2000) refers to an individual's evaluation of their life that includes a feeling element characterized as the happiness construct and a perception element characterized as satisfaction with life (Diener et al., 1985). Notably, various cultural perspectives offer different understandings of what constitutes happiness and a happy life (Schnettler et al., 2021). The Satisfaction with Life Scale (SWLS; Diener et al., 1985) is an internationally recognized and widely used scale for evaluating the cognitive elements of SWB (Atienza et al., 2016; Dimitrova & Dominguez, 2015; Sovet et al., 2016; Tomás et al., 2015; Schnettler et al., 2021).

According to López-Ortega et al. (2016), one of the key advantages of the SWLS is its wide range of application. The SWLS has been validated in a variety of languages, including Arabic (Abdallah, 1998), Spanish (Vázquez et al., 2013), Dutch (Arrindell et al., 1991), Portuguese (Sancho et al., 2014; Gouveia et al., 2009), Turkish (Durak et al., 2010), and Chinese (Bai et al., 2011), and it is currently one of the most extensively used scales for assessing happiness. In Spain, validation studies and evaluation of the

psychometric properties of the SWLS have been performed using adolescent and adult samples (Vázquez et al., 2013); likewise, in Russia (Balatsky & Diener, 1993), Sweden (Hultell & Gustavson, 2008; Garcia et al., 2021), and Taiwan (Wu & Yao, 2006).

Since its development, the SWLS has demonstrated good psychometric properties. The SWLS has been found to be a valid and reliable instrument for measuring life satisfaction due to its excellent reliability and internal consistency, as well as its potential for use with people of all ages and diverse populations (Pavot & Diener, 2009). Evaluations of the SWLS using samples from various nations support the positive psychometric properties of the tool (López-Ortega et al., 2016). Furthermore, the reliability coefficients for the internal consistency of the SWLS range from .79 to .89 (Diener et al., 1985; Pavot & Diener, 1993), and Pavot and Diener (1993) report test-retest reliability coefficients of .83 and .84. Previous research has shown that the scale has acceptable construct, convergent, and discriminant validity (Lucas et al., 1996; Pavot & Diener, 1993; Sachs, 2004). Notwithstanding the fact that not all the items on the SWLS have an equally good fit, confirmatory factor analyses (CFAs) reveal a consistent component structure that accounts for 60–75% of the variance (Pavot & Diener, 2009; Esnaola et al., 2017).

Researchers utilizing the SWLS must confirm that the psychometric equivalence of its constructs remain consistent across groups and over time, given its widespread use across cultures and populations (Huang et al., 2011; Schnettler et al., 2021). This consistency of measurements across groups is known as measurement invariance and is crucial when comparing group averages in both psychological and developmental research (Jang et al., 2017; Putnick & Bornstein, 2016; Esnaola et al., 2017). Non-

equivalence of measures (or measurement non-invariance) on the SWLS can occur, possibly due to cultural differences in the results of evaluations of happiness with life (Jang et al., 2017; Esnaola et al., 2017). Previous research on the gender invariance of the SWLS has revealed strong gender invariance among British persons (Shevlin et al., 1998) and among undergraduate students in Brazil (Zanon et al., 2014). Similarly, gender invariance has been reported among persons of a wide range of ages in Angola (Tomás et al., 2015) and Norway (Clench-Aas et al., 2011), as well as Taiwanese (Wu & Yao, 2006) and Chinese adolescents and adults (Bai et al., 2011). Furthermore, scalar invariance of the SWLS has been reported among undergraduate Swedish students (Hultell & Gustavson, 2008), and metric invariance of the SWLS has been reported among adolescents in Norway (Moksnes et al., 2014) and among adolescents and mature adults in Germany (Glaesmer et al., 2011). There was slight metric invariance among adolescents in Spain, especially for items 2 and 5 on the SWLS (Atienza et al., 2016). Studies on the measurement invariance of the SWLS have primarily focused on gender- and age-related factorial invariance and cross-national or cross-cultural measurement invariance (Dimitrova & Domnguez, 2015; Ponizovsky et al., 2013, 2016; Zanon et al., 2014).

