Turkish Version of the Revised Sense of Purpose Scale 2 (SOPS-2): A Preliminary Study for Validity and Reliability

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ABSTRACT

The Sense of Purpose Scale 2 (SOPS-2) is a revised version of the Sense of Purpose Scale (SOPS) which aims to evaluate sense of purpose with a multidimensional conceptualization. The purpose of the present study was to validate a Turkish version of the SOPS-2 for Turkish college students, by first translating it into the Turkish language, and then examining its psychometric properties. With this purpose, data were collected from 237 undergraduate students, studying at a state-founded Turkish university, in the fall term of 2018-2019 academic year. Following the translation procedures, the psychometric properties of the Turkish SOPS2 have been analyzed using Confirmatory Factor Analysis (CFA), criterion-related validity, and internal consistency methods. Results of CFA indicated that the original three-dimensional model (Awareness of purpose, Altruistic purpose, and Awakening to purpose) is accaptable ($\chi2/df$=2.14, CFI= .96; GFI= .91 ve NFI= .93; RMSEA= .07). Results of Pearson Moments Correlation revealed that the Turkish version of the SOPS-2 had satisfactory criterion-related validity with the measure of satisfaction with life (r=.54, p<.01). Furthermore, item-total correlations ranged between .44 and .79, and Cronbach's alpha coefficient calculated for the total scale (α=.91) and for the Awareness of purpose, Altruistic purpose and Awakening to purpose sub-scales (α= .92, α=.84, and α=.84, respectively) were found high, indicating good internal consistency. As a result, findings of this preliminary study suggest that the Turkish version of the SOPS-2 is a valid and reliable tool for measuring sense of purpose in life for Turkish undergraduate students.

Keywords: Sense of purpose, validity, reliability

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INTRODUCTION

Man's search for meaning and purpose of his life is as old as human history. The concepts of "meaning" and "purpose", which have been one of the most questioned fields of philosophy over the years, started to take part in the psychology literature with the views of Alfred Adler. According to Adler's theory of Individual psychology, the mental health of man is determined by a purpose. At an early age, every human being determines the purpose of life for himself and behave according to this life purpose. So that they can think, feel and dream in line with the purpose of their life (Adler, 2008).

Victor Frankl is another psychologist that emphasizes the importance of the meaning and purpose of human life in the field of psychology. Frankl's Logotherapy studies in the 1940s are accepted as the first systematic study regarding the meaning of life. According to him, the meaning of life is an essential source of motivation that allows people to continue living. Meaning in life is a concept that is evaluated with the purpose of life, besides being a realistic and natural motive brought by innate. In a sense, the purpose is the final reason for living. Therefore, the main purpose of Logotherapy is to help the individual to find meaning and purpose in life (Frankl, 2007). Although it is possible to see studies in the literature that mention the concepts of meaning and purpose after Frankl, there are some disagreements on the relationship between the two concepts. Some psychologists claim that the meaning and purpose are the identical concepts, while some emphasize the distinct nature of these two (George and Park 2016). According to psychologists who emphasize the difference between meaning and purpose, the purpose is related with the future-oriented life goals, and as a result, could be described as the motivational component of meaning in life (Martela and Steger 2016; Reker and Wong 1988).

As Alfred Adler and Victor Frankl, the existentialist psychotherapist Irvin Yalom also frequently emphasizes the meaning and purpose in his works. According to Yalom (2011), when people who have a certain purpose in their lives face with death, they can continue to live in a more qualified way as they lived their life with satisfaction and full of excitement. So they can better understand the value of life.

Based on the views of the theorists who emphasize the importance of the purpose in human life, a number of studies have been conducted to determine the various correlates of this concept. The findings of these studies showed that purpose in life is positively correlated with mental health (Zika and Chamberlain, 1992); positive affect and happiness (Burrow and Hill 2011); empathy (Mariano and Savage 2009); vitality, openness, focus, and humility (Bronk, 2008); satisfaction with life, hope, contentment, and motivation (Bronk, Hill, Lapsley, Talib, and Finch, 2009); and generosity (Mariano and Savage 2009) and negatively correlated with the incidence of depression, suicidal ideation, substance use, anxiety and problems (Harlow, Newcomb and Bentler, 1986).

The findings of the research showing the relationship of the life purpose with mental-health and psychological well-being (Battista and Almond, 1973; Zika and Chamberlain, 1992) make it important to study this concept in psychological counseling and therapy processes. In addition, the fact that people

who do not have a purpose in life are to apply more for therapy (Battista and Almond, 1973) also supports the importance of the concept of purpose for counselors and researchers in this field. However, arranging studies aimed at improving individuals' life purposes is closely related to the development of appropriate measurement tools.

