

# The Turkish Version of the Family Sense of Coherence Scale- Short Form (FSOC-S): Initial Development and Validation

*Ayşe Rezan ÇEÇEN\**

## **Abstract**

The purpose of this study is to investigate validity and reliability of Short Form of The Family Sense of Coherence Scale's which was developed originally 26 items by Antonovsky and Sourani (1988) and 12 items short form by Sagy (1998). The scale measures individuals' perception of Family Sense of Coherence and it can be applied to adolescents and adults. The sample was consisted of 328 female (58%) and 234 male (42%), totally 562 undergraduate students who attend Education Faculty, Cukurova University. After translating the FSOC into Turkish, exploratory factor analysis was performed on samples of undergraduate students. In addition item analyses, convergent, divergent scales validity and test-re test, Cronbach alpha coefficient reliability were examined. The results have shown that Short form of Turkish Family Sense of Coherence Scale has satisfactory reliability and validity.

## **Key Words**

Family Sense of Coherence, Family Assessment, Scale Adaptation.

*\*Correspondence:* Assist.Prof. Dr. A. Rezan ÇEÇEN, Çukurova University, Faculty of Education, Department of Educational Sciences, 01330 /Balcalı/ Adana, Turkey. E-mail: arcecen@cu.edu.tr

Salutogenic model developed by Aaron Antonovsky (1979, 1987) focuses on exploring the origin of health rather than explaining the causes of disease. The salutogenic approach is an alternative perspective to the traditional pathogenic model. It is an approach that looks for the health-promoting factors within individuals and societies. In contrast to the pathological orientation (the health vs. disease dichotomy), health is viewed as a continuum from health (ease) to disease (dis-ease) in Antonovsky's model. The author suggested that the individual's cognition of and mode of response to the environment and to stress may be important in promoting good health (Antonovsky, 1988). The salutogenic model highlights the strengths of individuals and their capacity for successful adjustment and tries to explain why certain people seem to preserve health and well-being and successfully cope with tension and the exposure to life's stresses and difficulties (Antonovsky & Sagy, 1986; Heiman, 2004). Antonovsky (1979) developed the concept of *sense of coherence* (SOC) as central to his *salutogenic model*, which is a global orientation that expresses a general view of individuals regarding their internal and external environment. Social, historical, and cultural context and life experiences are the foundations of an individual's degree of SOC. Within the SOC, Antonovsky (1987, p. 19) identified three main resources that may help facilitate individuals' positive adjustment, how they deal with challenges, and how they cope with difficulties: These resources are revealed by the extent to which one has a pervasive, enduring though dynamic, feeling of confidence that (a) the stimuli derived from one's internal and external environments are *comprehensible*, structured, predictable, and explicable; (b) the sources are *manageable* and available; and (c) demands are *meaningful*, challenging, and worthy of investment and engagement. In the literature, there are a lot of research that indicates that strong sense of coherence is related to good health and weak sense of coherence is related to poor health (Anderzen & Arnetz, 1999; Berg & Hallberg, 1999; Eriksson & Lindström, 2006; Flanery & Flanery, 1990; Feldt, Jahnsen, Villien, Straghelle & Holm, 2002; Kaiser, Sattler, Bellack & Dersin, 1996; Leskinen, Kinnunen, Mauno, 2000; Karlsson, Berglin, Larsson, 2000; Nesbitt & Heidrich, 2000; Schnyder, Buchi, Sensky, Klaghofer, 2000). In addition, a lot of studies have shown that strong sense of coheren-

ce is linked to high self esteem (Antonovsky, 1987, 1991; Cecen, 2007; Dantas, Motzer, Ciol, 2002; Johnson, 2004; Scherler, 2004; Scherler & Lajunen, 1997).

