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# Satisfaction with Life Scale Among Italian Workers: Reliability, Factor Structure and Validity through a Big Sample Study

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**Abstract:** The study aims to assess the psychometric characteristics of the Satisfaction with Life Scale among 1074 participants from the working context. Analyzing Reliability, Factor Structure and concurrent validity, results indicated good values; besides results revealed a robust structure with one factor. On the basis of these results, the SWLS is a valid instrument in relation to evaluate some cognitive aspects of life satisfaction also in the Italian work context.

**Keywords:** life satisfaction; well-being; validity; psychology of work; SWLS; assessment; psychometric properties; Italian workers

## 1. Introduction

The current work contexts are marked on the basis of new technologies, digitization, and automation and the workplace scenarios are continuously changing [1]. Workers are facing unceasing transitions and it is thus fundamental to pay attention to the possible implications for workers well-being [2]. In this framework life satisfaction of workers represents a theme of interest. This construct can be included in a hedonic approach to well-being where this latter is considered in terms of pleasure attainment, pain avoidance and satisfaction. The Satisfaction with Life Scale (SWLS) [3] can be considered one of the most known scale all over the world for measuring cognitive aspects of subjective well-being [4,5]. The use of this scale offers diverse advantages including its shortness, its potential to be used in different scenarios, and its psychometric robustness; these are just some reasons suggesting that this scale is one of the most used for the evaluation of life satisfaction across diverse cultures. The psychometric characteristics of this brief measure have been analyzed into various researches [4,6]. In the Italian work context no thorough investigations has been implemented to check the reliability, validity and factor structure of this scale. The importance to assess this construct in the world of work is clear, also in line with preventive and strength based perspectives where it is crucial to boost resources reducing riskiness [7] with the goal to build individual strengths and life satisfaction [8].

Given this importance, this research wants to assess the main psychometric characteristics of this instrument using a big sample of Italian workers in order to understand its applicability also in the Italian work world.

## 2. Method

### 2.1. Participants

One thousand and seventy four of Italian workers belonging to diverse organizations of the centre and south of Italy participated in this study. Five hundred and two workers employed at public organization (46.74%) and 572 workers employed at private organizations (53.26%). Four hundred ninety participants were males (45.62%) and 584 were females (54.48%), mean age of 42.55 years old ( $SD = 11.77$ ).

### 2.2. Measures

*Italian Satisfaction with Life Scale (SWLS)*. This instrument [3,5], with five items on a Likert scale divided into 7 points (1 = *Strongly disagree* until 7 = *Strongly agree*) and a Cronbach's alpha coefficient of 0.85, was administered.

*Italian Rosenberg Self-Esteem Scale (RSES)*. This instrument [9,10], with 10 items on a Likert scale divided into 4 points (1 = *Strongly disagree* until 4 = *Strongly agree*) and a Cronbach alpha coefficient of 0.84, was used.

*Italian Multidimensional Scale for Perceived Social Support (MSPSS)*. This instrument [11,12], with 12 items on a Likert scale divided into 7 points (1 = *Strongly disagree* until 7 = *Strongly agree*) was applied. This scale evaluates perceived support from family members (Cronbach's alpha coefficient = 0.92), from friends (Cronbach's alpha coefficient = 0.90), from significant others (Cronbach's alpha coefficient = 0.91) and a Cronbach's alpha coefficient of 0.91 for the total score.

*Italian Trait EI Questionnaire Short Form (TEIQue-SF)*. This instrument [13,14], with 30 items on a Likert scale divided into 7 points (1 = *Completely disagree* until 7 = *Completely agree*) and good Cronbach's alphas coefficients (Well-Being 0.80, Self-control 0.81, Emotionality 0.83, Sociability 0.82), was administered.

### 2.3. Procedure

In this study we used the items of a previous version of the Italian SWLS realized on the basis of back-translation processes [15]. The administrations were realized collectively by specialized personnel and according with privacy laws. A demographic questionnaire and the self-report measures were administered to participants, who did not take any compensation for their involvement in the study.

