

Abstract. The aim of the current study was to present the adaptation process of the Hungarian version of the Existence Scale (ES) and to demonstrate the psychometric properties of a shortened version (ES-S). The 8-item ES-S was designed based on the data of 166 Hungarian young adults, who completed the full version of the ES (study 1). In the next step reliability and validity of the ES-S were examined with the participation of 392 respondents (study 2). For the construct validity analysis, the Purpose in Life Test, the Satisfaction with Life Scale and a shortened version of the Beck Depression Inventory were used. Both inner reliability and convergent / divergent validity of the ES-S were found to be adequate.

Key words: Meaning fulfilment, Existence Scale, shortened version, reliability and validity

Zusammenfassung. Der Zweck dieser Studie war die ungarische Adaptation der Existenz-Skala (ESK) und die psychometrischen Eigenschaften einer gekürzten Version (ESK-K) zu demonstrieren. Die 8-item ESK-K wurde nach den Daten von 166 ungarischen jungen Erwachsene ausgearbeitet, die die volle Version der ESK ausgefüllt haben (Studie 1). In dem nächsten Schritt wurden die Reliabilität und Validität der ESK-K mit der Hilfe von 392 Teilnehmern untersucht (Studie 2). Für die Analyse der Konstruktvalidität waren der Purpose in Life Test, die Satisfaction with Life Scale und eine gekürzte Version des Beck Depression Inventory benutzt. Sowohl die Reliabilität als auch die Konvergente und Divergente Validität der ESK-K erwiesen sich als genügend. Schlüsselwörter: Sinnerfüllung, Existenz Skala, gekürzte Version, Reliabilität und Validität

1. Introduction

In recent years the construct of meaning in life has received considerable attention and legitimacy, perhaps in conjunction with the growing emphasis on positive psychology (Piko, 2004). The first to introduce this construct to the social sciences was Viktor Frankl, who developed an existential personality theory. Frankl (1959) considered the will to meaning as a fundamental drive of human beings and therefore he argued that failure to achieve a sense of meaning in life results in a so-called existential vacuum.

Since the introduction of the construct of meaning in life, a lot of efforts have been devoted to the measurement of personal meaning. Most research concerning meaning in life has used the Purpose in Life test (Crumbaugh & Maholick, 1964) and the Life Regard Index (Battista & Almond, 1973), while somewhat less often used are the Life Attitudes Profile (Reker & Peacock, 1981) and its revised version (Reker, 1992). Endeavours to operationalize meaning in life have resulted in a large number of further measuring instruments, each reflecting a somewhat different theoretical orientation of the researcher.

The 46-item Existence Scale (ES; Längle, Orgler, & Kundi, 2000; Längle, Orgler, & Kundi, 2003) with a 6-point rating scale (from “absolutely” to “not at all”) is an instrument specifically designed to evaluate the noetic dimension of human being and it is based on an exploration of the personal and existential realities of human beings. The ES measures the four basic elements of existence: perception, recognition of values, competence for decision-making, and responsibility,

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i.e. it is an assessment instrument of the personal abilities that can be labelled as personal competencies for existence (Längle, Orgler, & Kundi, 2003).

Since its publication several empirical investigations have been conducted with the Existence Scale. The ES related significantly to other measures of meaning in life, e.g. to the Purpose in Life Test (Längle, Orgler, & Kundi, 2003) and to the Logo Test (Konkolj Thege, 2005; Längle, Orgler, & Kundi, 2000). Meaning fulfilment measured by the ES was positively connected to satisfaction with intimate relationships (Harries, 2004), general life satisfaction (Harries, 2004; Hefti, 2002), self esteem (Scherler, Lajunen, & Gülgöz, 1998), a certain kind of religiousness (Robu, 2006) and mental health (Wurst & Maslo, 1996; Kundi, Wurst & Längle, 2003). Furthermore, scores on the ES were associated negatively with neuroticism (Längle, Orgler, & Kundi, 2003; Scherler, Lajunen, & Gülgöz, 1998), symptoms of burnout (Nindl, Längle, Gamsjäger & Sauer, 2003; Tomić, Evers & Brouwers, 2004), eating disorders (De Landaboure et al, 2001) and depression (De Landaboure et al, 2001; Hefti, 2002; Längle, Orgler, & Kundi, 2003).