A family sense of coherence can be seen as a family resistance resource against the impact of stress and crisis on the family and it has an influence on the quality of life of the family (Anderson, 1998; Antonovsky & Sourani, 1988; Wickens, & Greeff, 2005). When investigated the literature, Wickens and Greeff (2005) and Anderson (1998) have reported that there are strong positive relations between the sense of coherence and family sense of coherence. Family stability, relative support, and coping strategies that are utilized during crisis situations are the products of socio-cultural influences that are carried over from one generation to another (McCubbin, Thompson, Thompson, Elver, & McCubbin, 1998). In the Turkish literature, there isn't any scale to measure family sense of coherence. Thus, it is important to adapt the Family Sense of Coherence Scale into Turkish to use it in research and practice. In the light of the literature, the purpose of this study is to adapt the Family Sense of Coherence Scale into Turkish.

## Method

*Sample-1:* First sample was consisted of 248 female (57%), 189 male (43%) total 437 undergraduate students who attend different departments (i.e., counseling, elementary education, pre-school, language, science and social science teacher education) at the Cukurova University. The age range was 17-26 and mean age was 18.90

*Sample-2:* The second sample was consisted of 45 female (64%), 25 male (36%) total 70 undergraduate students who attended classes in the college of education. To investigate convergent and divergent validity of the scale, the Family Sense of Coherence Scale (FSOC) and the Family Assessment Scale were administered together to undergraduate students. The age range was 18-25 and the age mean was 19.22.

*Sample-3:* The third sample was consisted of 35 female (63.6%) and 20 male (36.4%) total 55 undergraduate students who attended classes in the college of education. To investigate two weeks test-retest reliability of the FSOC the scale was re-administered to these

students. The age range was 18-22 and the mean age was 19.10. The data were collected in classrooms and participation was voluntary.

### Measurements

The Short form of Family Sense of Coherence Scale (FSOC-S) (Antonovsky & Sourani, 1988; Sagy, 1998) and the Family Assessment Scale (Epstein, Baldwin & Bishop, 1983) were used to collect data. The Turkish version of the both scales was administered to students.

## Results and Discussion

The FSOC-S was translated into Turkish by three academicians who were competent in both written and spoken English. The translated forms were reviewed by the author and compared with one another in terms of the content and clarity of the items. In addition, the Turkish form was reviewed by two Turkish literature instructors to assess the appropriateness of the grammatical structure of the items. This form was administered to a small group of university students ( $n = 40$ ) and they assessed the items in respect of clarity. The author evaluated and corrected stated items to ensure all items understandable. The final Turkish version was back translated into English by two academicians, and then it was compared with the original scale (Hambleton, 1994). The back-translated resulted in a highly similar version to the original scale.

Skewness and kurtosis values were investigated on data and all values were below 1 (Tabachnick, & Fidell, 1996). The principal component factor analysis and varimax rotation technique was performed on obtained data from first sample ( $n = 437$ ). Because of the theoretical frame the best prediction method of maximum likelihood (ML) prediction was used (Backhaus, Erichson, Plinke & Weber, 1994). Three factor solutions emerged that had eigenvalue above 1. However when investigated the scree test after first eigenvalue could be seen dramatically decreasing and when investigated eigenvalues the first factor explained 32% , second 9%, third 8% variance. Thus, FSOC-S could be viewed as having a single general factor although it has three factors (Kline, 1994). In order to determine the scale's validity, correlations of the item-total scores we-

re examined. The results showed item-total correlations' ranges from .48 to .65. In addition to assess the concurrent and discriminant validity of the FSOC-S, the relationships between the FSOC-S and the Family Assessment Device's (FAS) (Miller, Epstein, Bishop & Keitner, 1985), which was adapted into Turkish by Bulut (1990) subscales were evaluated on the second sample ( $n = 70$ ). There were significant relationships between the scores on the FSOC-S and the scores on the FAS. The healthy functions of family and the FSOC-S scores had positive correlations and unhealthy functions of family and FSOC-S had negative correlations as expected. The Cronbach alpha coefficient was calculated on the first sample ( $n = 437$ ) to examine the reliability of the FSOC-S. The Cronbach alpha coefficient was .80. Test re-test reliability (two weeks) was .85 on the third sample data. The results of this study consisted with those of Newby (1996). Newby (1996) reported that family sense of coherence and family functions assessment indices have shown positive correlations.

