

# The Scales of Psychological Well-being: A Study of Validity and Reliability

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## **Abstract**

This study investigated the validity and reliability of the Turkish version of the Scales of Psychological Well-being (Ryff, 1989a). The sample of the study consists of 1214 university students. Results of language equivalency showed that correlations between the Turkish and English forms were .94 for autonomy, .97 for environmental mastery, .97 for personal growth, .96 for positive relations with others, .96 for purpose in life, and .95 for self-acceptance. The total variance explained was 68% and factor loadings ranged from .30 to .94. Fit index values of the model were RMSEA=.072, NFI=.97, IFI= .98, RFI=.97, CFI=.98, GFI=.93, and SRMR=.062. Internal consistencies varied between .87 and .96 and test-retest reliability coefficients ranged between .78 and .97 for six subscales. These results demonstrate that the scale is a valid and reliable instrument.

## **Key Words**

Psychological Well-being, Validity, Reliability, Confirmatory Factor Analysis.

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Psychological research has generally focused on pathology, unhappiness, and human suffering (Diener & Seligman, 2002; Seligman & Chikzentmihalyi, 2000). As social sciences tried to better understand the human being, it became evident that positive aspects of psychological functioning were misunderstood and perhaps most importantly understudied. In order to empirically examine positive aspects of human functioning, an operational definition of psychological well-being had to be established. This was a major undertaking, because like most psychological constructs, psychological well-being is multifaceted and encompasses multiple dimensions (Christopher, 1999). Part of the difficulty in grasping a profound understanding of the concept of psychological well-being is the wide variety of concepts used interchangeably in the literature. For example, well-being; happiness (Bradburn, 1969); life satisfaction (Wood, Wylie, & Sheator, 1969); quality of life; mental or emotional health; subjective well-being; and mood and affect (Kozma, Stones, & McNeil, 1991) have been used synonymously with psychological well-being throughout the literature. Stull (1987), however, stated that even though these concepts are related, they are not identical.

Various approaches to conceptualizing well-being have been proposed. Some have suggested that well-being results from achieving a goal (Diener, 1984) while other perspectives hold that happiness results from engaging in interesting and challenging activities (Chekola, 1975). Other conceptions of psychological well-being have included life satisfaction (Pavot & Diener, 1993; Shin & Johnson, 1978) and the experience of positive affect and an absence of negative affect (Pavot & Diener, 1993; Watson, Clark, & Tellegen, 1988). Despite the difficulty in defining and describing well-being, researchers have described numerous variables that appear to be associated with the construct. Positive relations include satisfaction with family life, standard of living, and physical health (Campbell, Converse, & Rodgers, 1976), racial identity (Martinez, & Dukes, 1997), satisfaction with income (Braun, 1977), marriage (Andrews & Withey, 1976), love (Anderson, 1977), and education (Campbell, 1981). Moreover, many studies have demonstrated the relationship between psychological well-being, self-esteem (Betton, 2001; Pelham & Swann, 1989; Taylor & Brown, 1988), and social support (Turner, & Noh, 1983).

Ryff and Keyes (1995) have criticized early research on psychological well-being for not actually answering the basic question: What does

being psychologically healthy mean? Ryff suggested that these theories of psychological well-being have had limited impact for three reasons: They have reproduced few credible assessment procedures, the criteria for well-being proposed by each are quite diverse, and each has been criticized as being “hopelessly value-laden” (Ryff, 1989b, p. 1070). Ryff, however, undertook the difficult task of distilling these theories and developed an original psychological well-being model. The model integrates components of the theories of Maslow’s concept of self-actualization, Rogers’ view of the fully functioning person, Jung’s formulation of individuation, Allport’s conception of maturity, Erikson’s psychosocial stage model, Buhler’s basic life tendencies, Neugarten’s executive processes of personality, and Jahoda’s concept of mental health. Ryff’s theory includes six basic dimensions of psychological well-being: Autonomy, environmental mastery, personal growth, positive relations with others, purpose in life, and self-acceptance (Ryff, 1989a, 1989b; 1995; Ryff, & Essex, 1992; Ryff, & Keyes, 1995; Ryff, & Singer, 1996).