2. Hungarian adaptation and the shortening process

The original, German language version of the Existence Scale was translated into Hungarian by two independent translators. After preparing a common version by the two translators, it was back translated into German by a third, independent, bilingual translator. The resulting text was compared with the original items and was accepted as appropriate by the first author of the original test.

The 46-item ES is a relatively long questionnaire, which can be a serious disadvantage especially when administering complex test batteries. Since the very high inner reliability of the test ($\alpha > .90$ of both the original and the Hungarian versions) allows us to reduce the number of items, an **abbreviated form of the instrument was developed**. During the shortening process several aspects were taken into consideration: two items with very good corrected item-total correlation were chosen from all the four subscales. We also intended to include reverse coded items in the shortened version and avoid content similarity between the items from the same subscale.

3. Study 1.

3.1 Sample and measures

166 Hungarian young adults from the capital and from another bigger town (Szeged) completed the 46-item Hungarian version of the ES and answered sociodemographic questions. Respondents were collected by the “snowball” method. 68 males (41%) and 98 (59%) females made up the sample, and mean age of the participants was 24.8 years (ranging from 18-32, $SD=3.1$). Most of the respondents **(83.1%) were student** or had already finished university, 9% finished grammar school, while 7.9% finished trade school or specialized secondary school.

3.2 Results

Table 1 shows descriptive statistics for the ES and its abbreviated version (ES-S). Inner reliability of the subscales and the full ES was adequate and Cronbach’s alpha values were in accordance with those of the original German language version (Längle, Orgler, & Kundi, 2003). Internal consistency of the ES-S was also satisfactory (Cronbach’s $\alpha = .78$).

N=166	Min.	Max.	M	SD	Alpha
ES ST (14-84)	43	84	71.4	8.5	.77
ES-S ST (2-12)	4	12	10.4	1.8	
ES F (11-66)	27	62	49.0	8.3	.74
ES-S F (2-12)	2	12	8.1	2.5	
ES SD (8-48)	17	47	34.8	6.8	.73
ES-S SD (2-12)	3	12	9.7	2.2	
ES R (13-78)	25	75	54.6	10.5	.79
ES-S R (2-12)	2	12	8.5	2.4	
ES Total (46-276)	118	256	209.8	29.4	.92
ES-S Total (8-48)	15	48	36.8	6.9	.78

Note. ES=Existence Scale; ES-S=Shortened Version of the ES; ST=Self-Transcendence Subscale, F=Freedom Subscale, SD=Self-Distance Subscale, R=Responsibility Subscale

Table 1. Descriptive statistics for the Existence Scale and its shortened version

Table 2 describes further psychometric properties of the **ES-S**. Pearson-correlation coefficient between the full and the shortened version of the Existence Scale was very high ($r=0.91$; $p<.001$). Principal component analyses confirmed the unidimensionality of both the full and the abbreviated versions (figure 1.).

Original item number and subscale	Corrected item-total correlation in ES	Corrected item-total correlation in ES-S	Correlation between items of the subscale	Correlation of the original and the shortened subscale	Correlation of the ES and the ES-S
2. (ST)❖	.37	.36	.25***	.72***	.91***
13. (ST)	.63	.56			
18. (F)	.58	.56	.31***	.74***	
26. (F)❖	.45	.43			
19. (SD)	.57	.47	.32***	.82***	
43. (SD)	.57	.52			
30. (R)	.59	.52	.33***	.72***	
39. (R)	.53	.48			

ST=Self-Transcendence, F=Freedom, SD=Self-Distance, R=Responsibility, ❖=inverse item
*** $p\leq.001$

Table 2. Psychometric properties of the Shortened Version of the Existence Scale (ES-S)