Based on the results of this study, it is safe to conclude that the Turkish short version of FSOC-S possesses satisfactory psychometric properties as a measure of family sense of coherence on undergraduate students. Although the results of this study revealed sufficient psychometric properties for this sample, it needs to be further studies with different samples and age groups to investigate FSOC-S validity and reliability.

## Kaynakça/References

- Anderson, K. H. (1998). The relationship between family sense of coherence and family quality of life after illness diagnoses: Collective and consensus views. In (Ed.) H. I. McCubbin, E. A. Thompson, A. I. Thompson, & J. E. Frommer *Stress, coping, and health in families: Sense of coherence and resiliency* (pp. 169-187). United States of America New York: Sage.
- Anderzen, I., & Arnetz, B. B. (1999). Psycho psychophysiological reactions to international adjustment. Results from a controlled, longitudinal study. *Psychotherapy and Psychosomatics*, 68 (2), 67-75.
- Antonovsky, A. (1979). *Health, stress and coping*. San Francisco: Jossey-Bass.
- Antonovsky, A. (1987). *Unraveling mystery of health*. San Francisco: Jossey-Bass.
- Antonovsky, A. (1988). *Unravelling the mystery of health: how people manage stress and stay Well*, Jossey-Bass Publishers, San Francisco, CA,
- Antonovsky, A. (1991). *The structural sources of salutogenic strengths*. In (Ed.) C. L. Cooper & R. Payne *Individual differences: Personality and stress* (pp. 67-104). New York: Wiley
- Antonovsky, H. & Sagi, S. (1986). The development of a Sense of Coherence and its impact on responses to stress situations. *Journal of Social Psychology*, 126, 213-227.
- Antonovsky, A., & Sourani, T. (1988). Family sense of coherence and family adaptation. *Journal of Marriage and The Family*, 50, 79-82.
- Backhaus, K., Erichson, B., Plinke, W., & Weiber, R. (1994). *Multivariate analysemethodun-eine anwendungsorientierte einführung*. Berlin: Springer.
- Berg, A., & Hallberg, I. R. (1999). Effects of systematic clinical supervision on psychiatric nurses' sense of coherence, creativity, workrelated strain, job satisfaction and view of the effects from clinical supervision: a pre-post test design. *Journal of Psychiatry Mental Health Nursing*, 6, 371-381.
- Bulut, I. (1990). *Aile değerlendirme ölçeği el kitabı*. Ankara: Özgüzelik Matbaası
- Çeçen, A. R. (2007, Ekim). *Yaşam doyumunu yordamada bireysel bütünlük duygusu, aile bütünlük duygusu ve benlik saygısı*. IX. Psikolojik Danışma ve Rehberlik Kongresi'nde sunulan bildiri. Çeşme, İzmir.
- Dantas R. A. S., A., & Ciol, M. A. (2002). The relationship between quality of life, sense of coherence and self-esteem in persons after coronary artery bypass graft surgery. *International Journal of Nursing Studies*, 39 (7), 745-755.
- Epstein, N. B., Baldwin, L. M., & Bishop, D. S. (1983). The McMaster family assessment device. *Journal of Marital and Family Therapy*, 9, 171-180.
- Eriksson, M. & Lindström, B. (2006). Antonovsky's sense of coherence scale and the relation with health: A systematic review. *Journal of Epidemiology and Community Health*, 60, 376-381.
- Feldt, T., Leskinen, E., Kinnunen, U., & Mauno, S. (2000). Longitudinal factor analysis models in the assessment of the stability of sense of coherence. *Personality and Individual Differences*, 28, 239-257.

