

Survey of Family Environment (SFE) (prepared by Junko Honda, PhD, RN, PHN, MBA, CTN-A and colleagues)

Title of Measure: Survey of Family Environment (SFE)

Website: Provision of SFE-E, the English version of the Survey of Family Environment

<http://www.familynursing.org/theory/thehohashinotes/sfe/>

Reference for original article(s) describing how the measure was developed and tested:

- Hohashi, N., & Honda, J. (2012). Development and testing of the Survey of Family Environment (SFE): a novel instrument to measure family functioning and needs for family support. *Journal of Nursing Measurement, 20*(3), 212–229.
<https://doi.org/10.1891/1061-3749.20.3.212>

Purpose/Background:

- Hohashi's Concentric Sphere Family Environment Model (CSFEM; Hohashi & Honda, 2011) is a newly proposed family nursing theory for holistically understanding the family environment that acts on family well-being. The Survey of Family Environment (SFE-J), grounded in the CSFEM, for measuring family's perceived family functioning and family's perceived needs for family support.

Psychometrics:

- Internal consistency reliability was high as measured by Cronbach's alpha coefficients. Temporal stability over a 2-week interval was supported by high (substantial or perfect) and significant intraclass correlation coefficients. The total score for the SFE-J was significantly correlated with the Japanese version of the Feetham Family Functioning Survey (FFFS-J), indicating an acceptable concurrent validity. Construct validity was supported by a confirmatory factor analysis that evaluated the five-factor structure to measure the concept of CSFEM Utilization

Scoring procedure:

Participants are asked to respond to instrument items, and the respective satisfaction score (SS) and importance score (IS) of each item are obtained. To assess the need for family support, the needs score (NS) is obtained by indirect calculation from the SS and IS. To measure SS, respondents were asked to rate the items on a 5-point Likert scale according to the satisfaction level as a family with the items.

Response options were 1 = dissatisfied, 2 = somewhat dissatisfied, 3 = neither satisfied nor dissatisfied, 4 = somewhat satisfied, and 5 = satisfied. A 5-point Likert scale was chosen to allow a neutral midpoint for respondents who may truly be neutral regarding an item, and consideration was given so that each participant would not be forced to choose an attitude of either satisfied or dissatisfied. The SS of each item is scored from 1 to 5 points, and a higher score is considered to indicate a higher level of family functioning. At the same time, the level of importance of the respective items of family functioning was evaluated using the 5-point Likert scale, which gives their IS. The IS for each item is scored from 1 to 5 points with 1 indicating unimportant and 5 representing important. The NS for each item is obtained by cross calculating the IS against a 6-SS (with scores ranging from 1 to 25 points). Consequently, domains/items with a high NS signify a low SS and high IS, or equivalently represent low family functioning despite their being considered important. Therefore they can be used in conjunction with conventional nursing methods to help determine domains/items to be given higher priority for family nursing interventions. As the number of items to which the respondents replied varied, calculation of the overall scores or scores broken down by domains was obtained using the item average. In other words, for analytical purposes, the sum of SS divided by the number of responded items gave the "overall satisfaction score" (OSS) and "item average for SS broken down by domain," and the sum of NS divided by the number of responded items gave the "overall needs score" (ONS) and "item average for

NS broken down by domain.”

Norms/Comparative Data: no normative data yet

Populations the measure has been used with:

- Families of children of childrearing age
- Families with patients diagnosed with IBD
- Families with family members in college
- Single parent families (families with children enrolled in nurseries and kindergartens who were either living in remote, rural islands or in an urban city on the mainland in Japan)
- Families with children enrolled in nurseries and kindergartens
- Childrearing families in Hong Kong
- Families with children at the elementary to high school level

Languages the measure is available in:

- Japanese
- English
- Chinese

Strengths and Limitations of the measure:

- Strengths:
 - The disparities in scores between husbands and wives in the OSS, OIS, and ONS are presented in Table 3. The families' OSS was 3.77 (SD 5 .26). When applied to paired partners, the OSS was 3.78 (SD 5 .32) for husbands and 3.76 (SD 5 .30) for wives, with no significant differences between paired partners. Likewise, in the OIS and ONS as well, no significant differences were observed between paired partners.
 - The SFE-J is a reliable and valid instrument to assess not only intrafamily functioning but also interfamily functioning and, by identifying items/domains with high requirements for family support, serves to facilitate the providing of appropriate support to families.
- Limitations
 - Because this research recruited the fathers and mothers having children at kindergartens/ nursery schools, there is a need to replicate the findings obtained and to assess the generalizability of the findings among family members other than husbands/fathers and wives/ mothers, in families other than child-rearing families, and to obtain clinical samples that differ from community samples.
 - SFE was used only for childrearing family so far.
 - Use of abstract questions, the question related to irregular situations for the family member, different understanding of the question by the family member, difference in the degree of importance that the family member accords to the question, and different evaluation standards by the family member.
 - It is difficult to assess the current situation related to the family as a whole.
- **Reference for articles that include a discussion of strengths and limitations of the measure:**

- Hondo, J., Nakai, Y., Kakazu, S., & Hohashi, N. (2015). Factors affecting the perception of family functioning among couples in child-rearing Japanese families. *Open Journal of Nursing*, 5, 407-415. <https://doi.10.4236/ojn.2015.55044>

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

- Hiratani, Y., Honda, J., & Hohashi, N. (2016). The family intervention needs of families with children of child-rearing age residing on remote islands: comparisons with urban families, utilizing the Japanese Version of the Survey of Family Environment (SFE-J). *Japanese Journal of Research in Family Nursing*, 22(1), 15-25.

- Hiratani, Y., Honda, J., & Hohashi, N. (2012). Abstract journal of the 19th Annual Conference of Japanese Association for Research in Family Nursing, 147.
- Hiratani, Y., & Hohashi, N. (2016). A comparison study of single-parent families living on remote, rural Islands and in urban settings in Japan. *The Journal of Nursing Research : JNR*, 24(2), 145–152. <https://doi.org/10.1097/jnr.0000000000000110>
- Hondo, J., Hohaski, N., Leung, S.K. (2016). Reliability and validity of the Chinese version of the Survey of Family Environment (SFE). *Open Journal of Nursing*, 6, 820-832. <https://doi.10.4236/ojn.2016.69081>
- Hondo, J., Nakai, Y., Kakazu, S., & Hohashi, N. (2015). Factors affecting the perception of family functioning among couples in child-rearing Japanese families. *Open Journal of Nursing*, 5, 407-415. <https://doi.10.4236/ojn.2015.55044>
- Hohashi, N., & Honda, J. (2012). Development and testing of the Survey of Family Environment (SFE): a novel instrument to measure family functioning and needs for family support. *Journal of nursing measurement*, 20(3), 212–229. <https://doi.org/10.1891/1061-3749.20.3.212>
- Kakazu, S., Honda, J., & Hohashi, N. (2017). An examination of evaluation of family functioning scores in terms of family growth and development. Abstract journal of the 24th Annual Conference of Japanese Association for Research in Family Nursing, 128.
- Miki, Y., & Hohashi, N. (2016). An examination of the family intervention needs of patients with IBD, utilizing the Japanese Version of the Survey of Family Environment, (SFE-J). Abstract journal of the 23rd Annual Conference of Japanese Association for Research in Family Nursing, 158.
- Nishimoto, Y. Mizumoto, N., & Hohashi, N. (2015). An evaluation of family functioning of families with family members in college, utilizing the Japanese version of the Survey of Family Environment (SFE-J). Abstract journal of the 22nd Annual Conference of Japanese Association for Research in Family Nursing, 136.