Family Inventory of Resources for Management (FIRM) (prepared by Kim Mooney-Doyle, PhD, RN, CPNP-AC)

Title of Measure: Family Inventory of Resources for Management (FIRM)

Website: https://www.mccubbinresilience.org/measures.html

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

 McCubbin, H.I., Comeau, J. & Harkins. (1981). Family Inventory of Resources for Management (FIRM). In H.I. McCubbin, A.I. Thompson, & M.A., McCubbin (1996) Family assessment: Resiliency, coping and adaptation – inventories for research and practice. (pp. 307-323). Madison: University of Wisconsin System.

Purpose/Background: In an attempt to assess the family's repertoire of resources, the Family Inventory of Resources for Management (FIRM) was developed by Hamilton McCubbin, Joan Comeau, and Jo Harkins (1981). In order to describe or predict how a family adapts to stressful events, the Resiliency Model of Family Stress, Adjustment, and Adaptation calls for information about which resources a family has, does not have, or has depleted. It is hypothesized that families possessing a larger repertoire of resources will manage more effectively and will be able to adapt better to stressful situations. Along with the social-psychological resources assessed by FIRM, the clinician or research investigator should consider two sociodemographic resources: family income and the parents' education.

Psychometrics:

- Internal reliability for four subscales: (Family strengths I-IV)= Cronbach's alpha: .89
 - o I: Esteem and communication: Cronbach's alpha: .85
 - o II: Mastery and health: Cronbach's alpha: .85
 - o III: Extended family social support: Cronbach's alpha: .62
 - o IV: financial well-being): Cronbach's alpha: .85
- Intercorrelation matrix: scales correlate moderately (P.310)
- Validity: hypothesized FIRM scales would be moderately correlated with family Environment.
 - Positively correlated with dimensions of cohesion, expressiveness and organization (p. 311)
 - Negative correlations between family conflict and four FIRM scales (p. 311)
- Test-retest reliability: no data presented in original document (McCubbin, Comeau etc.)

Scoring Procedure:

- Scoring procedures involve summing the values of the responses (0=not at all; 1=minimally; 2=moderately; 3=very well)
- 30 items are reverse coded:
 - 2, 3, 4, 6, 7, 8, 9, 10, 11, 13, 14, 15, 16, 17, 18, 21, 21, 22, 23, 25, 26, 27, 28, 29, 32, 34, 41, 49, 57, 61
 - o (3=not at all; 2=minimally; 1=moderately; 0=very well)
- Add items for subscales (esteem and communication; mastery and health; extended family social support; financial well-being) for total FIRM score
- Two additional subscales (sources of financial support and social desirability) were added to give additional information but are not considered major dimensions or subscales of FIRM and not included in analysis
- High score indicates resource-rich family

Norms/or Comparative Data

- Table 8.3 in original document
- Family strengths I:
 - o esteem and communication: standard mean: 35; deviations: 6
- Family strengths II:

- o Mastery and health: mean: 39; deviations 9
- Extended family social support: standard mean: 9; deviations: 2
- o Financial well-being: standard mean: 29; deviations: 9

Populations it measure has been used with:

- Families with a chronically ill child (myelomeningocele and CP): McCubbin, M.
- Cardiac surgery patient/spouse pairs 6 months post-op
- Single-parent families of children with CP; matched to two-parent families based on severity of impairment
- Families of infant on apnea monitoring program
- Families of infants with emergent apnea episode and subsequently placed on home monitor
- Families coping with major vascular surgery and recovery
- Families of preschoolers with developmental disabilities
- Caregivers of older adults
- Intact families and multiple family members evaluated
- Children 6-9 years old and their mothers
- AYA with spina bifida and their families
- Families of children with Down syndrome regarding siblings
- Families of children with Down syndrome

Languages the measure is available in:

- Chinese
- English

Strengths and Limitations of the measure:

- Strengths:
 - Easy scoring
 - Allows measurement of a variable that is potentially modifiable (Van Riper, 2000)
 - o Individual subscales can be used (Ridosh et al., 2014)
 - High reliability when:
 - Used with families of AYA with and without Spina Bifida: Cronbach alpha: 0.91 (Ridosh et al., 2014)
 - Used with families whose babies had been in NICU: Cronbach alpha: mothers: 0.93; fathers: 0.90
 - Used with families of child with Down syndrome (.85; Van Riper, 2007)
 - Used with families of children with Down syndrome re siblings:
 - Alpha coefficients were .66 for the Extended Family Support subscale, .80 for Family Strengths I, and .82 for Family Strengths
 - Amended when 2 items had low reliability. Overall demonstrated good reliability in families of chronically ill children in (Sawin et al., 2002)
- Limitations
 - No translation to Spanish or other commonly-spoken languages
 - May be considered long with 69 items
 - Limited discussion of validity in original documents
 - No discussion of test-retest reliability in original documents
- References for articles that include a discussion of the strengths and limitations of the measure:
 - Sawin, K. J., Brei, T. J., Buran, C. F., & Fastenau, P. S. (2002). Factors associated with quality of life in adolescents with spina bifida. *Journal of Holistic*

nursing: Official Journal of the American Holistic Nurses' Association, 20(3), 279–304. https://doi.org/10.1177/089801010202000307

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

- McCubbin, M., & Huang, S.T.T. (1989). Family strengths in the care of handicapped children: targets for intervention. *Family Relations*, 38, 436-443. https://doi.org/10.2307/585750
- Gilliss, C. L., Neuhaus, J. M., & Hauck, W. W. (1990). Improving family functioning after cardiac surgery: a randomized trial. *Heart & Lung: The Journal of Critical Care*, *19*(6), 648–654.
- McCubbin M. A. (1989). Family stress and family strengths: a comparison of single- and two-parent families with handicapped children. Research in nursing & health, 12(2), 101–110. https://doi.org/10.1002/nur.4770120207
- Mirsoleymani, S. R., Rohani, C., Matbouei, M., Nasiri, M., & Vasli, P. (2016).
 Psychometric Properties of the Family Inventory of Resources for Management in a Sample of Iranian Family Caregivers of Cancer Patients. *Nursing research and practice*, 2016, 1401645. https://doi.org/10.1155/2016/1401645
- Ridosh, M. M., Sawin, K. J., Schiffman, R. F., & Klein-Tasman, B. P. (2016). Factors associated with parent depressive symptoms and family quality of life in parents of adolescents and young adults with and without Spina Bifida. *Journal of Pediatric Rehabilitation Medicine*, 9(4), 287–302. https://doi.org/10.3233/PRM-160399
- Sawin, K. J., Brei, T. J., Buran, C. F., & Fastenau, P. S. (2002). Factors associated with quality of life in adolescents with spina bifida. *Journal of Holistic nursing: Official Journal* of the American Holistic Nurses' Association, 20(3), 279–304. https://doi.org/10.1177/089801010202000307
- Van Riper M. (2000). Family variables associated with well-being in siblings of children with Down syndrome. *Journal of Family Nursing*, 6(3), 267-286. https://doi:10.1177/107484070000600305
- Van Riper M. (2007). Families of children with Down syndrome: responding to "a change in plans" with resilience. *Journal of Pediatric nursing*, 22(2), 116–128. https://doi.org/10.1016/j.pedn.2006.07.004