The consistent invariance levels in the SWLS data may be due to the fact that individuals interpret and conceptualize SWLS items differently (Zanon et al., 2014; Schnettler et al., 2021), possibly as a result of differences in culture (Atienza et al., 2016; Schnettler et al., 2021; Zanon et al., 2014) or age (Atienza et al., 2016; Casas et al., 2012; Esnaola et al., 2017). According to Jang et al. (2017), the disparity in the mean age of countries contributes substantially to the differences in the intercepts for item 4 on the

SWLS (“So far, I have gotten the key things I want in life”) for different countries. Based on their research findings, older respondents are more likely to agree with item 4 on the SWLS than younger respondents; consequently, samples comprised of older respondents are likely to have a much higher intercept for this item than those comprised of younger respondents. Evidence supporting this notion is provided by cross-sectional and longitudinal studies that demonstrate how life satisfaction varies with age (Clench-Aas et al., 2011; Wu et al., 2009).

Recently, assessment of life satisfaction among adults in academic settings has been featuring more prominently in research (Tsitsas et al., 2019). Assessments of satisfaction in emerging adults who attend school require factoring in their specific life conditions because they often experience various forms of stress—including personal (Cadime et al., 2016), social, academic, and economic stress (Hiçdurmaz et al., 2017; Lee et al., 2017)—irrespective of their country of residence or the cultural context. Previous SWLS studies conducted with samples comprising college students have investigated factors such as gender (Hultell & Gustavsson, 2008; Sovet et al., 2016; Tomás et al., 2015), time (Wu et al., 2009), and age (Hultell & Gustavsson, 2008; Tomás et al., 2015). However, the intercultural immutability of SWLS in this population (i.e., college students) has not been thoroughly investigated (Schnettler et al., 2021). In short, these findings indicate that SWLS exhibit some degree of cultural sensitivity and point to the necessity for further research to determine the composition of the SWLS in terms of equivalence across academic settings (Schnettler et al., 2021). In this respect, the special education teacher population has not been explored in sufficient detail. Although the SWLS is the most well-known tool for measuring life satisfaction that has been

researched, only a few studies have analyzed the intercultural invariance of SWLS measurements using samples comprising adolescent students. Abdallah (1998) translated and validated the SWLS using samples comprised of Arabic-speaking individuals. However, no study has investigated the invariance of the Arabic SWLS measurements using samples comprising only special education teachers.

This study had two objectives. The first objective is to assess the psychometric properties of the Arabic SWLS in a sample of special education teachers in (...). To this end, a multigroup CFA was used to investigate the underlying structure of the SWLS. The second objective is to evaluate the measurement invariance and the latent mean differences between the gender and marital status of Arabic SWLS respondents.

Methods

Participants and Procedures

Ethical approval was obtained from the Research Ethics Committee of the University of Hail, Arabic-speaking special education teachers at primary schools in the Hail metropolitan area in the northern part of Saudi Arabia were recruited as study participants. Using convenience sampling, data were gathered electronically from 25 public elementary schools via an online survey. The objectives of the study were explained to all participants, and they were informed that their responses would be confidential. The demographics of the participants are presented in Table 1. A total of 237 Arabic-speaking special education teachers were recruited as participants to this study, of whom 69 (29.1%) were female and 168 were male, 78.1% were married and 21.9% were single, 19.8% were aged 20–29 years, 38.8% were aged 30–39 years, 33.3% were aged 40–49 years, and 8% were aged 50 years or older. The participants' teaching

experience ranged from 0 to 36 years, with a mean of 12.62 (SD = 8.62), as presented in Table 1.

Table 1

Demographics of Respondents (n = 237)

Variable	Characteristics	Respondents	%
Sex	Male	168	70.9
	Female	69	29.1
Marital Status	Single	52	21.9
	Married	185	78.1
Age	20–29	47	19.8
	30–39	92	38.8
	40–49	79	33.3
	50–59	15	6.3
	≥60	4	1.7

Measurement Tools

Satisfaction with Life Scale

The SWLS assesses respondents' overall life satisfaction. It consists of five items scored on a Likert-type scale with a total of seven points to measure how satisfied people are with their lives (Diener et al., 1985). Responses to items on the SWLS range from *strongly disagree* (score = 1) to *strongly agree* (score = 7). The SWLS items include the following statements: “If I could live my life over, I would change almost nothing” and “I am satisfied with my life.” Total SWLS scores range from 5 to 35, with higher scores indicating greater levels of life satisfaction.

