Family Environment Scale (prepared Hyunkyung Choi, PhD, RN, WHNP)

Title of Measure: Family Environment Scale (FES)

Website: <u>https://www.mindgarden.com/family-environment-scale/150-fes-manual.html</u> Reference for original article(s) describing how the measure was developed and tested:

- Moos, R. H. (1974). Family environment scale preliminary manual. *Palo Alto, CA:* Consulting.
- Moos R. H. (1990). Conceptual and empirical approaches to developing family-based assessment procedures: resolving the case of the Family Environment Scale. *Family* process, 29(2), 199–211. <u>https://doi.org/10.1111/j.1545-5300.1990.00199.x</u>
- Moos, R. H., & Moos, B. S. (1994). Family environment scale manual. Consulting Psychologists Press
- Moos, R.H., & Moos, B.S. (2009). Family Environment Scale manual and sampler set: development, applications and research. Mind Gard, Inc., Palo Alto, CA.

Purpose/Background:

- **Purpose**: The FES was developed to assess the social climates of families. It focuses on the measurement and description of the interpersonal relationships among family members, on the directions of personal growth which are emphasized in the family and the basic organizational structure of the family.
- It gives counselors and researchers a way of examining each family member's perceptions of the family in three ways—as it is (real), as it would be in a perfect situation (ideal) and as it will probably be in new situations (expected).
- It has been widely used in clinical settings, to facilitate family counseling and psychotherapy, to teach clinicians and program evaluators about family systems, and in program evaluation. It can be used for individual and family counseling, or for research and program evaluation.

Psychometrics:

- Cronbach's alphas for the subscales of Form R range from .61-.78 Moos & Moos, 2009
- According to Galea (2010), face and content validity of the FES is "supported by the clear statements relating to the 10 subscale domains. Moos (1990) contends that each of the subscales was developed and "based on conceptually derived definitions of central constructs."
- Psychometrics are available for various populations and translations of the FES

• Malaysia version

- Gan, W. Y., Mohamad, N., & Law, L. S. (2018). Factors associated with binge eating behavior among Malaysian adolescents. *Nutrients*, *10*(1), 66. <u>https://doi.org/10.3390/nu10010066</u>
- Portuguese version
 - Tavares, A., Crespo, C., & Ribeiro, M. T. (2023). Assessing Silent Conflict: Results from the Portuguese Version of the Silent Interparental Conflict Scale. *Contemporary Family Therapy*, 45(1), 1-10. <u>https://doi.org/10.1007/s10591-021-09587-5</u>
- Chinese version
 - Shao, X., & Ni, X. (2021). How Does Family Intimacy Predict Self-Esteem in Adolescents? Moderation of Social Media Use Based on Gender Difference. SAGE Open, 1-10. <u>https://doi.org/10.1177/21582440211005453</u>

- Hong Kong
 - Suh, H. N., Yuen, M., Wang, K. T., Fu, C. C., & Trotter, R. H. (2014). Comparing perfectionist types on family environment and well-being among Hong Kong adolescents. *Personality and Individual Differences*, 70, 111-116. https://doi.org/10.1016/j.paid.2014.06.023

o Japanese version

Hiratsuka, R., Aoyama, M., Masukawa, K., Shimizu, Y., Hamano, J., Sakaguchi, Y., ... & Miyashita, M. (2021). The Association of Family Functioning With Possible Major Depressive Disorders and Complicated Grief Among Bereaved Family Members of Patients With Cancer: Results From the J-HOPE4 Study, a Nationwide Cross-Sectional Follow-Up Survey in Japan. *Journal of Pain and Symptom Management*, *62*(6), 1154-1164. https://doi.org/10.1016/j.jpainsymman.2021.06.006

• New Zealand

- Chu, J. T. W., Bullen, P., Farruggia, S. P., Dittman, C. K., & Sanders, M. R. (2015). Parent and adolescent effects of a universal group program for the parenting of adolescents. *Prevention Science*, *16*, 609-620. https://doi.org/10.1007/s11121-014-0516-9
- o Spain
 - Verdolini, N., Amoretti, S., Mezquida, G., Cuesta, M. J., Pina-Camacho, L., García-Rizo, C., ... & Bernardo, M. (2021). The effect of family environment and psychiatric family history on psychosocial functioning in first-episode psychosis at baseline and after 2 years. *European Neuropsychopharmacology*, *49*, 54-68. https://doi.org/10.1016/j.euroneuro.2021.03.015
 - Torres-Rodríguez, A., Griffiths, M. D., Carbonell, X., & Oberst, U. (2018). Internet gaming disorder in adolescence: Psychological characteristics of a clinical sample. *Journal of behavioral addictions*, 7(3), 707-718. https://doi.org/10.1556/2006.7.2018.75

