

The Resilience, Adaptation and Well-Being Project



Family Inventory of Resources for Management

FIRM

FIRM:

Family Inventory of Resources for Management

Overview

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.

Development of FIRM

The selection of items for FIRM was influenced by literature and theory in three major areas: (a) personal resources; (b) family system internal resources; and (c) social support.

Personal resources refer to the broad range of resources, qualities and aids characteristic of individual family members which are available to any family member in need. They include: financial (economic well-being); education (contributing to cognitive ability, facilitating realistic perceptions and problem solving abilities); health; and psychological attributes (personality characteristics) (George, 1980; Pearlin & Schooler, 1978).

Family system resources encompass primarily the original concepts identified by Hill (1958) and in Burr's (1973) synthesis of the literature-family adaptability and family integration or cohesion. Managerial ability (resource management) has been emphasized by proponents of family management frameworks (Deacon & Firebaugh, 1975; Paolucci, Hall, & Axinn, 1977), along with the ability to identify resources (Paolucci et al., 1977). Problem solving ability has been examined as a key family system resource (Aldous, Condon, Hill, Straus, & Tallman, 1971; Hill, 1949; Reiss, 1971).

Social Support, as defined by Cobb (1976), is information exchanged between people which provides: emotional support, resulting in the individual feeling loved and cared for; esteem support, resulting in the individual feeling esteemed and valued; and network support, resulting in the individual feeling he or she is part of a network of mutual obligation and understanding. Social support from within the family, as well as from extended family, friends, neighbors, co-workers and community, is a dimension of resources which is particularly important for managing stress and for adaptation.

Conceptual Organization

The initial instrument consisted of 98 self-report items and the respondent was asked to evaluate on a 0-3 scale how well the items describe their family. Factor analytic procedures were used on the data from 322 families with a chronically ill child (myelomeningocele and cerebral palsy) to determine the underlying dimensions. Four scales representing perceived family resources emerged from this process. The four scales in the final inventory of 68 items are:

- I. **Family Strengths I: Esteem and Communication.** This factor (15 items) reflects the presence of a combination of personal, family system and

social support resources in six areas: (a) family esteem (respect from friends, relatives, co-workers and among family members); (b) communication (sharing feelings, discussing decisions); (c) mutual assistance (helping each other and relatives); (d) optimism; (e) problem solving ability; and (f) encouragement of autonomy among family members. Items: 36, 38, 39, 44, 46, 50, 52, 53, 55, 58, 60, 62, 65, 67, 68.

- II. **Family Strengths II: Mastery and Health.** This factor includes 20 items that reflect personal, family system and social support resources along three dimensions: (a) sense of mastery over family events and outcomes (fate control, flexibility, managerial abilities); (b) family mutuality (emotional support, togetherness, cooperation); and (c) physical and emotional health. Items: 2, 3, 4, 6, 7, 8, 9, 11, 13, 14, 15, 17, 18, 20, 22, 23, 26, 27, 29, 32.
- III. **Extended Family Social Support.** This scale contains 4 items which indicate the mutual help and support given to and received from relatives. Items: 41, 48, 56, 66.
- IV. **Financial Well-Being.** This factor consisting of 16 items reflects the family's perceived financial efficacy: (a) ability to meet financial commitments; (b) adequacy of financial reserves; (c) ability to help others (relatives, the needy); (d) optimism about the family's financial future (adequacy of insurance, employment benefits, retirement income, earning power, and the family's financial future progress). Items: 35, 37, 40, 42, 43, 45, 47, 49, 51, 54, 57, 59, 61, 63, 64, 69.

Two subscales were added to give the investigator additional information, but they are not considered major dimensions or subscales of FIRM and are not included in the factor analysis (due to the dichotomous nature of the items).

- V. **Sources of Financial Support Index.** This index of financial well-being contains 7 items: 1, 10, 21, 25, 28, 31, 33.

Although the reliability of this (V) subscale is low (Cronbach's alpha = .44), the source of family income may be useful information when looked at along with actual income and/or net worth, since it reflects the sense of stability and esteem associated with income.

- VI. **Social Desirability Scale.** Items: 5, 12, 16, 19, 24, 30, 34.

This subscale is based on the Edmonds Scale of marital conventionalization (Edmonds, 1967).