Flourishing Scale

The Flourishing Scale (FS) comprises eight items that correspond to various facets of human functioning, such as feeling competent, being in healthy relationships, and having

a sense of meaning and purpose in life (Diener et al., 2010). Each scale item is graded between 1 and 7, with the “strongly disagree” response receiving the lowest score and the “strongly agree” response receiving the highest. All items are framed as positive statements. The total FS score ranges from 8 (*strongly disagree* with all items) to 56 (*strongly agree* with all items). A high score indicates that the respondent has a good impression of themselves in the key areas of human functioning. Although the scale does not provide independent measures of different aspects of happiness, it does provide an overview of positive functioning across a variety of categories that are generally considered significant in assessing human well-being.

Center for Epidemiological Studies—Depression Scale

An 8-item Center for Epidemiological Studies—Depression (CES-D) scale was used to assess the frequency of depressive symptoms such as sadness, loneliness, and insomnia (Radloff, 1977). The two positive statements on the CES-D scale, “I enjoyed life” and “I was happy,” are reverse-scored on a 4-point Likert scale, with a score of 0 assigned to the “never or almost never” response, 1 to “some of the time,” 2 to “most of the time,” and 3 to “always” (all or nearly all of the time). The overall score can be any number between 0 and 24, with higher total scores indicating more frequent depressive symptoms.

Happiness Measures

The Happiness Measures (HM) is Fordyce’s (1988) one-item measure of happiness (“Taking all things together, how happy would you say you are?”) is used to assess happiness. Responses to this item are ranked on an 11-point scale that ranges from 0 (extremely unhappy with life) to 10 (extremely happy with life).

Life Satisfaction

Life Satisfaction (LS) is evaluated using a one-item measure from the World Values Survey (Organisation for Economic Cooperation and Development [OECD], 2013). The item is worded as follows: “All things considered, how satisfied are you with life as a whole nowadays?” and is scored on an 11-point scale ranging from 0 (extremely dissatisfied) to 10 (extremely satisfied).

Statistical Analysis

Descriptive statistical analyses of the SWLS were computed, and Cronbach’s alpha and the McDonald omega coefficient were used to test reliability in terms of internal consistency.

First, for construct validity, CFA was used to confirm the one-factor structure of the Arabic SWLS—specifically, the maximum likelihood estimation method was employed. The chi-squared (χ^2) test, comparative fit index (CFI), standardized root means square residual (SRMR), and root mean square error of approximation (RMSEA) with a 90% confidence interval (CI) were used to assess the model fit of the SWLS. A relatively small chi-squared score indicates that the model successfully fit the data. To determine whether the SWLS has an acceptable model fit using the other indices, the following cut-off values were employed: CFI: .90, SRMR: .08, and RMSEA: .08 (Browne & Cudeck, 1993; Byrne, 2016; Hu & Bentler, 1999).

Second, the correlations between the SWLS and other well-being and happiness scales, such as the FS, Fordyce’s single-item general happiness scale, and the single-item LS measure, were examined to assess the convergent validity of the SWLS. The

correlation between the SWLS and the CES-D was also determined to evaluate discriminant validity.

Third, multigroup confirmatory factor analysis was used to evaluate the measurement invariance of a single-factor model of the participants' gender and marital status. Configural, scalar, and metric invariance were also tested. The one-factor model was tested for configurational invariance between the compared groups. The metric invariance test evaluates whether the factor loadings of each item are consistent across respondent groups. Based on the scalar invariance model, any difference between groups can be identified as real variations in the means of related constructs. The chi-squared difference test was utilized to assess the cross-group invariance of the one-factor model. The results of the aforementioned invariance tests were supported by a nonsignificant chi-square difference test result (Byrne, 2016). Variations in RMSEA and SRMR, with changes in the CFI, were utilized as indices to test for invariance.

Fourth, relying on determining the measurement invariance in the gender and marital status of the participants, the latent mean differences between the groups were computed. The group comprising married male teachers was selected as the reference group, and its latent mean was set to zero. The latent mean of the other group was estimated freely to determine the mean difference between the groups. The latent means were compared using the critical ratio (CR) indicator. The CR coefficient was examined for any significant differences. According to Byrne (2016), a positive CR value indicates that the latent mean value of the comparison group is higher than that of the reference group, with a CR of ≥ 1.96 indicating statistically significant mean differences ($p = .05$).

The dataset was analyzed using the Analysis of Moment Structures version 25.0 and the Statistical Package for the Social Sciences version 26.0.