### 2.4. Data Analysis

We used a Confirmatory Factor Analysis (CFA) with a maximum likelihood method to verify the factorial structure of the Italian SWLS. We analyzed the adequacy of the model by referring not only to the value of  $\chi^2$  (given that this statistic is influenced by the high number of participants), but in addition by considering also the minimum discrepancy (CMIN/DF); Comparative Fit Index (CFI) and Non Normed Fit Index (NNFI), considering that an acceptable fit is evaluated with values higher than 0.90 [16]; Root Mean Square Error of Approximation (RMSEA) and Standardized Root Mean Square Residual (SRMR) [17] for which scores lower than 0.08 show that the data adequately fit to the model [16]. We used the Cronbach alpha coefficient and the correct item-total correlations to verify the reliability of this Italian version. Furthermore, we also used the RSES, the MSPSS, the TEIQue-SF and their associations with SWLS, using the Pearson's  $r$  coefficients to verify some aspects of concurrent validity.

## 3. Results

Table 1 shows results of CFA in relation to all participants and in relation to males and females, reporting values of indices of fit.

**Table 1.** Summary of CFA fit indices.

Sample	$\chi^2/df$	NNFI	CFI	SRMR	RMSEA
Total sample ( $N = 1074$ )	1.27	0.96	0.95	0.06	0.05
Gender					
Males ( $N = 490$ )	1.33	0.95	0.95	0.06	0.06
Females ( $N = 584$ )	1.28	0.96	0.96	0.06	0.05

Note. Tucker Lewis index (Non Normed Fit Index) (TLI); Comparative Fit Index (CFI); Standardized Root Mean Square Residual (SRMR); Root Mean Square Error of Approximation (RMSEA).

As regards to the indices considered, this Italian version showed a unidimensional structure also with workers. The factor loadings are all significant and are the following: item 1 = 0.80, item 2 = 0.77, item 3 = 0.86, item 4 = 0.81, item 5 = 0.67.

We calculated the alpha Cronbach coefficient and the correct item-total correlations to evaluate internal consistency. The Cronbach alpha was 0.88 and corrected item-total correlations values emerged with the following range: from 0.63 for item 5 until 0.79 for item 3.

Correlations of the SWLS with RSES, MSPSS and the TEIQue-SF are exposed in Table 2 and reported satisfactory and good values.

**Table 2.** SWLS, RSES, MSPSS, TEIQue-SF Correlations.

	RSES	MSPSS	Well-Being	Self-Control	Emotionality	Sociability	TEIQue-SF
SWLS	0.46 **	0.40 **	0.51 **	0.45 **	0.28 **	0.19 **	0.49 **

Note.  $N = 1074$ .  $p < 0.01$  \*\*; Note. Rosenberg Self-Esteem Scale (RSES); Multidimensional Scale of Perceived Social Support (MSPSS); Trait Emotional Intelligence Questionnaire-Short Form (TEIQue-SF).

#### 4. Discussion

This work analyzed the main psychometric characteristics of the Italian SWLS using a large sample of Italian participants from the working context. The adequacy of the unidimensional structure was highlighted using CFA: goodness of fit indices showed a good fit of the model to the data.

The reliability of the scale emerged adequate on the basis of results. The correlations of the Italian SWLS with the other scales related to life satisfaction and well-being administered to assess concurrent validity issues indicated satisfactory results, aligned to prior investigations carried out with Italian adolescent and young adults [5,18]. As regards to correlation results it can be useful to consider the relationships among SWLS and psychological resourcefulness, like self-esteem and social support, because in the optic of strength-based perspective, an improvement of these resources can have an effect on life satisfaction [19–21].

The Italian SWLS has proven to be a valid and reliable instrument for evaluating life satisfaction also in the Italian context with workers. Results of the factorial structure are in line with those of previous studies that showed a one-dimensional structure of the scale [5,18]. Regarding limitations, the first one concerns the sample recruitment: in fact, in this study we considered predominantly workers from the centre and the south of Italy. Future research therefore should also use workers from northern Italy. It could also be useful to confirm the results with other targets as other categories of adults and older people.

Despite the highlighted limitations, the Italian version of the SWLS represents an instrument capable of accurately detecting life satisfaction also with Italian workers. This valid and reliable instrument could allow to open new perspectives in relation to research on well-being of working people to enhance healthy business and healthy organizations [22,23], particularly in the current working framework where technological innovation, digitization, and automation are changing workplace contexts all over the world.

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