Reliability

The internal reliability for these four subscales (I, II, III, & IV) is .89 (Cronbach's alpha), The internal reliabilities for the individual scales are as follows: Family Strengths I: Esteem and Communication = .85 (Cronbach's alpha); Family Strengths II: Mastery and Health = .85 (Cronbach's alpha); Extended Family Social Support =.62 (Cronbach's alpha); and Financial Well-Being =.85 (Cronbach's alpha).

The intercorrelation matrix (Table 8.1) of the FIRM scales was examined and the scales were found to correlate moderately, as might be expected with this type of instrument designed to assess dimensions of family life which are in reality related.

Table 8.1
Intercorrelation Matrix of FIRM Scales

FIRM Scales	Family Strengths I	Family Strengths II	Extended Family Social Support	Financial Well-Being	Sources of Financial Support	Social Desirability
Family Strengths I: Esteem & Communication	----	.29***	.37***	.29***	-.01	.48***
Family Strengths II: Mastery & Health	.29***	----	.27***	.28***	.17***	.46***
Extended Family Social Support	.37***	.27***	----	.19***	.05	.23***
Financial Well-Being	.29***	.28***	.19***	----	.38***	.18***
Sources of Financial Support	-.01	.17***	.05	.38***	----	-.002
Social Desirability	.48***	.46***	.23***	.18***	-.002	----

***p < .001

Validity

It was hypothesized (Comeau, 1985) that the FIRM scales would be moderately correlated with selected Family Environment scales since the latter were designed to assess family relationships and characteristics. Table 8.2 presents data showing significant positive correlations between the FIRM scales and family environment dimensions of cohesion, expressiveness and organization, and negative correlations between family conflict and four FIRM scales. These associations between family resources and desirable family functioning offer support for the validity of FIRM.

Test-Retest Reliability

No additional studies to report at this time.

Table 8.2
Correlations Between Family Resource (FIRM)
and Family Environments (FES)

FIRM Scales	Family Environment Scales			
	Cohesion	Expressiveness	Conflict	Organization
Family Strengths I: Esteem & Communication	.37***	.31***	.22***	.21***
Family Strengths II: Mastery & Health	.41***	.25***	-.30***	.19***
Extended Family Social Support	.14***	.15***	-.02	.04
Financial Well- Being	.23***	.08	-.13**	.15**
Total of the four Family Resource Scales	.46***	.27***	-.30***	.26***

*p < .05

** p < .01

*** p < .001

Additional Validity Checks

No additional studies to report at this time.

Scoring Procedures

Scoring procedures for FIRM involve summing the values of the responses (i.e., Not at all = 0, Minimally = 1, Moderately = 2, and Very well = 3). However, for thirty items (2, 3, 4, 6, 7, 8, 9, 10, 11, 13, 14, 15, 16, 17, 18, 20, 21, 22, 23, 25, 26, 27, 28, 29, 32, 34, 41, 49, 57, and 61) the values must be reversed (i.e., Not at all = 3, Minimally = 2, Moderately = 1, and Very well = 0). This will ensure that all items are weighted in the same positive direction for both the analysis and the interpretation of results. Add the items for Family Strengths I, Family Strengths II, Extended Family Social Support, and Financial Well-being to obtain the FIRM total score. Items in the subscales were mentioned earlier in the chapter.

Two 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 are not included in the analysis.

Norms and/or Comparative Data

A brief overview of the means and standard deviations for the FIRM scales are presented in Table 8.3.

Instrument Utilization for Research

To facilitate the review of research involving the use of FIRM, a summary table of related publications is provided. This table includes the authors, subjects, reliabilities, and notations on findings. The results of our review of FIRM are presented in Table 8.4.

Notes

1. The earlier writings on this instrument included a comprehensive description of the instrument's development. For the sake of brevity we limited the chapter to the basic information that users have requested and needed. If you desire a copy and are unable to find our earlier publications, either the 1987 or the 1991 edition, please write to us at the Center for Excellence in Family Studies, Family Stress, Coping and Health Project, University of Wisconsin-Madison, 1300 Linden Drive, Madison, WI 53706 or send email to manual @macc.wisc.edu. There will be a charge for these additional materials.
2. When referencing this instrument, the proper citation is: McCubbin, H.I., Comeau, J., & Harkins, J. (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.