Results

Descriptive Analysis and Reliabilities

The mean, standard deviation, and Cronbach's alpha values for the Arabic SWLS are presented in Table 2. Evidently, the SWLS has good internal consistency reliability, with a Cronbach's alpha coefficient of .79, and a McDonald omega of .78.

Table 2

Descriptive Statistics and Reliability Coefficients for the Arabic SWLS

	Item or SWLS	M	SD
1	"In most ways my life is close to my ideal."	5.51	1.27
2	"The conditions of my life are excellent."	5.85	1.04
3	"I am satisfied with my life."	6.08	0.93
4	"So far, I have gotten the important things I want in life."	5.39	1.21
5	"If I could live my life over, I would change almost nothing."	4.31	1.79
	Scale	5.43	0.95
	Cronbach's alpha	.791	
	McDonald Omega	.789	

Factorial Validity of the SWLS

As seen in Table 3, the CFA yielded high fit indices for the single-factor model of the SWLS—for both gender and marital status. The best-fitting models across the groups had correlated errors between item 1 and item 4 and between item 4 and item 5. The standardized factor loadings for all groups are presented in Table 4. All factor loadings were higher than 0.41 and significant at $p < 0.001$. These values support the suitability of the one-factor structure of the Arabic SWLS for use with special education teachers.

Table 3

Goodness of Fit Indices Across Gender and Marital Status for the Arabic SWLS

Administered to Special Education Teachers (n = 233)

	χ^2 (df)	p	CFI	RMSEA (90% CI)	SRMR
Special Education Teachers	4.546 (3)	.208	.996	.047 (.000 –.129)	.0202
Gender					
Males	4.007 (3)	.261	.996	.045 (.000 –.147)	.0250
Females	0.863 (3)	.834	1	.000 (.000 –.118)	.0155
Marital status					
Single	1.841 (3)	.606	1	.000 (.000 –.198)	.0234
Married	5.986 (3)	.112	.991	.074 (.000 –.161)	.0264

Note. df = degrees of freedom; CFI = comparative fit index; RMSEA = root mean square error of approximation; CI = confidence interval; SRMR = standardized root mean square residual.

Table 4

Standardized Factor Loadings for All Items on the SWLS and All Respondent Groups

Item	Teachers	Males	Females	Singles	Married
1	.74	.69	.80	.71	.75
2	.83	.89	.73	.88	.81
3	.82	.80	.86	.82	.82
4	.53	.47	.62	.59	.51
5	.46	.41	.52	.49	.45

Note. The factor loadings for all items were significant at $p < .001$.

Convergent and Discriminant Validity

Table 5 presents the correlations between the SWLS and the other measures used in this study. The correlations between the SWLS and other well-being and happiness measures were determined to assess convergent validity. As anticipated, a significant and positive correlation was found between the SWLS and the FS ($r = .56$, $p < .001$), happiness ($r = .45$, $p < .001$), and LS ($r = .46$, $p < .001$). Furthermore, there was a negative correlation

between the SWLS and the CES-D. The negative correlation between the CES-D and the SWLS ($r = -.40$, $p < .001$) indicates and supports the discriminant validity of the SWLS.

Table 5

Correlations Between the SWLS and Associated Scales (N = 233)

Measures	Flourishing Scale (FS)	Satisfaction with Life Scale (SWLS)	Happiness Measures (HM)	Life Satisfaction (LS) Measure
SWLS	.559***			
Happiness	.360***	.454***		
Life Satisfaction	.363***	.460***	.796***	
CED-D	-.406***	-.401***	-.592***	-.509***

Measurement Invariance Across Gender and Marital Status

Table 6 presents the results of an invariance analysis of both gender and marital status. The fit of the configural model to the data was acceptable between groups—males and females ($CFI = 1$, $SRMR = .0250$, $RMSEA = .000$ [90% CI = .000, -.076]). The metric invariance model ($\Delta CFI = .000$, $\Delta RMSEA = .000$, $\Delta SRMR = .0008$) and scalar invariance model ($\Delta CFI = .000$, $\Delta RMSEA = .000$, $\Delta SRMR = .0003$) were also supported.

Regarding the marital status groups, the configural model was supported ($CFI = .996$, $SRMR = .0264$, $RMSEA = .036$ [90% CI = .000, -.098]). The metric invariance test results show that the factor loadings were equivalent across marital status ($\Delta CFI = .000$, $\Delta RMSEA = .010$, $\Delta SRMR = .0037$). The scalar invariance model was also supported ($\Delta CFI = .004$, $\Delta RMSEA = .026$, $\Delta SRMR = .0002$). These results indicate that all levels of measurement invariance were achieved across gender and marital status.