- Flanery, R., & Flanery, G. (1990). Sense of coherence, life stress, and psychological distress: A prospective methodological inquiry. *Journal of Clinical Psychology, 46* (4), 415-420.
- Hambleton, R. K. (1994). Guidelines for adapting educational and psychological tests: a progress report. *European Journal of Psychological Assessment, 10* (3), 229-244.
- Heiman, T. (2004). Examination of the salutogenic model, support resources, coping style and stressors among Israeli university students. *The Journal of Psychology, 138* (6), 505-520.
- Jahnsen, R., Villien, L., Straghelle, J. K., & Holm, I. (2002). Coping potential and disability sense of coherence in adults with cerebral palsy. *Disability and Rehabilitation, 24*, 511-518.
- Johnson, M. (2004). Approaching the salutogenesis of sense of coherence: The role of active self esteem and coping. *British Journal of Health Psychology, 9* (3), 419-432.
- Kaiser, C. F., Sattler, D. N., Bellack, D. R., & Dersin, J. A. (1996). Conservation of resources approach to a natural disaster: Sense of coherence and psychological distress. *Journal of Social Behavior and Personality, 11*, 459-476.
- Karlsson, I., Berglin, E., & Larsson, P. A. (2000). Sense of coherence: quality of life before and after coronary artery bypass surgery a longitudinal study. *Journal of Advance Nursing, 31*, 6, 1383-1392.
- Kline, P. (1994). *An easy guide to factor analysis*. London: Routledge.
- McCubbin, H. I., Thompson, A. L., Thompson, E. A., Elver, K. M., & McCubbin, M. A. (1998). Ethnicity, schema, and coherence: Appraisal processes for families in crisis. In (Ed.) H. I. McCubbin, E. A. Thompson, A. I. Thompson, & J. E. Fromer *Stress, coping, and health in families: Sense of coherence and resiliency* (pp. 41-67). London: Sage.
- Miller, I. W., Epstein, N. B., Bishop, D. S., & Keitner, G. I. (1985). The McMaster family assessment device: Reliability and validity. *Journal of Marital and Family Therapy, 11*, 345-356.
- Nesbitt, B. J., & Heidrich, S. M. (2000) Sense of coherence and illness appraisal in older women's quality of life. *Res Nursing Health 23*, 25-34.
- Newby, N. M. (1996). *Reliability and testing of the family sense of coherence scale in chronic illness*. Unpublished master thesis, School of Saint Louis University.
- Sagy, S. (1998). Effects of personal, family and community characteristics of emotional reactions in a stress situation: The golan heights negotiations. *Youth and Society, 29*, 311-329.
- Sagy, S. & Dotan, N. (2001). Coping resources of maltreated children in the family: A salutogenic approach. *Child Abuse & Neglect: The International Journal, 25*(11), 1463-1480.
- Scherler, R. H. (2004). *A comparison of finnish and Turkish university students on the short form of the sense of coherence scale*. Psychology Congress, Oral Presentation, Finland.

- Scherler, R. H., & Lajunen, T. (1997, July). *A comparison of finnish and Turkish university students on the short form of the sense of coherence scale*. Fifth Congress of European Psychology. Oral Presentation, Dublin, Ireland.
- Schnyder, U., Buchi, S., Sensky, T., & Klaghofer, R. (2000). Antonovsky's sense of coherence: Trait or state? *Psychotherapy and Psychosomatic*, *69*, 296-302.
- Tabachnick, B. G., & Fidell, L. S. (1996). *Using multivariate statistics* (3. edition). New York: Harper Collins.
- Wickens, L., & Greeff, A. (2005). Sense of family coherence and the utilization of resources by first year students. *American Journal of Family Therapy*, *33* (5) 27-441.



Copyright of Educational Sciences: Theory & Practice is the property of EDAM- Education Consultancy Limited and its content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.