Table 8.3
Means and Standard Deviations for FIRM Scales

Scale	Number of items	Standard Mean	Deviations
Family Strength I:			
Esteem & Communication	15	35	6
Family Strength II:			
Mastery & Health	20	39	9
Extended Family Social Support	4	9	2
Financial Well-Being	16	29	9
Total of the Above Four Scales	55	110	18
Sources of Financial Support	7	5	3
Social Desirability	7	12	1

Table 8.4
Family Inventory of Resources for Management (FIRM):
Select Published Reports

Author(s)	Sample	N Count	Alpha Reliability	Validity Notes
Auslander, W.F., Bubb, J., Rogge, M., & Santiago, J.V. (1993)	Children recently diagnosed with insulin-dependent diabetes mellitus	53	.89	<ul style="list-style-type: none"> • Family resources (FIRM) were significantly related to child's higher level of metabolic control.
Clause, R. (1993)	N/A	N/A	N/A	<ul style="list-style-type: none"> • Master's Thesis
Collins, E. (1993)	N/A	N/A	N/A	<ul style="list-style-type: none"> • Doctoral Dissertation
Duong, D. (1994)	N/A	N/A	N/A	<ul style="list-style-type: none"> • Doctoral Dissertation
Fong, J. (1993)	N/A	N/A	N/A	<ul style="list-style-type: none"> • Doctoral Dissertation
Giard, J. (1995)	N/A	N/A	N/A	<ul style="list-style-type: none"> • Master's Thesis
Filliss, C.L., Neuhaus, J.M., & Hauck, W.W. (1990)	Cardiac surgery patient/spouse pairs 6 months after surgery	67	N/A	<ul style="list-style-type: none"> • No significant effects of treatment on family resources (FIRM) after surgery
Halvorsen, J.G. (1991)	Families randomly selected from family practice clinics in Minnesota & University of Minnesota faculty & staff	382	.89	<ul style="list-style-type: none"> • FIRM significantly related to new Family Stress & Support Inventory measuring intrafamilial stress & support
Knecht, L.D. (1991)	Mothers with infants in home apnea monitoring program	124	.92	<ul style="list-style-type: none"> • FIRM was significantly related to mood disturbance in mothers of diagnosed children for all time periods. • FIRM explains family functioning for Time 1 & 2 but not for Time 3.
Kunnie, T.Y. (1992)	N/A	N/A	N/A	<ul style="list-style-type: none"> • Doctoral Dissertation
Leavitt, M.B. (1990)	Families coping with major vascular surgery & recovery	42	.85	<ul style="list-style-type: none"> • Family resources (FIRM) related to mastery & health at admission
Mather, M.S. (1993)	N/A	N/A	N/A	<ul style="list-style-type: none"> • Doctoral Dissertation

Table 8.4 cont.
Family Inventory of Resources for Management (FIRM):
Select Published Reports

Author(s)	Sample	N Count	Alpha Reliability	Validity Notes
McCubbin, M.A. (1989)	Single-parent families of children with cerebral palsy, matched to two-parent families based on severity of impairment	166	N/A	<ul style="list-style-type: none"> • In general, no difference in family resources between single-parent & two-parent families with one exception: single-parent families were significantly lower on familial resources, as predicted.
Morena, P. (1995)	N/A	N/A	N/A	<ul style="list-style-type: none"> • Doctoral Dissertation
Phipps, S., Drotar, D., Joseph, C., Feiss, C., & Doershuk, C. (1989)	Families of previously healthy infants who had an emergency apnea episode & were subsequently placed on a home apnea monitor	30	N/A	<ul style="list-style-type: none"> • A highly significant main effect for resources was evident, & subjects with greater family resources experienced less distress throughout the study period.
Reddon, J.E., McDonald, L., & Kysela, G.M. (1992)	Families raising preschoolers with developmental disabilities	16	N/A	<ul style="list-style-type: none"> • The less the family resources as measured by FIRM, the higher the family functioning scores
Scott, L.S., (1992)	N/A	N/A	N/A	<ul style="list-style-type: none"> • Doctoral Dissertation
Scott, L.S., (1993)	N/A	N/A	N/A	<ul style="list-style-type: none"> • Doctoral Dissertation
Shin, H. (1995)	N/A	N/A	N/A	<ul style="list-style-type: none"> • Doctoral Dissertation
Theis, S., Moss, J., & Pearson, M. (1994)	Caregivers of elderly	130	N/A	<ul style="list-style-type: none"> • FIRM did not suggest pathology in the area of resource management, although the ranges show diversity of scores.
Weigel, D., & Weigel, R. (1993)	Intact families (all 4 members completed questionnaires)	284	.76	<ul style="list-style-type: none"> • Subscale of FIRM used: 4 items from esteem & communication subscale. Significant differences were found. The younger generation saw fewer communication resources & were less satisfied with intergenerational communication.