o Greece

- Charalampous, K., Kokkinos, C. M., & Panayiotou, G. (2013). The Family Environment Scale: Resolving psychometric problems through an examination of a Greek translation. *International Journal*, *13*(2), 81-99.
- o Israel
 - Sela, Y., Zach, M., Amichay-Hamburger, Y., Mishali, M., & Omer, H. (2020). Family environment and problematic internet use among adolescents: The mediating roles of depression and fear of missing out. *Computers in Human Behavior*, *106*, 106226. https://doi.org/10.1016/j.chb.2019.106226

• Validity with alcoholic families

- Sanford, K., Bingham, C. R., & Zucker, R. A. (1999). Validity issues with the Family Environment Scale: Psychometric resolution and research application with alcoholic families. *Psychological Assessment*, *11*(3), 315. <u>https://doi.org/10.1037/1040-3590.11.3.315</u>
- Short-form FES
 - Quick, V., Delaney, C., Eck, K., & Byrd-Bredbenner, C. (2021). Family social capital: Links to weight-related and parenting behaviors of mothers with young children. *Nutrients*, *13*(5), 1428. <u>https://doi.org/10.3390/nu13051428</u>

Scoring Procedure:

- The FES (90 items) is made up of ten subscales measuring three underlying dimensions of the family environment:
 - Family Relationship
 - Personal Growth
 - o System Maintenance and Change
- There are three forms of the FES:
 - Form R measures the respondent's current perception of the family environment
 - Form I measures the respondent's ideal preferences for the family environment
 - Form E measures the respondent's that individuals have in relation to their family environment
- The family's mean raw score can be determined by averaging the subscale raw scores for all members. Raw score to Standard score conversion tables can be found in the FES Manual's Appendix X. FES total raw scores range from 0 (complete agreement between family members) to 90 (total disagreement between family members).

Norms/or Comparative Data: Normative data is available for normal and distressed families <u>https://www.sralab.org/rehabilitation-measures/family-environment-scale-fourth-edition</u>

Populations the measure has been used with:

- Normal families
 - Distressed families
 - Families of individuals with alcohol use problems
 - Families with psychiatric patients
 - Families with a child or adolescent in a crisis situation
 - o Families with bipolar and non-bipolar children
 - Families of individuals with TBI
 - Families of adolescents
 - Families of youth with obsessive-compulsive disorder
 - Functional, distressed, and abusive families
 - Families of undergraduate students

Languages the measure is available in:

• The FES has been translated into 22 languages - Arabic, Chinese (traditional), Danish Dutch, Farsi (Form R only), Finnish, French, Greek, Hebrew, Hindi, Italian, Japanese, Korean, Malay (Form R only), Norwegian (Form R only), Polish, Portuguese, Slovenian (Form R only), Spanish (Form R only), Swedish, Tagalog (Form R only), Thai

Strengths and Limitations of the measure:

- The FES is one of the most widely used family functioning measurement tools. Since its development, the FES has been used for many different types of families, providing an excellent comparison source. The FES proposes three family environment typologies (Interpersonal Relationship, Personal Growth, and System Maintenance) based on the 10 subscales (Cohesion, Expressiveness, Conflict, Independence, Achievement, Intellectual-Cultural, Active recreational, and Moral-religious emphasis, Organization, and Control). Because of the clear conceptual structure of the FES and its usefulness in clinical and research settings, it is likely to be used in the future.
- However, FES is also criticized for the following issues.
 - The reliability coefficients generated were lower than those originally reported for this instrument; most coefficients generated were below the acceptable level for practical or research use, and there was considerable variation in the reliabilities across types of stressed families. An attempt to generate more reliable scales using the original items was unsuccessful, and questions about the validity of the subscales were raised (Roosa & Beals, 1990).