The fundamental proposition of Ryff’s psychological well-being model was that subjective well-being (Diener, Lucas, & Oishi, 2002) wasn’t necessarily a condition for mental health (Robbins & Kliever, 2000). For example, a psychotic person might say being happy though psychologically distresses. Therefore, additional features are essential in evaluating psychological health (Robbins & Kliever, 2000). This multidimensional model doesn’t equate psychological health with the mere absence of psychopathology. This model also requires an individual to analyze her or his own thoughts, evaluate oneself by one’s own standards, assert one’s own values and make appropriate choices to represent those values and work towards goals one has set for oneself (Keyes, Shmotkin, & Ryff, 2002; Ryff, 1989a, 1995). According to this new model, psychological well-being is not directly connected to “happiness” but is the “byproduct of a life that is well-lived” (Ryff & Singer, 1998, p. 5).

#### *The Scales of Psychological Well-being (SPWB)*

The Scales of Psychological Well-being (SPWB, Ryff, 1989a) is a self-report scale designed to measure psychological well-being. The 84-item instrument consists of six subscales: (a) Autonomy, (b) Environmental mastery, (c) Personal growth, (d) Positive relationships with others, (e) Purpose in life, and (f) Self-acceptance. Each subscale consists of 14 items divided approximately equally between positive and negative items. The autonomy dimension assesses self-determination, inde-

pendence, and an internal locus of control. The environmental mastery dimension measures one's ability to manipulate and control complex environments. The personal growth dimension measures one's needs to actualize and realize one's potentials. The positive relationships with others dimension assesses the ability to love, trust, and establish deep relationships with others. The purpose in life dimension is to measure one's sense of directedness and goals. Finally, the self-acceptance dimension assesses positive attitudes held toward the self. Participants respond on a 6-point scale that ranges from "strongly disagree" (1) to "strongly agree" (6). Certain items are reverse coded. Scores are summed and subscale scores are obtained. The total score is the sum of the 84 items. Higher scores indicate higher psychological well-being within the respective dimension. The SPWB takes approximately twenty five minutes to complete.

The reliability and validity of the SPWB was assessed using a sample of 321 participants. Ryff (1989a) reported the following internal consistency reliability coefficients: .86 for autonomy, .90 for environmental mastery, .87 for personal growth, .91 for positive relationships with others, .90 for purpose in life, and .93 for self-acceptance. Test-retest reliability was assessed using a subset of the sample, 117 people, over six weeks; coefficients ranged from .81 to .85. In another study, the internal consistency reliability coefficients were .78 for autonomy, .77 for environmental mastery, .74 for personal growth, .83 for positive relationships with others, .76 for purpose in life, and .79 for self-acceptance. Test-retest reliability coefficients, over eight weeks, ranged from .74 to .84 (Cenkseven, 2004).

To assess the validity of the SPWB, each of the six dimensions was correlated with several existing measures of psychological well-being were: (1) the Affect Balance Scale correlations ranged from .25 with personal growth to .62 with environmental mastery; (2) the Life Satisfaction Index correlations ranged from .28 with autonomy to .73 with self-acceptance; (3) correlations with the Rosenberg Self-esteem Scale ranged from .29 for personal growth to .62 for self-acceptance; (4) the Zung Depression Scale was used as a measure of maladjustment, and correlations ranged from -.60 with environmental mastery and purpose in life to -.33 with positive relationships with others (Ryff, 1989a). The purpose of this study is to translate the SPWB into Turkish and investigate the psychometric properties of the Turkish version of this scale.

## Method

### Participants

Validity and reliability studies of the SPWB were executed on three sample groups. The first group was 1214 university students from Sakarya, Istanbul, and Karadeniz Technical Universities in Turkey. Of the participants, 596 (49%) were female; 618 (51%) were male. The mean age of the participants was 21.8 years. The second group was 124 English teachers (46 female, 78 male) mean age of them was 30.4. The third group consisted of 178 university students from Sakarya University.

### Measures

*The Self-compassion Scale.* The Self-compassion Scale (Akın, Akın, & Abacı, 2007; Neff, 2003) is a 26-item self-report inventory and consists of six sub-scales: Self-kindness, self-judgment, awareness of common humanity, isolation, mindfulness, and over-identification. Each item was rated on a 5-point Likert scale (1=strongly disagree to 5=strongly agree). Language validity findings indicate that correlations between the Turkish and English forms were .94, .94, .87, .89, .92, and .94 for six subscales, respectively. The results of confirmatory factor analysis indicate that the model was well fit and Chi-Square value ( $\chi^2=779.01$ ,  $N=633$ ,  $df=264$ ,  $p=0.00$ ) which was calculated for the adaptation of the model was found to be significant. The goodness of fit index values of the model were RMSEA=.056, NFI=.95, CFI=.97, IFI=.97, RFI=.94, GFI=.91, and SRMR=.059. The internal consistency coefficients were .77, .72, .72, .80, .74, and .74 and the test-retest reliability coefficients were .69, .59, .66, .60, .69, and .56, for six subscales, respectively.