Table 6

Measurement Invariance Analysis of the Gender and Marital Status of SWLS

Respondents

Model	χ^2 (df)	p	CFI	RMSEA (90% CI)	SRMR	$\Delta\chi^2$ (df)	p	Δ CFI	Δ RMSEA	Δ SRMR
Gender¹										
Configural	4.865 (6)	.561	1	.000 (.000, .076)	.0250	-	-	-	-	-
Metric	6.171 (10)	.801	1	.000 (.000, .046)	.0242	1.306 (4)	.860	.000	.000	.0008
Scalar	6.495 (14)	.952	1	.000 (.000, .000)	.0239	0.324 (4)	.988	.000	.000	.0003
Marital status²										
Configural	7.829 (6)	.251	.996	.036 (.000, .098)	.0264	-	-	-	-	-
Metric	11.514 (10)	.319	.996	.026 (.000, .078)	.0301	3.685 (4)	.450	.000	.010	.0037
Scalar	13.198 (14)	.511	1	.000 (.000, .060)	.0303	1.684 (4)	.794	.004	.026	.0002

Note. ¹ Male vs. Female; ² Single vs. Married.

Differences Across Gender and Marital Status

With full scalar invariance achieved, it was possible to compare the latent mean differences between groups of participants based on their marital status and gender. In essence, comparisons of latent mean differences across gender and marital status were possible because configural, metric, and scalar invariances were supported. The results of these comparisons show that males had a higher significant score than females (unstandardized fitted mean_(male) = $-.321$, standard error [SE] = $.144$, CR = -2.231 , $p = .026$), and there were no statistically significant differences in SWLS scores between single and married participants (unstandardized fitted mean_(married) = $-.122$, SE = $.147$, CR = -0.830 , $p = .407$).

Discussion

The main findings of the consistency reliability tests performed in this study indicate that the Arabic SWLS is a reliable scale for use with special education teachers in Saudi Arabia. CFA was used to confirm that the unidimensional structure was good, and the goodness-of-fit indices show that the SWLS model fits the data well, indicating

that the SWLS has a one-factor structure. Based on these findings, the reliability of the SWLS was deemed adequate.

The FS, HM, and LS measure utilized in this study correlate with the Arabic version of SWLS, demonstrating convergent validity. The discriminant validity of the SWLS is supported by the negative correlation between the SWLS and the CES-D. These results indicate that all levels of measurement invariance were achieved across gender and marital status. Furthermore, male respondents recorded significantly higher latent means than female respondents on the SWLS, indicating higher levels of satisfaction with life than females. The results also reveal no statistically significant differences between the latent means for married and single Arabic SWLS respondents.

The mean SWLS scores in this study were somewhat higher than the average scores reported in previous studies conducted with large samples (Hinz et al., 2018; Lorenzo-Seva et al., 2019; Esnaola et al., 2017); however, these mean SWLS scores are similar to those reported by Clench-Aas et al. (2011). The high mean SWLS scores in this study compared to scores reported in other studies may be because the study sample comprised only special education teachers. However, the higher satisfaction scores of the teachers sampled in this study may be due to their awareness of the hard and stressful work in which they engage with students with disabilities in their schools. This satisfaction may be linked to the previously mentioned observation regarding the life phase of adults in school and their persistent experience of various forms of stress, including personal (Cadime et al., 2016), social, academic, and economic stress (Hiçdurmaz et al., 2017; Lee et al., 2017). The McDonald omega and Cronbach's alpha values in this study—as reliability (internal consistency) estimates—were lower than

those reported in several previous studies (Hinz et al., 2018; Clench-Aas et al., 2011; Vázquez et al., 2013; Esnaola et al., 2017) but are similar to those reported in others (Gouveia et al., 2009).