- The internal consistency reliability of the FES was criticized for being low compared to the generally accepted range; in particular, the Expressiveness, Independence, and Achievement Orientation subscales were criticized for having low reliability and should be used with caution. It was also pointed out that the 10 subscales of the FES are not well categorized (Loveland-Cherry et al., 1989).
- A study of Australian adolescents also found low to moderate reliability for most subscales except cohesion, conflict, and moral and religious emphasis (Boyd et al., 1997).
- When targeting husbands and wives in nonclinical families, it is recommended to apply a two-factor (Cohesion vs. Conflict dimension, Organization/Control dimension) rather than the three-factor solution proposed by Moos (Chipuer & Villegas, 2001).
- The quality of the translated FESs cannot be guaranteed especially those that do not report a validation process. In order to properly measure family environment characteristics using the FES, the tool needs to be validated with families in each country (e.g., Park, 2004).
- References for articles that include a discussion of the strengths and limitations of the measure:
 - Boyd, C. P., Gullone, E., Needleman, G. L., & Burt, T. (1997). The Family Environment Scale: reliability and normative data for an adolescent sample. *Family Process*, *36*(4), 369–373. <u>https://doi.org/10.1111/j.1545-5300.1997.00369.x</u>
 - Chipuer, H. M., & Villegas, T. (2001). Comparing the second-order factor structure of the Family Environment Scale across husbands' and wives' perceptions of their family environment. *Family Process*, *40*(2), 187–198. <u>https://doi.org/10.1111/j.1545-5300.2001.4020100187.x</u>
 - Roosa, M. W., & Beals, J. (1990). Measurement issues in family assessment: the case of the Family Environment Scale. *Family Process*, 29(2), 191–198. <u>https://doi.org/10.1111/j.1545-5300.1990.00191.x</u>
 - Loveland-Cherry, C. J., Youngblut, J. M., & Leidy, N. W. (1989). A psychometric analysis of the Family Environment Scale. *Nursing Research*, *38*(5), 262–266.
 - ↔ Park, J. H. (2004). Validity of the family environment scale-Korean version. J Korean Fam Ther, 12, 1-26.

References for articles by IFNA members and others who have used the measure:

- Galea, M. (2010). Does child maltreatment mediate family environment and psychological well-being? *Child Development*, 1034, 1-45.
- Glaser, B. A., Sayger, T. V., & Horne, A. M. (1993). Three types of Family Environment Scale profiles: Functional, distressed, and abusive families. *Journal of Family Violence*, 8(4), 303-311 <u>https://doi.org/10.1007/BF00978095</u>
- Negy, C., & Snyder, D. K. (2006). Assessing family-of-origin functioning in Mexican American adults: retrospective application of the family environment scale. Assessment, 13(4), 396–405. <u>https://doi.org/10.1177/1073191106289809</u>
- Peris, T. S., Sugar, C. A., Bergman, R. L., Chang, S., Langley, A., & Piacentini, J. (2012). Family factors predict treatment outcome for pediatric obsessive-compulsive disorder. *Journal of Consulting and Clinical Psychology*, *80*(2), 255–263. <u>https://doi.org/10.1037/a0027084</u>
- Sanford, K., Bingham, C. R., & Zucker, R. A. (1999). Validity issues with the Family Environment Scale: Psychometric resolution and research application with alcoholic

families. *Psychological Assessment*, *11*(3), 315. <u>https://doi.org/10.1037/1040-3590.11.3.315</u>

- Yeh, H. Y., Ma, W. F., Huang, J. L., Hsueh, K. C., & Chiang, L. C. (2016). Evaluating the effectiveness of a family empowerment program on family function and pulmonary function of children with asthma: A randomized control trial. *International Journal of Nursing Studies*, *60*, 133–144. <u>https://doi.org/10.1016/j.ijnurstu.2016.04.013</u>
- Erickson, S. J., Dinces, S., Kubinec, N., & Annett, R. D. (2022). Pediatric Cancer Survivorship: Impact Upon Hair Cortisol Concentration and Family Functioning. *Journal* of Clinical Psychology in Medical Settings, 29(4), 943-953. https://doi.org/10.1007/s10880-022-09858-9
- Klein, C. C., Bruns, K. M., McLaughlin, L. E., Blom, T. J., Patino Duran, L. R., & DelBello, M. P. (2022). Family environment of youth with first episode Mania. *Clinical child psychology and psychiatry*. <u>https://doi.org/10.1177/13591045221141773</u>
- Darrow, S. M., Accurso, E. C., Nauman, E. R., Goldschmidt, A. B., & Le Grange, D. (2017). Exploring types of family environments in youth with eating disorders. *European Eating Disorders Review*, 25(5), 389-396. <u>https://doi.org/10.1002/erv.2531</u>