Table 8.4 cont.
Family Inventory of Resources for Management (FIRM):
Select Published Reports

Author(s)	Sample	N Count	Alpha Reliability	Validity Notes
Wertlieb, D., Weigel, C., & Feldstein, M. (1987)	Children 6-9 years of age & their mothers	159		<ul style="list-style-type: none">• A strong inverse relationship between a family's social support and child behavior symptomatology was evident.

FIRM

FAMILY INVENTORY OF RESOURCES FOR MANAGEMENT

Chinese Version

我們想了解您家中有那些可用的資源或支持.請閱讀下列敘述,並請針對其對您家庭情況描述的適切程度來作答.若此敘述**從未發生**在您家中請選擇”0”;若此敘述僅**偶爾發生**在您家中請選擇”1”;若此敘述**經常發生**在您家中請選擇”2”;若此敘述描述您家中情形非常正確,也就是在您家中**總是如此**請選擇”3”.

	從	偶	經	總	未
常	如	如	如	如	爾
是	此	此	此	此	
	0	1	2	3	
1. 我們家中的收入有些來自我們的投資(例如:房地產,租賃房屋,股票,債券等).....	0	1	2	3	
2. 經常覺得身體疲倦乃是我們家裏的一個問題.....	0	1	2	3	
3. 我們必須互相嘮叨抱怨才能把事情做完.....	0	1	2	3	
4. 我們對未來不做太長遠的計劃,因為許多事情最後是好或是壞總是靠運氣.....	0	1	2	3	
5. 我們的家庭正如世界上任何家庭一樣,能夠調適得很好..	0	1	2	3	
6. 家中只有一個人賺錢養家是(將會是)我們家的一個問題	0	1	2	3	
7. 我們家人認為全家人相互彼此的付出是理所當然的.....	0	1	2	3	
8. 我們覺得有時無法完全掌控我們生活的方向.....	0	1	2	3	
9. 我們家中有些人完全是付出,而有些人則完全是獲得.....	0	1	2	3	
10. 我們幾乎全靠社會福利或其它公益組織的財物資助(協會、基金會.....等).....	0	1	2	3	
11. 我們似會延遲做決定.....	0	1	2	3	

- 12.我們家人間彼此完全了解. 0 1 2 3
- 13.我們家人承受著許多情緒上或精神上的壓力..... 0 1 2 3
- 14.許多事情似乎都會影響到家人能否彼此分憂..... 0 1 2 3
- 15.我們家中大部份有關金錢的運用,僅由家中某一個人做
決定..... 0 1 2 3
- 16.家人有時會做一些令彼此不高興的事..... 0 1 2 3
- 17.我們的家人好像比別人有更多的健康問題(感冒,傷風 等) 0 1 2 3
- 18.在我們家中,有些人負擔許多的責任,然而其他的人
卻很少負擔責任..... 0 1 2 3
19. 當我們家人聚在一起時,沒有任何人會比我們更快樂.... 0 1 2 3

常 是	從 偶	經 總	未 爾
此 此 此 此	如 如	如 如	
	0	1	2 3

20. 當事情的結果並不照原先的計劃時, 我們家人會因此
而不安. 0 1 2 3
- 21.我們的收入幾乎全仰賴贍養費或(及)是兒童補助..... 0 1 2 3
- 22.覺得難過或心情不好,是我們家中的一個問題..... 0 1 2 3
- 23.讓家人彼此相互合作是很困難的..... 0 1 2 3
- 24.如果我們家人有任何不對的地方,我們並不會察覺到..... 0 1 2 3
- 25.我們幾乎完全倚賴退休金來維生..... 0 1 2 3