Frankl's studies on the purpose of life contributed greatly to the development of measurement tools in this field. Firstly, the test that he worked on at the end of the 50s was developed by Crumbaugh and Maholick (1964) and continued to be used as Purpose In Life-PIL test. In the following years, other tests were developed by Battista and Almond (1973), called Seeker of Life Regard Index-LRI, and by Crumbaugh (1977), called Seeking of Noetic Goals. Besides these, various scales have been developed and used which measure the purpose as a sub-dimension of various scales (Reker and Peacock 1981; Ryff, 1989) or measure the purpose as a one-dimensional structure (Bundick et al. 2006; Hutzell and Finck 1994; Robbins and Francis 2000).

Recently, Sharma, Yukhymenko-Lescroart and Kang (2018) have begun to work on a new measuring tool to address the limitations of the measures of life purpose and to eliminate them. According to these researchers, the previously developed scales for the purpose of life were merely evaluating individuals with goal-directedness and ignoring their non-personal purposes beyond-the-self dimension. There were also some items that were not relevant to the purpose of life in the present objective scales (Zika and Chamberlain, 1992). Also, these scales were taking "purpose" as a result (Dik, Steger, Gibson, and Peisner, 2011) rather than focusing on it as a process through which people awaken to their life's purpose over time.

Taking into account all these limitations in the existing scales measuring the purpose of life, Sense of Purpose Scale (SOPS), which is a multidimensional scale to measure altruistic purposes and prosocial behaviors, has been developed firstly (Sharma, Yukhymenko-Lescroart and Kang, 2018). The validity and reliability studies of this scale, consisting of 17 items and three sub-dimensions including Awareness to Purpose, Altruistic Purpose, and Awakening to Purpose, were performed on young adults. Then, a revised version of SOPS, SOPS-2, has been validated for emerging adults ranging in age from 18 to 80 years (Sharma and Yukhymenko-Lescroart, in press) and adults including undergraduate and graduate students, university instructors and staff (Yukhymenko-Lescroart and Sharma, 2019).

The purpose of the present study is to validate a Turkish version of the SOPS-2 for Turkish college students, by first translating it into the Turkish language, and then examining its psychometric properties.

METHOD

Participants

This study was carried out on a total of 237 (182 females and 55 males) undergraduate students, studying at a state-founded Turkish university (Bursa Uludağ University), in the fall term of 2018-2019 academic year. A convenience sampling method was used in the study. Participants were Faculty of Education students enrolled in six different departments (Elementary Education, 13.5%; Computer Education and Instructional Technology, 11.4%; Mathematics and Science Education, 24.9%; Foreign Language Education, 11%; Fine Arts Education, 13.1%; and Educational Sciences, 26.2%) of the faculty. Ages of participants were 18-33 with a mean of 20.81 (SD=2.37). The distribution of participants across gender groups and departments are presented in Table 1.

Table 1.

Distribution of participants across gender groups and departments

Group		n	%
Gender	Female	182	77
	Male	55	23
Departments	Elementary Education	32	14
	Computer Education and Instructional Technology	27	11
	Mathematics and Science Education	59	25
	Foreign Language Education	26	11
	Fine Arts Education	31	13
	Educational Sciences	62	26
	Total	237	100

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Measures

The Revised Sense of Purpose Scale 2

The Sense of Purpose Scale (SOPS) is a 17 items and 3 dimensional (Awareness of purpose, AWR; Altruistic purpose, ALT; and Awakening to purpose, AWK) scale developed by Sharma, Yukhymenko-Lescroart and Kang (2018) to measure sense of purpose in young adults aged between 18-

25. SOPS-2 is a revised version of the SOPS, with 14 items and 3 dimensions (AWR, ALT, AWK), for adults between ages 18 and 80 (Yukhymenko-Lescroart and Sharma, 2019). The AWR dimension composed of 5 items (1, 2, 3, 4 and 5); the ALT dimension composed of 5 items (6, 7, 8, 9 and 10); the AWR dimension composed of 4 items (11, 12, 13 and 14). Respondents indicated their agreement on a 7-point agreement scale. Higher scores indicate a higher sense of purpose. The SOPS2 includes no reversed items. Results of several CFAs conducted by Yukhymenko-Lescroart and Sharma' (2019) confirmed both a correlated three factors model and a bifactor model for the SOPS2.

