

The Resilience, Adaptation and Well-Being Project



Family Problem Solving Communication

FPSC

FPSC:

Family Problem Solving Communication

Overview

The Family Problem Solving Communication (FPSC) Index was developed by Marilyn McCubbin, Hamilton McCubbin, and Anne Thompson (1988) to assess the two dominant patterns in family communication that appear to play an important part in family coping with hardships and life catastrophes. Recognizing that all families have both positive and negative patterns of communication, the need for a measure to assess both patterns as important factors in family problem solving and resiliency was apparent. The FPSC is available in English and Spanish.

Development of FPSC

The Family Problem Solving Communication Index was developed specifically for family stress and resiliency research and to measure the problem solving and coping (PSC) component in the Resiliency Model of Family Stress, Adjustment and Adaptation (M.A. McCubbin & H.I. McCubbin, 1993) (see Chapter 1). In this model, adaptive coping strategies and problem solving communication patterns are more generalized ways of responding to family hardship and difficulties by creating a family environment or context of communication in which and through which family hardships and issues are addressed and resolved. It is assumed that the quality of family communication determines to a measurable degree how families manage tension and strain and acquire a satisfactory level of family functioning, adjustment and adaptation.

Conceptual Organization

The FPSC is a 10-item instrument with a four-point Likert scale (0=False, 1=Mostly False, 2=Mostly True, and 3=True). Family members or respondents are asked to record the degree to which the statement about their family's pattern of communication is characteristic (True) or not characteristic (False) of how their family system typically behaves. The instrument consists of two five-item subscales, Incendiary Communication and Affirming Communication.

- I. Incendiary Communication. The pattern of family communication that is inflammatory in nature and tends to exacerbate a stressful situation. Incendiary communication is measured by five items such as: When we have conflicts, we yell and scream at each other.
- II. Affirming Communication. The pattern of family communication which conveys support and caring and exerts a calming influence. Affirming communication is measured by five items such as: When we have conflicts, we are respectful of each other's feelings.

Reliability

The overall index of instrument and subscale internal consistency was determined. The alpha reliability for the FPSC instrument is .89. Incendiary Communication has an alpha reliability of .78 and Affirming Communication has an alpha reliability of .86.

Validity

The Family Problem Solving Communication Index has been validated in several large scale studies of families under stress, some of which included samples of ethnic groups (H.I. McCubbin, A.I. Thompson, Pirner, & M.A. McCubbin, 1988; H.I. McCubbin, A.I. Thompson, E.A. Thompson, Elver, & M.A. McCubbin, 1994; E.A. Thompson, H.I. McCubbin, A.I. Thompson, & Elver, 1995). Two early studies included investigations involving investment executives and their families and rural non-farm families in

the banking industry (H.I. McCubbin & A.I. Thompson, 1988; 1989). Both groups faced major economic crises-the former confronted the stock market crisis known as "Black Monday" and the latter, the economic downturn in the farming economy. Construct validity was also confirmed through two independent factor analyses with identical factor structures emerging for Incendiary and Affirming Communication. Concurrent validity was confirmed through the correlations of the Family Problem Solving Communication Index with other established criterion measures of family functioning, namely family hardiness, family cohesion, family system distress, and self actualization (H.I. McCubbin & A.I. Thompson, 1989). In the sample of 297 investment executive families who had recently experienced the market crisis (H.I. McCubbin & A.I. Thompson, 1989), Incendiary Communication was found to be positively correlated with family system distress and negatively correlated with family hardiness, family coherence, and self-actualization. Affirming Communication was negatively correlated with family system distress and positively correlated with family hardiness, family coherence, and self actualization.

In a survey of 721 Wisconsin rural banking employees who had recently experienced the farm economy crisis (H.I. McCubbin & A.I. Thompson, 1988), Incendiary Communication was positively associated with both employee and spouse appraisal of family system distress and negatively associated with family hardiness. Affirming Communication was negatively associated with both employee and spouse appraisal of family system distress and positively associated with family hardiness.

