

## Validation and psychometric properties of the Romanian Version of the Subjective Happiness Scale

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### **Abstract**

*The present study aims to analyze the psychometric properties of the Subjective Happiness Scale on a Romanian adult sample. The Romanian version of the SHS had excellent psychometric properties. All items loaded in the expected factor, being a unidimensional scale. The confirmatory factor analysis results revealed excellent fit indices. Convergent validity showed high associations with satisfaction with life. The results are concordant with those reported for the original version of the instrument. Future investigations should consider assessing the temporal stability of this instrument and the predictive validity of the scale.*

**Keywords:** *subjective happiness, satisfaction with life, psychometric properties, validation study*

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## I. THE SCIENTIFIC STUDY OF HAPPINESS

Subjective happiness was operationalised as pleasure and gratification, embodiment of strengths and virtues or meaning and purpose (Seligman, 2011). The sources of personal happiness are very diverse and although the research on happiness witnessed an explosion during the last decades, it is difficult to find a comprehensive definition in order to determine what happiness means and how it could be achieved (Lyubomirsky & Lepper, 1999).

Subjective happiness is associated with well-being, individuals who are happier having more satisfying relationships and more positive feelings than individuals who are less happy (Diener & Seligman, 2002). Research showed that individuals who declare that are happier, tend to be more successful in several areas of their lives including marriage, social relationships, job performance, and health to use more adaptive coping strategies and to recover better after experiencing negative events (Lyubomirsky, King, & Diener, 2005).

The most well-known instrument for the measurement of the happiness is The Subjective Happiness Scale (Lyubomirsky & Lepper, 1999), being considered an instrument to globally evaluate if a person is happy or unhappy. The Subjective Happiness Scale has been widely used because of its adequate psychometric properties and brevity. It has been translated into several languages, such as Portuguese (Spagnoli, Caetano, & Silva, 2012), German (Swami et al., 2009), Japanese (Shimai, Otake, Utsuki, Ikemi, & Lyubomirsky, 2004), Spanish (Quezada et al., 2016), Brazilian (Damasio, Zanon, & Koller, 2014).

The present study aims to analyze the psychometric properties of the Subjective Happiness Scale on a Romanian adult sample.

## II. METHOD

### 1. Participants and procedure

The participants were 210 adults, male (31.9%) and female (68.1%), with a mean age of 35 years ( $SD = 5.65$ ,  $X_{min} = 25$ ,  $X_{max} = 57$ ). The scales were administered online. The participants who gave their consent in participating in the study (a free-consent term was added in the first page of the survey) were asked to fill in two questionnaires.

### 2. Measures

The Subjective Happiness Scale - SHS (Lyubomirsky & Lepper, 1999), the Romanian version was used for this research. Each of items is completed by choosing one of 7 options that finish a given sentence fragment, the options being different for each item.

The Satisfaction with Life Scale (Diener, Emmons, Larsen, & Griffin, 1985) includes five items rated on a seven-point Likert scale (1 = strongly disagree, 7 = strongly agree). The Satisfaction with Life Scale was developed to assess satisfaction with the respondents' life as a whole. According to the SWLS, higher scores indicate greater life satisfaction.

### III. RESULTS

The SHS was translated into Romanian by an English language specialist and a psychologist expert. Then, the instrument was back-translated into English. After confronting the two versions and reformulating the problematic items, the instrument was pre-tested on a sample of 50 participants having similar characteristics to the participants included in the subsequent validation study. Cronbach's Alpha for the entire scale was high .87 showing a high internal consistency.

The exploratory factor analysis revealed a unidimensional solution, covering 68.56% of the total variance. The Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO =.73) and Bartlett's test of sphericity ( $\chi^2$  [6] 380.87,  $p < 0.001$ ) were adequate. All items had loadings higher than .67 (Table 1).

Table 1. Factor loadings, reliability, and explained variances of SHS

Items	Loadings
1. In general, I consider myself not very happy/ a very happy person.	.888
2. Compared with most of my peers, I consider myself less happy/ happier.	.879
3. Some people are generally very happy. They enjoy life regardless of what is going on, getting the most out of everything. To what extent does this characterization describe you?	.856
4. Some people are generally not very happy. Although they are not depressed, they never seem as happy as they might be. To what extent does this characterization describe you?	.670
Eigenvalue	2.74
Explained variance ( $R^2$ )	68.56
Cronbach's Alfa	.87

Note: Extraction Method: Principal Component Analysis.  $N = 210$ .