The Satisfaction With Life Scale (SWLS)

The SWLS is a 5-item and unidimensional scale, developed by Diener, Emmons, Larsen, and Griffin (1985) to measure global satisfaction with life. Participants indicated their agreement on a 7-point agreement scale. SWLS includes no reversed items. Higher scores on the scale indicate higher satisfaction with life. Köker (1991) translated the SWLS into Turkish and provided support for the validity and reliability of the Turkish form. The test-retest reliability of the Turkish form was reported to be r=.85. Item-total correlations reported between .71 and .80. Additionally, the internal consistency of the Turkish SWLS was calculated as α=.86 by Yetim (1991). Cronbach's alpha values for the Turkish SWLS was also calculated in the present study, and found as, .70, indicating good internal consistency (Cronbach, 1951).

Procedure

To develop a Turkish version of the SOPS-2, first, permission to translate and adapt the scale into Turkish was obtained from Mariya Yukhymenko-Lescroart by e-mail correspondence. Then the SOPS-2 was independently translated into Turkish by 6 bilingual experts. Six versions of the scale were discussed and combined into one by three faculty members of the Department of Psychological Counseling and Guidance. The Turkish version of the SOPS-2 was administered to the students by the first author, at the spring term of 2018-2019 academic year. The instruments were distributed to the students at the beginning of the class hours. Participation was voluntary. Students were informed regarding the aims and measures of the study both with written and oral instructions. The administrations took about 5-10 minutes.

Data Analyses

The SPSS 23.0 (Statistical Package for Social Sciences) and AMOS 24 software packages were used for data analyses. CFA was employed to assess the factorial validity of the Turkish version of the SOPS-2. Pearson moments correlation coefficients were calculated to examine criterion validity by determining the relationship between SOPS-2 (total and sub-scale scores) and SWLS scores. Cronbach's alpha coefficients and item-total correlations were calculated for internal consistency. Significance levels of .001 and .01 were used for statistical analyses.

RESULTS

Results of Validity Studies

CFA was conducted for the Turkish form of the SOPS-2 to test the original three-dimensional model fit. Maximum Likelihood (ML) estimation was chosen, since the data set met the "skewness less than 2 and kurtosis less than 7" criterion (West, Finch, and Curran, 1995). The indices of the model fit considered were: The ratio of Chi-square to its Degrees of freedom ($\chi 2/df$), the Goodness of Fit Index (GFI), the Comparative Fit Index (CFI), the Normed Fit Index NFI), and the Root Mean Square Error of Approximation (RMSA). The goodness of fit indices and their acceptable and perfect cutoff levels for determining model fit (Schermelleh-Engel and Moosbrugger, 2003) are presented in Table 2.

Table 2.

The goodness of fit indices and their cutoff levels

Fit measure	Acceptable fit	Good fit
$\chi 2 /df$	2-3	0-2
NFI	0.90-0.95	0.95-1.00
GFI	0.90-0.95	0.95-1.00
CFI	0.95-0.97	0.97-1.00
RMSEA	0.05-0.08	0.00-0.05

Schermelleh-Engel and Moosbrugger (2003)

Results of CFA based on 14 items of the Turkish form of the SOPS-2 indicated an acceptable fit ($\chi 2/df$=2.14, CFI= .96, GFI= .91, NFI= .93 and RMSEA= .07). All parameters were significant at p<.001. Therefore, the three-dimensional factor structure of the 14-item Turkish form of the SOPS-2 was supported for the sample. Findings are illustrated in Figure 1.
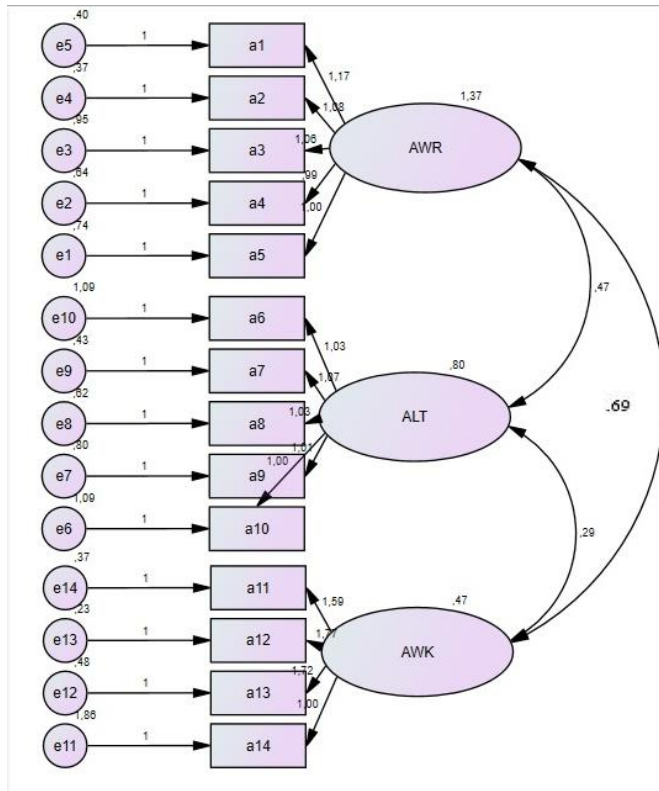
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Figure 1. Results of CFA with t-values