More recent studies include the survey of Caucasian, Asian, Hawaiian, and mixed race families, as well as a longitudinal study of balancing work and family issues for employees of a large insurance company (H.I. McCubbin, A.I. Thompson, Kretzschmar, et al, 1992), and the study of families with chronically ill children (M.A. McCubbin, 1988). In these investigations Incendiary Communication was inversely related to family well-being for Caucasian, Hawaiian and mixed race families. In contrast, Affirming Communication was positively related to family well-being for Caucasian, Asian, Hawaiian, and mixed race families (H.I. McCubbin & A.I. Thompson, 1992).

Test-Retest Reliability

The test-retest reliability for the subscales and overall FPSC is .86.

Additional Validity Checks

No additional validity information is available at this time.

Scoring Procedures

The FPSC may be scored in two ways. To measure Incendiary and Affirming Communication separately, the values (i.e., 0 = False, 1 = Mostly False, 2 = Mostly True, and 3 = True) of the items in each should be summed after reversing items 3 and 9 of the Incendiary Communication scale (i.e., 0 = True, 1 = Mostly True, 2 = Mostly False, and 3 = False) in order to ensure that all items are scored in the same direction for analysis and interpretation. This will make the Incendiary subscale a negative form of communication. In contrast, Affirming Communication will then be a positive attribute. The following list will help you determine which items belong to each subscale. Items which require reversal before summing are marked with an asterisk in the right hand column.

Subscale 1: Affirming Communication 2, 4, 6, 8, 10

Subscale 2: Incendiary Communication 1, 3*, 5, 7, 9*

The FPSC may also be scored to create a total score where the values (i.e., 0 = False, 1 = Mostly False, 2 = Mostly True, and 3 = True) of all ten items are summed after reversing certain items (1, 5, and 7) to ensure that all items are scored in a positive (all affirming and non-incendiary) direction for analysis and interpretation. When creating a total score (positive score) do NOT reverse items 3 and 9.

Norms and/or Comparative Data

The comparative data for FPSC are available separately for several different samples including investment executives and their families, rural non-farm families in the banking industry, Native Hawaiian families, employees of a large Midwestern insurance company, and families of children with chronic illness. Percentiles with standardized scores, means and standard deviations are in Tables 21.1 through 21.32.

Instrument Utilization for Research

The FPSC instrument is in its early stages of use and is currently being tested within the Family Stress, Coping and Health Project and by other investigators. To facilitate the review of research involving the use of FPSC, a limited summary table of related publications is provided (Table 21.33). This table includes the authors, subjects, reliabilities, and notations on findings.

Notes

1. The availability of additional psychometrics and bibliographies of other users is limited at the date of publication due to the recent development of the instrument. Upon publication of this material, wider usage is expected, and as subsequent publications become available they will be added to our database. If you would like to inquire about more recent studies, 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, M.A., McCubbin, H.I., and Thompson, A.I., (1988). Family Problem Solving Communication (FPSC). In H.I. McCubbin, A.I. Thompson & M.A McCubbin (1996). *Family assessment: Resiliency, coping and adaptation-Inventories for research and practice*. (pp. 639-686). Madison: University of Wisconsin System.

Table 21.1
Employees of a National Insurance Company Personal Problem Solving, and Communication
Affirming Communication Scale (N=1404)

Raw Scores	Standard Scores	Cumulative Percentiles
0	-4.7	.1
1	-4.3	.2
2	-3.9	.4
3	-3.5	.6
4	-3.1	.8
5	-2.7	1.3
6	-2.3	2.8
7	-1.9	4.8
8	-1.5	9.0
9	-1.1	14.8
10	-0.7	33.8
11	-0.3	47.6
12	+0.1	60.8
13	+0.5	72.7
14	+0.9	83.7
15	+1.4	100.0

Mean = 11.667

SD = 2.457

Range =15

Kurtosis = .799

Skewness = -.634

Mode = 10.0

Table 21.2
Employees of a National Insurance Company Personal Problem Solving and Communication
Incendiary Communication Scale (N=1409)