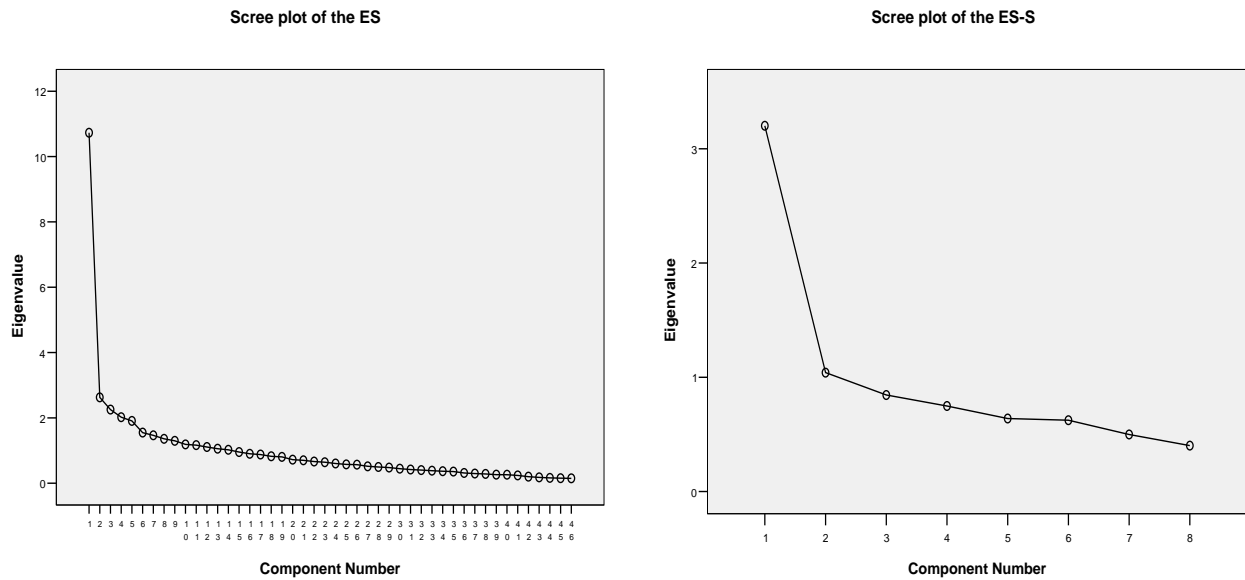


Figure 1. Scree plots of the principal component analyses of the ES and ES-S

Contrary to the German language version (Längle, Orgler, & Kundi, 2003), scores on both the ES and on the ES-S showed gender differences: females had significantly higher scores than males (Table 3). However, according to the effect sizes (Cohen's d), the difference was only moderate. No significant differences were found in ES and ES-S scores regarding to age, education and net monthly income.

		N	M	SD	Cohen's d	t	Sign.
ES (46-276)	Males	68	203.0	29.9	.40	-2.55	.01
	Females	98	214.6	28.2			
ES_S (8-48)	Males	68	35.2	7.2	.41	-2.61	.01
	Females	98	38.0	6.5			

Table 3. Gender differences in scores on the ES and the ES-S

4. Study 2.

4.1 Sample

The second sample consisted of 392 Hungarian respondents, of whom 46.9% were males and 53.1 % females. Mean age was 32.3 years (SD=14 years, ranging from 18 to 89 years). Average years of education was 14.9 (SD=2.9, ranging from 7 to 29 years). 53.3% of the respondents had net monthly income lower than 90 000 HUF² and 40.1% had higher than that, while 6.6% of them refused to answer this latter question.

² 90 000 Hungarian Forint (approx. 360 €) is somewhat higher than the average net monthly income (82 948 HUF) in the previous year and region (central Hungary) of the data collection (Hungarian Central Statistical Office, 2006).

4.2 Measures

For testing the convergent and divergent validity of the abbreviated version of the Existence Scale, three inventories were used besides the sociodemographic questions and the 8-item ES-S (Cronbach's alpha was .74 in this sample).