Chi-square= 159, df= 74, p-value= 0.000, GFI =0.91, CFI=0.96, NFI = 0.93, RMSA=.07

In order to verify the criterion-related validity of the Turkish SOPS-2, Pearson Moments Correlation coefficients calculated to examine the relationship between SOPS-2 (total and three sub-scale) scores and SWLS scores. Results are presented in Table 3.

Table 3.

Correlations between SOPS2 total and sub-scale scores and SWLS scores

Variable	SOPS-2	AWR	ALT	AWK	SWLS
SOPS-2	1	.89**	.72**	.88**	.55**
AWR		1	.40**	.77**	.56**
ALT			1	.46**	.24**
AWK				1	.55**
SWLS					1

**p<.01

As seen in Table 3, the total (r=.55, p<.01), and all three sub-scale scores of SOPS-2 (AWRr=.56, p<.01; ALTr=.24, p<.01; and AWKr=.55, p<.01) were found to be significantly and positively correlated with SWLS scores, indicating acceptable criterion validity.

Additionally, all sub-scale scores of the SOPS-2 were found to be significantly and positively correlated with each other and the SOPS-2 total score as another evidence of construct validity of the scale.

Results of Reliability Studies

To examine the internal consistency of the Turkish form of the SOPS-2, Cronbach's alpha coefficients were calculated for the total score and the three sub-scale scores. Results revealed good internal consistency for the overall scale (α=.92), and the AWR (α=.93), the ALT (α=.84), and the AWK (α=.84) sub-scales. Results are presented in Table 4.

Table 4.

Cronbach's α values for the Turkish SOPS-2 total and sub-scale scores (n=237)

Scale	$\bar{x}$	SD	α
SOPS-2	76.20	13,37	.91
AWR	26.11	6,47	.92
ALT	29.05	5,03	.84
AWK	21.03	4,60	.84

Item-total correlations, explaining the relationships between the test items and the total scores obtained from the test, were also calculated to examine the reliability of the Turkish SOPS-2 (See Table 5.). Positive item-total correlations more than .30 indicates high internal consistency (Büyüköztürk 2011, 171). The corrected item-total correlations calculated in the present study for all items of the Turkish SOPS-2 were positive and more than .30 (between .44 and .79), supporting the internal reliability of the Turkish SOPS-2.

Table 5.

Item-total correlations

Item No	Item	Corrected Item-Total Correlation	α if Item Deleted
1	Hayattaki amacım nettir.	.79	.91
2	Hayatımın amacından eminim.	.75	.91
3	Hayatımın amacı konusunda içim rahattır.	.65	.91
4	Hayatımın amacını tanımlayabilirim.	.76	.91
5	Hayatımın amacını açıkça anladım.	.73	.91
6	Yaşadığım toplumda olumlu bir farklılık yaratmayı çok istiyorum.	.47	.92
7	Başkalarına yardım etmeye çalışıyorum.	.56	.91
8	Büyük küçük, birçok yolla topluma hizmet etmeye çalışıyorum.	.51	.92
9	Hayatımı başkalarının üzerinde olumlu bir etki bırakarak geçirmek istiyorum.	.49	.92
10	Diğer insanların mutluluğunu arttırmak için çaba sarf ediyorum.	.46	.92
11	Hayatımın asıl hedefinin farkına varıyorum.	.77	.91
12	Hayatımın amacı hakkında netlik kazanıyorum.	.78	.91
13	Hayatımın daha derin amacını kavrıyorum.	.76	.91
14	Son zamanlardaki etkinlikler hayat amacımın farkına varmamda bana yardımcı oluyor.	.44	.92

Overall, the Turkish form of the SOPS-2 was found as valid and reliable with its three-dimensional 14-item nature to use with Turkish undergraduate students.