Raw Scores	Standard Scores	Cumulative Percentiles
0	-1.6	8.7
1	-1.2	16.6
2	-0.8	29.4
3	-0.4	43.1
4	0.0	59.5
5	+0.4	78.6
6	+0.8	85.8
7	+1.2	91.3
8	+1.6	94.7
9	+2.0	97.4
10	+2.4	98.7
11	+2.8	99.1
12	+3.2	99.5
13	+3.6	99.8
14-15	+4.0	100.0

Mean = 3.978

SD = 2.510

Range = 14

Kurtosis = .677

Skewness = .617

Mode = 5.0

Table 21.3
Employees of a National Insurance Company Personal Problem Solving and Communication Total
Scale (N=1399)

Raw Scores	Standard Scores	Cumulative Percentiles
0-1	-4.7	.1
2-3	-4.2	.1
4	-4.0	.4
5	-3.8	.4
6	-3.6	.5
7	-3.4	.6
8	-3.2	.9
9	-2.9	1.2
10	-2.7	1.5
11	-2.5	1.9
12	-2.3	2.6
13	-2.1	3.6
14	-1.9	4.9
15	-1.7	6.9
16	-1.4	9.0
17	-1.2	11.3
18	-1.0	14.8
19	-0.8	20.4
20	-0.6	30.9
21	-0.4	39.0
22	-0.1	47.7
23	+0.1	56.1
24	+0.3	63.0
25	+0.5	69.9
26	+0.7	76.3
27	+0.9	83.3
28	+1.1	89.4
29	+1.4	93.8
30	+1.6	100.0

Mean = 22.697

SD = 4.659

Range = 29

Kurtosis = .960

Skewness = -.684

Mode = 20.0

Table 21.4
Mothers of Children with Cardiac Illness Time 1 Personal Problem Solving and Communication
Affirming Communication Scale (N=107)

Raw Scores	Standard Scores	Cumulative Percentiles
0-6	-2.5	1.9
7	-2.1	5.6
8	-1.6	8.4
9	-1.2	13.1
10	-0.8	29.0
11	-0.4	46.7
12	+0.1	57.0
13	+0.5	67.3
14	+0.9	83.2
15	+1.3	100.0

Mean = 11.879
SD = 2.362
Range = 9
Kurtosis = -.531
Skewness = -.412
Mode = 11.0

Table 21.5
Mothers of Children with Cardiac Illness Time 1 Personal Problem Solving and Communication
Incendiary Communication Scale (N=107)

Raw Scores	Standard Scores	Cumulative Percentiles
0	-1.8	5.6
1	-1.4	10.3
2	-1.1	15.9
3	-0.7	31.8
4	-0.3	46.7
5	0.0	63.6
6	+0.4	73.8
7	+0.7	80.4
8	+1.1	87.9
9	+1.5	92.5
10	+1.8	97.2
11	+2.2	98.1
12-15	+2.5	100.0

Mean = 4.963
SD = 2.778
Range = 12
Kurtosis = -.203
Skewness = .376
Mode = 5.0

Table 21.6
Mothers of Children with Cardiac Illness Time 1 Personal Problem Solving' and Communication
Total Scale (N=107)

Raw Scores	Standard Scores	Cumulative Percentiles
0-10	-2.5	.9
11	-2.3	2.8
12	-2.1	4.7
13	-1.8	5.6
14	-1.6	9.3
15	-1.4	11.2
16	-1.2	15.0
17	-1.0	16.8
18	-0.8	24.3
19	-0.6	27.1
20	-0.4	36.4
21	-0.2	44.9
22	0.0	54.2
23	+0.2	61.7
24	+0.5	67.3
25	+0.7	74.8
26	+0.9	81.3
27	+1.1	88.8
28	+1.3	93.5
29	+1.5	95.3
30	+1.7	100.0

Mean = 21.841

SD = 4.788

Range = 20

Kurtosis = -.375

Skewness = -.389

Mode = 20.0

Table 21.7
Fathers of Children with Cardiac Illness Time 1 Personal Problem Solving and Communication
Affirming Communication Scale (N=92)