The 20-item Purpose in Life Test (PIL, Crumbaugh & Maholick, 1964) with a 7-point rating scale is the most often used instrument to assess the degree to which individuals experience a sense of meaning and purpose in their life. Psychometric properties of the Hungarian version were found to be appropriate (Konkolý Thege, & Martos, 2006). In the present study the internal consistency of the measure was excellent (Cronbach's alpha=.90).

Depressive symptomatology was assessed by the nine-item Hungarian version of the Beck Depression Inventory (BDI-S, Rózsa, Szádóczy, & Füredi, 2001), which is a reliable measure for screening depressive symptom severity. The Hungarian version of this instrument with a 4-point Likert-scale has been validated both in the general population and on clinical samples. In this study the internal reliability for this scale was good (Cronbach's alpha =.79).

Finally, well-being was measured by the Hungarian version of the 5-item Satisfaction with Life Scale (SWLS, Diener et al, 1985). This scale has a 7-point rating scale and it is a widely used and well validated measure of life satisfaction representing the cognitive aspect of subjective well-being. In this sample internal consistency of this measure was very good (Cronbach's alpha=.89).

4.3 Results

Concerning **gender** and **age** no significant differences were found in scores on the Shortened Version of the Existence Scale. However years of **education** and **income** associated positively and **significantly** ($p < .001$ and $p = .024$ respectively) but weakly ($r = .19$ and Cohen's $d = .24$ respectively) with scores on the ES-S.

Descriptive statistics and intercorrelations of our variables can be seen in Table 4. Results showed that scores on the **ES-S are highly correlated** with the other measure of meaning in life (**PIL**), while the strength of the relationship between the ES-S and the scale measuring **well-being and life satisfaction (SWLS) was moderate**. Meeting our expectations, the ES-S was also in a moderate but negative relationship with the instrument measuring **depressive** symptoms (BDI-S).

	M	SD	PIL	BDI-S	SWLS
ES-S (8-48)	37.1	6.4	.76***	-.62***	.56***
PIL (20-140)	103.6	16.6		-.64***	.69***
BDI-S (9-27)	13.5	3.8			-.45***
SWLS (5-35)	23.3	6.5			

Note. ES-S=Shortened Version of the Existence Scale; PIL=Purpose in Life Test; BDI-S=shortened version of the Beck Depression Inventory; SWLS=Satisfaction with Life Scale; *** $p < .001$

Table 4. Descriptive statistics and intercorrelations of the variables

5. Interpretation of the results

Results of the first study show that both the full and the shortened Hungarian versions of the Existence Scale are **reliable, unidimensional** measures with **adequate inner consistency**. Furthermore, these findings prove that the **brief version (ES-S) can be a psychometrically adequate alternative** of the ES, if it is not suitable to use the full, 46-item version.

Results of the second study confirmed the convergent and divergent validity of the ES-S. Similarly to our results, scores on the SWLS were correlated moderately ($r=.52$; $p<.01$) with the ES in the study of Harries (2004). This author used the 46-item **English** language version of the Existence Scale, thus the agreement between her and our data proves the adequacy of both the Hungarian adaptation of the instruments (ES, SWLS) and the satisfactoriness of the shortening process (ES-S). Relationship between scores on the PIL and the ES has also been investigated (Längle, Orgler, & Kundi, 2003), however it was considerably weaker ($r=.49$) than presented in this study. The current results do not allow to determine, whether the discrepancy between the two studies comes from cultural differences or some kind of insufficiency in the Hungarian or the German adaptation of the PIL. Finally, the direction and the moderate strength of the connection between the ES-S and the BDI-S correspond to other results concerning the relationship between meaning in life and depressive symptoms (e.g., Crumbaugh, & Maholick, 1964; Konkolý Thege, & Martos, 2006; Längle, Orgler, & Kundi, 2003).

In summary, the findings of the present investigation indicate that the 8-item Shortened Version of the Existence Scale (ES-S) is a valid and reliable instrument for assessing meaning fulfilment.