CONSCLUSION

The aim of this study was to develop the Turkish version of the SOPS-2 (Yukhymenko-Lescroart and Sharma, 2019; Sharma and Yukhymenko-Lescroart, in press) which is a revised form of the SOPS (Sharma, Yukhymenko-Lescroart and Kang, 2018), and then to conduct a preliminary study to examine its psychometric properties. Results of CFA conducted to examine the construct validity of the Turkish SOPS2 revealed an accaptable fit to the three-factor structure. The three sub-factors have high correlations with the general scale and moderate and high correlations with each other. These findings are consistent with the findings that the SOPS-2 consists of three interrelated factors (Yukhymenko-Lescroart and Sharma, 2019).

The relationship between sense of purpose and life satisfaction was also examined in this study to determine criterion related validity of the Turkish SOPS-2. Significant and positive relations were found between SOPS-2 (total and sub-scale) scores and satisfaction with life scores, indicating that the life satisfaction of individuals with a purpose in life is high. This finding was consistent with Bronk et al.'s (2009) results obtained from a study conducted with a group of adolescents, emerging adults and adults.

Finally, item-total correlations and Cronbach's alpha values that are calculated to measure internal consistency showed that the Turkish SOPS-2 is a reliable measurement tool for Turkish undergraduate students.

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When all these findings are evaluated together, it can be said that the Turkish version of the SOPS-2 is a valid and reliable tool that can be used to evaluate the sense of purpose of Turkish undergraduate students.

On the other hand, this preliminary study has some limitations. Further studies need to be conducted to eliminate these limitations. First, this study was conducted with a group of students from the faculty of education of a Turkish state university, with the convenience sampling method. Therefore, the participants of this study may not represent all of the Turkish undergraduate students and Turkish culture. Adaptation studies of the SOPS-2 should be carried out with a more representative sample of Turkish undergraduate students and Turkish culture in future studies.

Furthermore, Yukhymenko-Lescroart and Sharma (2019) reported in a study in which students, academic and administrative staff between ages 18-80 were employed that the psychometric properties of the SOPS-2 were different for the staff and the students. Taking this result into consideration, individuals from different age groups can be used and compared in future studies for Turkish adaptation of the SOPS-2.

As the number of male participants in this study was less than the female participants, gender differences among males and females on the basis of SOPS-2 scores could not be evaluated. With the studies that have equal or almost equal gender distribution, this deficiency could be eliminated.

Finally, in this study, it was not explicitly investigated whether or not SOPS-2 provides consistent measurements depending on time. In future studies, this deficiency could be eliminated for the Turkish SOPS-2 by conducting test-retest reliability studies.

REFERENCES

Adler, A. (2008). *İnsanı Tanıma Sanatı*. Kamuran Şipal (Çev.). Ankara: Say Yayınları.

Battista, J., & Almond, R. (1973). The development of meaning in life. *Journal for The Study of Interpersonal Processes*. *36*(4), 409-427.

Bronk, K. C. (2008). Humility among adolescent purpose exemplars. *Journal of Research on Character Education*, *6*, 35–51.

Bronk, K. C., Hill, P. L., Lapsley, D. K., Talib, T. L., & Finch, W. H. (2009). Purpose, hope, and life satisfaction in three age groups. *The Journal of Positive Psychology*, *4*, 500–510.

Bundick, M., Andrews, M., Jones, A., Mariano, J. M., Bronk, K. C., & Damon, W. (2006). Revised youth purpose survey. Unpublished instrument. Stanford: Stanford Center.

Burrow, A. L., & Hill, P. L. (2011). Purpose as a form of identity capital for positive youth adjustment. *Developmental Psychology*, *47*, 1196–1206.

Büyüközrtürk, Ş. (2011). *Sosyal Bilimler İçin Veri Analizi El Kitabı* (14. Baskı). Ankara: Pegem Akademi.

Cronbach, L. J. (1951). Coefficient alpha and the internal structure of test. *Psychometrika*, *16*, 297-334.

Crumbaugh, J. C., & Maholick, L.T. (1964). An experimental study in existentialism: The psychometric approach to Frankl's consept of noogenic neurosis. *Journal of Clinical Psychology*, *20*(2), 200-207.

Crumbaugh, J. C. (1977). The Seeking of Noetic Goals Test (SONG): complementary scale to the Purpose in Life Test (PIL). *Journal of Clinical Psychology*, *33*, 900–907.