In this study, item 5 of the SWLS recorded the lowest correlation compared to the other items on the scale. Item 5 on the SWLS also exhibits less saturation, similar to reports in some previous studies (Pavot & Diener, 1993; Gouveia et al., 2009; Vázquez et al., 2013; Atienza et al., 2016; Lorenzo-Seva et al., 2019). According to Pavot and Diener (1993), this could be because item 5 is past-oriented rather than present-oriented, and is in this respect dissimilar to items 1, 2, 3, and 4 (Gouveia et al., 2009; Pavot & Diener, 1993). Items 4 and 5 of the SWLS are regarded as controversial by several researchers; according to Hultell and Gustavson (2008), the age of the respondent may influence the responses selected on these two items, with item 5 on the SWLS appearing to be negatively correlated with age. According to Casas et al. (2012), assessments yielded by item 5 on the SWLS may be problematic with adolescent respondents because many adolescents detest repeating the same experiences and find new experiences more appealing.

The findings of this study support the strong invariance of the SWLS across gender and marital status groups. These findings align with those of several recent studies (Esnaola et al., 2017; Atienza et al., 2016; Clench-Aas et al., 2011; Emerson et al., 2017; Bagherzadeh et al., 2018; Lorenzo-Seva et al., 2019) that report a strong measurement invariance of the SWLS for gender. However, the findings of this study differ from those of other studies that demonstrate scalar invariance with college student respondents in Sweden (Hultell & Gustavson, 2008), metric invariance with youth in Norway (Moksnes

et al., 2014), and metric invariance with a sample of youth and mature individuals in Germany (Glaesmer et al., 2011). The findings of this study differ from those of studies that found incomplete scalar invariance for the intercept of item 5 on the SWLS (Atienza et al., 2016; Jovanovic, 2016). The results of this study show that none of the SWLS items function differently for male and female respondents, and the test structure remains the same for single and married respondents. Based on these findings, the SWLS is gender invariant, even among respondents from diverse cultures and nations. The findings of this study also support strong invariance of the SWLS among special education teachers, notwithstanding this being the first study to examine invariance in the settings of special education teaching culture—or any Arabic cultural context, for that matter.

Because the strong invariance hypothesis was supported, it was possible to meaningfully compare the means of the study groups. Thus, with respect to teacher specialty and school culture, this is the first study to investigate the differences in satisfaction with life among special education teachers across gender and marital status. A significant latent mean difference was found across the study sample for one of the demographic variables. In general, it was found that female special education teachers tend to be less satisfied with their lives than their male counterparts, which aligns with the findings of Lorenzo-Seva et al. (2019). Because the interrelations between SWB and other critical factors—such as gender, age, educational level, and economic status—are complex, more variables need to be investigated.

Some potential limitations of this study need to be highlighted. First, this study used a convenience sample, which cannot be fully representative of the general

population. Instead of evaluating the external validity (generalizability) of the data, the focus of this study was to gather evidence on the psychometric properties of the SWLS. Furthermore, comparing the stratification of teachers from various teaching specialties might produce more in-depth results than those obtained in this study. From this perspective, it may be beneficial to confirm the findings of this study with additional target populations, such as different adult age groups—including older adults. Second, no causality-related data could be evaluated, and no explanation for how LS changed over time could be proffered because the study was designed to include only one evaluation of LS. The findings of this study have some significant implications for future research on this subject. First, comparisons of LS across different cultures, environments, and study sample characteristics are crucial. Investigating the data derived from the administration of the SWLS and its temporal stability (or test-retest reliability) in a representative sample in an Arabic setting would also be noteworthy.

Conclusion

The results of this study demonstrate that special education teachers have similar interpretations of the SWLS, regardless of their gender. Although the measurement invariance of the SWLS has been thoroughly tested across a wide range of cultural contexts and demographics, research using samples comprising adults in higher special education has not received sufficient attention. The similarity of the SWLS structure observed in special education teachers in Arabic speaking nations facilitates considerable latent mean comparisons, which, in turn, allow researchers to identify more factors that impact the individual's satisfaction with their lives. In terms of application, a tool that consistently measures LS among special education teachers may facilitate the

creation of policies designed to equivalently improve the lives of teachers in developed and developing Arab nations.

List of Abbreviations

SWLS	Satisfaction with Life Scale
CFA	Confirmatory factor analysis
FS	Flourishing Scale
HM	Happiness Measures
LS	Life Satisfaction
CES-D	Center for Epidemiological Studies—Depression
CFI	Comparative fit index
SRMR	Standardized root mean square residual
RMSEA	Root mean square error of approximation
CI	Confidence interval
CR	Critical ratio
χ^2	Chi-squared test
df	Degrees of freedom
r	Correlation coefficient

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Conflict of Interest

The authors have no conflict of interest to declare.

Data Availability

All data are available upon request from the authors.

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