26.我們常覺得對所遭遇的事,我們能改變的很有限.....	0	1	2	3
27.我們不斷地有相同的問題---我們似乎未能從過去的 錯誤中學習到經驗.	0	1	2	3
28.我們家中一個或多個原本有工作的家人最近失業.....	0	1	2	3
29.家中有些事是我們必須做的,但似乎尚未完成.....	0	1	2	3
30.我們覺得我們的家庭非常完美成功.....	0	1	2	3
31.除了我們現在居住的地方,我們還擁有其它土地或財產..	0	1	2	3
32.我們似乎非常專注於工作及(或)學校的活動,以致於 花很少的時間像家人般的相聚.....	0	1	2	3
33.我們擁有(或即將購買)自己的房子.....	0	1	2	3
34.有時我們會感到家人間並不非常地相愛.....	0	1	2	3
35.如果我們熟識的親戚有財務上的困難,我們覺得有能力 協助他們解決問題.....	0	1	2	3
36.朋友們都好像很喜歡到我們家來.....	0	1	2	3
37.我們覺得我們有很好的退休金政策.....	0	1	2	3
38.當我們做了計劃,我們幾乎能確定可以實行它.....	0	1	2	3
39.在我們家,我們了解彼此可以提供哪些幫助.....	0	1	2	3
40.我們似乎沒有多大困難準時付清各種帳單.....	0	1	2	3
41.我們的親戚似乎從我們家獲取很多,但回饋的卻很少.....	0	1	2	3
42.如果我們想要向銀行借款,不會有任何的問題.....	0	1	2	3
43.我們覺得手頭上有足夠的錢以應不時之需 (小於5000元).....	0	1	2	3
44.當面對問題時,我們審視每種可能解決此問題方法的				

優缺點..... 0 1 2 3

	從 未	偶 爾	經 常	總 是
如 此	如 此	如 此	如 此	如 此
	0	1	2	3

- 45.工作賺錢養家的家人,似乎都有好的員工福利
(如:保險,股票,醫療照護,教育等)..... 0 1 2 3
- 46.無論發生什麼事,我們都會往好處想..... 0 1 2 3
- 47.我們覺得有能力偶爾到外頭的餐廳吃飯,且不會影響到
家庭的預算..... 0 1 2 3
- 48.我們儘可能的常和親戚互相聯絡..... 0 1 2 3
- 49.我們似乎需要更多的人壽保險..... 0 1 2 3
- 50.在我們家,家人彼此表達正向的感情是被接受的..... 0 1 2 3
- 51.我們覺得我們有能力為正當的理由而捐獻金錢
(給有需要的人,或宗教等)..... 0 1 2 3
- 52.我們好像比我們所認識的許多家庭生活得更快樂..... 0 1 2 3
- 53.家人在傷心時哭泣是可以被接受的,即使是在別人的
面前亦是如此..... 0 1 2 3
- 54.當我們有急用時,我們有存款可用來支付所需..... 0 1 2 3
- 55.我們會先和其他家人討論我們的決定之後,才付諸執行.. 0 1 2 3

56.我們的親戚們很願意傾聽我們的問題.....	0	1	2	3
57.我們會擔心如何支付非預期的大筆花費(修房子或 修汽車等,大約36,000元左右).....	0	1	2	3
58.在家中,當我們可以彼此幫上忙時,會覺得非常的高興....	0	1	2	3
59.在我們家,我們覺得為未來而儲蓄是很重要的.....	0	1	2	3
60.我們家有工作的家人,似乎都受到他們同事的尊重.....	0	1	2	3
61.我們需要花錢時,曾發現沒有足夠的現金(或銀行沒有 足夠的存款).....	0	1	2	3
62.我們家人彼此互相尊重.....	0	1	2	3
63.我們會將一些額外的花費省下來做其它特殊的用途.....	0	1	2	3
64.我們有信心如果家中的主要收入者失去他(她)的工作, 他(她)可以再找到另一個工作.....	0	1	2	3
65.我們鼓勵家人有其自己的興趣及專長.....	0	1	2	3
66.我們對親戚為我們所做及所說的事心存感激.....	0	1	2	3
67.我們家人是眾所皆知的好國民及好鄰居.....	0	1	2	3
68.只要我們能力所及,我們會儘量幫助我們的親戚.....	0	1	2	3
69.我們覺得我們現在比5年前更富有.....	0	1	2	3