Raw Scores	Standard Scores	Cumulative Percentiles
0-5	-2.6	3.3
6	-2.2	4.3
7	-1.8	7.6
8	-1.4	15.2
9	-1.0	17.4
10	-0.6	30.4
11	+0.1	50.0
12	+0.3	65.2
13	+0.7	80.4
14	+1.1	91.3
15	+1.5	100.0

Mean = 11.348

SD = 2.438

Range = 10

Kurtosis = .143

Skewness = -.653

Mode = 11.0

Table 21.8
Fathers of Children with Cardiac Illness Time 1 Personal Problem Solving and Communication
Incendiary Communication Scale (N=92)

Raw Scores	Standard Scores	Cumulative Percentiles
0	-1.7	5.4
1	-1.4	8.7
2	-1.1	15.2
3	-0.7	34.8
4	-0.4	41.3
5	-0.1	60.9
6	+0.3	73.9
7	+0.6	79.3
8	+0.9	84.8
9	+1.3	92.4
10	+1.6	93.5
11	+1.9	96.7
12	+2.3	97.8
13	+2.6	98.9
14-15	+2.9	100.0

Mean = 5.163

SD = 2.999

Range = 14

Kurtosis = .300

Skewness = .609

Mode = 3.0

Table 21.9
Fathers of Children with Cardiac Illness Time 1 Personal Problem Solving and Communication
Total Scale (N=92)

Raw Scores	Standard Scores	Cumulative Percentiles
0-6	-3.1	1.1
7-9	-2.5	2.2
10	-2.3	3.3
11	-2.0	5.4
12	-1.8	6.5
13	-1.6	7.6
14	-1.4	12.0
15	-1.2	14.1
16	-1.0	16.3
17	-0.8	18.5
18	-0.6	21.7
19	-0.4	31.5
20	-0.2	41.3
21	0.0	46.7
22	+0.2	57.6
23	+0.4	68.5
24	+0.6	75.0
25	+0.8	80.4
26	+1.0	85.9
27	+1.2	92.4
28	+1.4	94.6
29	+1.6	96.7
30	+1.8	100.0

Mean = 21.185

SD = 4.970

Range = 24

Kurtosis = .383

Skewness = -.629

Mode = 22.0

Table 21.10
Mothers of Children with Diabetes Time 1 Personal Problem Solving and Communication
Affirming Communication Scale (N=72)

Raw Scores	Standard Scores	Cumulative Percentiles
0-8	-1.8	2.8
9	-1.4	12.5
10	-0.9	34.7
11	-0.4	48.6
12	+0.1	61.1
13	+0.6	73.6
14	+1.1	86.1
15	+1.6	100.0

Mean = 11.806
SD = 2.060
Range = 7
Kurtosis = -1.177
Skewness = .120
Mode = 10.0

Table 21.11
Mothers of Children with Diabetes Time 1 Personal Problem Solving and Communication
Incendiary Communication Scale (N=72)

Raw Scores	Standard Scores	Cumulative Percentiles
0-1	-1.8	4.2
2	-1.4	11.1
3	-0.9	27.8
4	-0.5	40.3
5	0.0	62.5
6	+0.5	77.8
7	+0.9	87.5
8	+1.4	94.4
9-10	+1.8	97.2
11-15	+2.7	100.0

Mean = 5.000
SD: 2.182
Range: 10
Kurtosis: .254
Skewness = .460
Mode = 5.0

Table 21.12
Mothers of Children with Diabetes Time 1 Personal Problem Solving and Communication Total Scale (N=72)

Raw Scores	Standard Scores	Cumulative Percentiles
0-12	-2.5	1.4
13-14	-2.2	2.8
15	-1.7	5.6
16	-1.5	9.7
17	-1.2	13.9
18	-1.0	19.4
19	-0.7	27.8
20	-0.5	38.9
21	-0.2	50.0
22	0.0	58.3
23	+0.3	61.1
24	+0.6	69.4
25	+0.8	79.2
26	+1.1	87.5
27	+1.3	94.4
28	+1.6	97.2
29-30	+1.8	100.0