Diener, E., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The Satisfaction with Life Scale. *Journal of Personality Assessment*, *49*, 71-75.

Dik, B. J., Steger, M. F., Gibson, A., & Peisner, W. (2011). Make your work matter: Development and pilot evaluation of a purpose-centered career education intervention. *New Directions for Youth Development*, *132*, 59–73.

Frankl, V. E. (2007). *İnsanın Anlam Arayışı*. Selçuk Budak (Çev.). İstanbul: Okuyan Us.

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George, L. S., & Park, C. L. (2016). Meaning in life as comprehension, purpose, and mattering: Toward integration and new research questions. *Review of General Psychology*, *20*, 205–220.

Harlow, L. L., Newcomb, M. D., & Bentler, P. M. (1986). Self-derogation, substance use, and suicide ideation: Lack of purpose in life as a mediational factor. *Journal of Clinical Psychology*, *42*, 5–21.

Hutzell, R. R., & Finck, W. C. (1994). Adapting the life purpose questionnaire for use in adolescent populations. *The International Forum for Logotherapy*, *17*, 42–46.

Köker, S. (1991). Normal ve sorunlu ergenlerin yaşam doyumu düzeyinin karşılaştırılması. (Yayımlanmamış yüksek lisans tezi). Ankara Üniversitesi Sosyal Bilimler Enstitüsü, Ankara.

Martela, F., & Steger, M. F. (2016). The three meanings of meaning in life: Distinguishing coherence, purpose, and significance. *The Journal of Positive Psychology*, *11*(5), 531–545.

Mariano, J. M., & Savage, J. (2009). Exploring the language of youth purpose: References to positive states and coping styles by adolescents with different kinds of purpose. *Journal of Research in Character Education*, *7*, 1–24.

Reker, G. T., & Wong, P. T. P. (1988). Aging as an individual process: Toward a theory of personal meaning. In J. E. Birren & V. L. Bengtson (Eds.), Emergent theories of aging (pp. 214–246). New York: Springer.

Reker, G. T., & Peacock, E. J. (1981). The Life Attitude Profile (LAP): A multidimensional instrument for assessing attitudes toward life. *Canadian Journal of Behavioral Science*, *13*, 64–73.

Robbins, M., & Francis, L. J. (2000). Religion, personality and well-being: The relationship between church attendance and purpose in life. *Journal of Research in Christian Education*, *9*, 223–238.

Ryff, C. D. (1989). Happiness is everything, or is it? Explorations on the meaning of psychological well-being. *Journal of Personality and Social Psychology*, *57*(6), 1069-   1081.

Schermelleh-Engel, K., & Moosbrugger, H. (2003). Evaluating The Fit of Structural Equation Models: Tests of Significance and Descriptive Goodness-of-Fit Measures. *Methods of Psychological Research Online*, *8*(2), 23-74.

Sharma, G., & Yukhymenko-Lescroart, M. (in press). Validation of the Revised Sense of Purpose Scale (SOPS-2) with late adolescents and emerging adults. *Journal of Character Education*.

Sharma, G., Yukhymenko-Lescroart, M., & Kang, Z. (2018). Sense of Purpose Scale: Development and initial validation. *Applied Developmental Science*, *22*(3), 188-199. doi:10.1080/10888691.2016.1262262

Steger, M. F., Frazier, P., Oishi, S., & Kaler, M. (2006). The meaning in life questionnaire: Assessing the presence of and search for meaning in life. *Journal of Counseling Psychology*, *53*(1), 80-93.

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West, S. G., Finch, J. E., & Curran, P. J. (1995). Structural equation models with nonnormal variables: Problems and remedies. In Hoyle, R. H. (Ed.), *Structural equation modeling: Concepts, issues, and applications*. Thousand Oaks, CA: Sage Publications.

Yalom, İ. (2011). *Varoluşçu Psikoterapi*. Zeliha Babayiğit (Çev.). İstanbul: Pegasus Yayınları.

Yetim, Ü. (1991). *Kişisel projelerin organizasyonu ve örüntüsü açısından yaşam doyumu*. (Yayınlanmamış doktora tezi). Ege Üniversitesi/Sosyal Bilimler Enstitüsü, İzmir.

Yukhymenko-Lescroart, M. A., & Sharma, G. Applied Research Quality Life (2019). https://doi.org/10.1007/s11482-019-09729-w

Zika, S., & Chamberlain K. (1992). On the relation between meaning in life and psychological well-being. *British Journal of Psychology*, *83*, 133-145.