*The Depression Anxiety Stress Scale (DASS).* Depression, anxiety, and stress were measured by using a the Turkish version of the DASS (Lovibond & Lovibond, 1995a, 1995b). The Turkish adaptation of the DASS was done by Akın and Çetin (2007). The DASS is a 42-item self-report inventory that provides scores on three subscales: Depression (14-items), anxiety (14-items), and stress (14-items). Each item was rated on a 4-point scale. The language validity findings indicate that correlation between the Turkish and English forms was .99. Factor loadings of the subscales ranged from .39 to .88. The internal consistency alpha coefficient was found .89, .92 and the test-retest reliability scores after three weeks were found .99 for three subscales.

## Procedure

The SPWB was translated into Turkish by five academicians in the English language department. After that they were back-translated into English and examined the consistency between the Turkish and English versions of the scale. Finally, these experts discussed the Turkish form and along with some corrections this scale was prepared. After that a study of language equivalence was executed and then the validity and reliability analyses of the scale were examined. In this study, construct and concurrent validities and re-test and internal consistency reliabilities, and item analysis of the SPWB were examined.

## Results

The language equivalence of the SPWB was assessed using a group of 124 English teachers. Results demonstrated that correlations between the Turkish and English forms of the SPWB were .94 for autonomy, .97 for environmental mastery, .97 for personal growth, .96 for positive relationships with others, .96 for purpose in life, and .95 for self-acceptance. The results of exploratory factor analysis have demonstrated that the items loaded on six factors similar to original form of the SPWB. The amount of total variance explained by three factors was nearly 68%. Factor loadings ranged from .42 to .91 for autonomy, from .57 to .94 for environmental mastery, from .49 to .76 for personal growth, from .45 to .86 for positive relationships with others, from .55 to .88 for purpose in life, and from .30 to .80 for self-acceptance subscales. Also, the results of confirmatory factor analysis indicated that the model was well fit (Hu & Bentler, 1999) and Chi-Square value ( $\chi^2=577.91$ ,  $df=94$ ,  $p=0.00$ ) which was calculated for the adaptation of the model was found to be significant. The goodness of fit index values of the model were RMSEA=.072, NFI=.97, CFI=.98, IFI=.98, RFI=.97, GFI=.93, and SRMR=.062. For concurrent validity, the relationships between the Self-compassion Scale, DASS and the Turkish form of SPWB were calculated. These results showed that self-compassion correlated all six subscales of the SPWB positively (.47, .39, .49, .51, .36, and .55 for six subscales, respectively). Further, six subscales of the SPWB were found related negatively to depression, anxiety and, stress (ranged from -.12 to -.51).

The internal consistencies of the SPWB were .91 for autonomy, .94 for environmental mastery, .90 for personal growth, .89 for positive rela-

onships with others, .96 for purpose in life, and .87 for self-acceptance. To establish test-retest reliability, the SPWB was administered to 178 university students, over a four-week period. Results indicated that test-retest reliability scores of the SPWB were .78 for autonomy, .95 for environmental mastery, .97 for personal growth, .86 for positive relationships with others, .90 for purpose in life, and .97 for self-acceptance. Findings also demonstrated that item-total correlations ranged from .32 to .90.

### **Discussion**

The purpose of this study was to translate the SPWB into Turkish and examine its psychometric properties. The results of language equivalency showed that the correlations between the Turkish and English forms were high. These results confirm that the Turkish and English forms of the SPWB might be regarded equivalent. The results of exploratory factor analysis demonstrated that the items loaded on six factors and that the factor structure was harmonized with the factor structure of the original scale. The results of confirmatory factor analysis indicated that the model was well fit. Thus, it can be said that the structural model of the SPWB which consists of six factors was well fit to the Turkish culture. Overall, findings demonstrated that this scale had high validity and reliability scores (Büyüköztürk, 2004; Tabachnick & Fidell, 1996; Tezbaşaran, 1996) and that it may be used as an efficient instrument in order to assess psychological well-being. However, further studies that will use the SPWB are important for its measurement force.

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