References

- Battista J & Almond R (1973) The development of meaning in life. *Psychiatry*, 36, 409-427.
- Crumbaugh JC & Maholick LT (1964) An experimental study in existentialism: The psychometric approach to Frankl's concept of noogenic neurosis. *Journal of Clinical Psychology*, 20, 200-207.
- De Landaboure NB, Martin BL, Kazmierzak A, Fraisse M, Toscani J (2001) Das existentielle Vakuum als pathologischer Faktor in den wichtigsten psychischen Erkrankungen unserer Zeit. *Existenzanalyse*, (18)1, 46-48.
- Diener E, Emmons RA, Larsen RJ, Griffin S (1985) The Satisfaction With Life Scale. *Journal of Personality Assessment*, 49(1), 71-75.
- Frankl V (1959) *Man's search for meaning*. New York: Washington Square Press.
- Harries S K (2004) *Relationships among life meaning, relationship satisfaction, and satisfaction with life*. Thesis. Trinity Western University, Langley (British Columbia)
- Hefti R (2002) *Messung von Sinn und Religion: Zusammenhang zwischen existenzanalytischen Skalen und Religionsmassen des MMRI*. <http://www.akademieps.de/download/5721-2emp2002-hefti.doc>
- Hungarian Central Statistical Office (2006) *Yearbook of household statistics – 2005*. Budapest, Hungarian Central Statistical Office
- Konkolý Thege B (2005) *A logoterápia és egzisztencia-analízis helye és alkalmazhatósága az egészségpszichológiában. Szakdolgozat*. Eötvös Loránd Tudományegyetem, Budapest
- Konkolý Thege B, Martos T (2006) Az Életcél-kérdőív magyar változatának jellemzői. *Mentálhigiéné és Pszichoszomatika*, 7(3), 153-169.
- Kundi M, Wurst E, & Längle A (2003) Existential Analytical Aspects of Mental Health. *European Psychotherapy*, 4(1), 87-96.
- Längle A, Orgler Ch, & Kundi M (2000) *Die Existenzskala (ESK). Test zur Erfassung existentieller Erfüllung. Manual*. Göttingen: Hogrefe
- Längle A, Orgler C, & Kundi M (2003) The Existence Scale: A new approach to assess the ability to find personal meaning in life and to reach existential fulfillment. *European Psychotherapy*, 4(1), 135-151.
- Nindl A, Längle A, Gamsjäger E, & Sauer J (2003) The Relationship between Existential Fulfillment and Burnout. An empirical study from an existential-analytical perspective. *European Psychotherapy*, 4(1), 145-149.
- Pikó B (2004) A pozitív pszichológia missziója a modern társadalomban. Paradigmaváltás a társadalomtudományokban? *Mentálhigiéné és Pszichoszomatika* 5(4), 289-299.
- Reker GT, & Peacock EJ (1981) The Life Attitude Profile (LAP): A multidimensional instrument for assessing attitudes toward life. *Canadian Journal of Behavioral Science*, 13, 264-273.
- Reker GT (1992) *Manual: Life Attitude Profile – Revised*. Petersborough, Ontario, Canada: Student Psychologists Press.
- Robu M (2006) The Relationship Between Religiousness, Attachment and Psychological Well-being. *Studia Universitatis Babeş-Bolyai Theologia Catholica Latina*, (51)1, 83-92.
- Rózsa S, Szádóczky E, Füredi J (2001) A Beck Depresszió Kérdőív rövidített változatának jellemzői a hazai mintán. *Psychiatria Hungarica*, 16(4), 379-397.
- Scherler HR, Lajunen T, & Gülgöz S (1998) A comparison study of Finnish and Turkish university students on the existential scale. *International Journal of Logotherapy and Existential Analysis*, 6(2), 30-42.

- Tomić W, Evers WJG, & Brouwers A (2004) Existential Fulfillment and Teacher Burnout. *European Psychotherapy*, 5(1), 65-73.
- Wurst E, Maslo R (1996) Seelische Gesundheit – Personalität – Existentialität. Ein empirischer Beitrag aus existenzanalytischer Sicht. *Zeitschrift für Klinische Psychologie, Psychiatrie und Psychotherapie*, 44, 200-212.