We did not find gender differences regarding the subjective happiness ( $M_{male} = 4.83$ ,  $SD = 1.39$ ,  $M_{female} = 5.23$ ,  $SD = 1.26$ ,  $t_{208} = 1.94$ ,  $p = .06$ ).

The confirmatory factor analysis revealed a good fit for the model with correlated errors (the error terms associated with the items 3 and 4, while the forts model (without correlated errors) had bad fit indices. The model improved significantly at the second step, all the fit indices

having excellent values (Table 2). However, the fourth item (*Some people are generally not very happy. Although they are not depressed, they never seem as happy as they might be. To what extent does this characterization describe you*) had the lowest loading (.43) (Figure 1).

Table 2. Fit indices for the Romanian version of The Work–Family Conflict Scale

Model	$\chi^2/df$	CFI	TLI	AIC	RMSEA (90% CI)
M1	14.42***	.929	.788	44.840	.272 (.190-.364)
M2 – correlated errors	.639	1.000	1.006	18.639	.001 (.000-.091)

CFI: Comparative Fit Index, TLI: Tucker-Lewis Index, AIC: Akaike Information Criterion, RMSEA: Root Mean Square Error of Approximation, 90% CI: 90% confidence interval for RMSEA, \*\*\*  $p < .001$

The SHS had also a high convergent validity. The Pearson correlation coefficient between the subjective happiness and the satisfaction with life was high and statistically significant:  $r(208) = .73, p < .001$ , similar results being reported in the literature (Mattei & Schaefer, 2004).

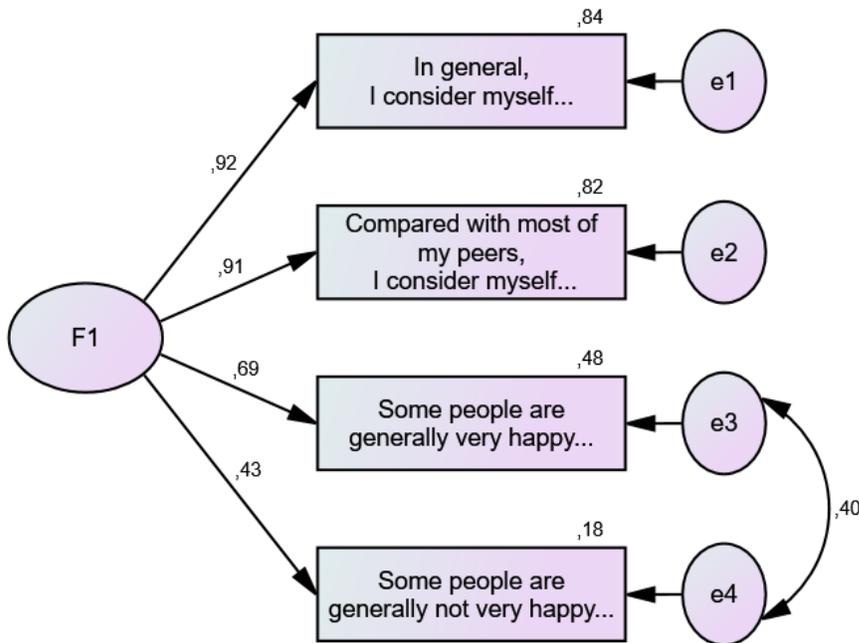


Figure 1. Confirmatory factor structure of Romanian SHS (standardized values)

#### IV. DISCUSSION

The Romanian version of the SHS had excellent psychometric properties. All items loaded in the expected factor being a unidimensional scale. The confirmatory factor analysis

results revealed excellent fit indices. Convergent validity also presented results in the expected directions, showing high associations with other wellbeing indicators, such as satisfaction with life. The results are concordant with those reported for the original version of the instrument (Lyubomirsky & Lepper, 1999) other adapted versions of the SHS (Damasio et al., 2014; Spagnoli et al., 2012; Swami et al., 2009). Therefore, we can conclude that SHS is a valid and reliable measure to evaluate subjective happiness. Future investigations should consider assessing the temporal stability of this instrument and the predictive validity of the scale.

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