Mean = 21.806

SD = 3.931

Range = 17

Kurtosis = -.530

Skewness = -.220

Mode = 20.0

Table 21.13
Fathers of Children with Diabetes Time 1 Personal Problem Solving and Communication Affirming
Communication Scale (N=62)

Raw Scores	Standard Scores	Cumulative Percentiles
0-6	-2.7	1.6
7-8	-1.6	8.1
9	-1.1	17.7
10	-0.6	35.5
11	-0.1	59.7
12	+0.4	74.2
13	+0.9	85.5
14	+1.4	95.2
15	+1.9	100.0

Mean = 11.210
SD = 1.951
Range = 9
Kurtosis = -.177
Skewness = -.045
Mode = 11.0

Table 21.14
Fathers of Children with Diabetes Personal Problem Solving and Communication Incendiary
Communication Scale (N=82)

Raw Scores	Standard Scores	Cumulative Percentiles
0	-2.2	1.6
1	-1.8	4.8
2	-1.4	8.1
3	-1.0	22.6
4	-0.5	40.3
5	-0.1	59.7
6	+0.3	71.0
7	+0.7	80.6
8	+1.1	88.7
9	+1.6	95.2
10	+2.0	98.4
11-15	+2.4	100.0

Mean = 5.290
SD = 2.370
Range = 11
Kurtosis = -.232
Skewness = .282
Mode = 5.0

Table 21.15
Fathers of Children with Diabetes Personal Problem Solving and Communication
Total Scale (N=62)

Raw Scores	Standard Scores	Cumulative Percentiles
0-14	-1.8	4.9
15	-1.5	11.5
16	-1.3	16.4
17	-1.0	19.7
18	-0.7	27.9
19	-0.5	37.7
20	-0.2	44.3
21	0.0	54.1
22	+0.3	63.9
23	+0.5	72.1
24	+0.8	82.0
25	+1.0	90.2
26	+1.3	91.8
27-28	+1.6	96.7
29	+2.1	98.4
30	+2.3	100.0

Mean = 20.918

SD = 3.891

Range = 16

Kurtosis = -.560

Skewness = .053

Mode = 19.0

Table 21.16
Families of Native Hawaiian Ancestry Personal Problem Solving and Communication Affirming
Communication Scale Overall
(N=189)

Raw Scores	Standard Scores	Cumulative Percentiles
0-1	-3.7	1.1
2-3	-3.0	1.6
4	-2.4	3.2
5	-2.0	6.3
6	-1.7	7.4
7	-1.3	9.5
8	-1.0	17.5
9	-0.6	28.6
10	-0.3	40.2
11	0.0	52.4
12	+0.4	71.4
13	+0.7	83.1
14	+1.1	89.4
15	+1.4	100.0

Mean = 10.857

SD = 2.907

Range = 15

Kurtosis = 1.447

Skewness = -.945

Mode = 12.0

Table 21.17
Families of Native Hawaiian Ancestry Personal Problem Solving and Communication Incendiary
Communication Scale Overall (N=184)

Raw Scores	Standard Scores	Cumulative Percentiles
0	-2.6	.5
1	-2.2	1.1
2	-1.8	6.0
3	-1.4	11.4
4	-1.1	17.9
5	-0.7	32.6
6	-0.3	47.8
7	+0.1	59.8
8	+0.5	75.0
9	+0.9	88.0
10	+1.8	92.4
11	+1.7	95.7
12	+2.0	98.9
13-15	+2.4	100.0

Mean = 6.734

SD = 2.576

Range = 13

Kurtosis = -.249

Skewness = .027

Mode = 8.0

Table 21.18
Families of Native Hawaiian Ancestry Personal Problem Solving and Communication
Total Scale Overall (N=189)

Raw Scores	Standard Scores	Cumulative Percentiles
0-3	3.4	1.0
4-6	-2.8	1.5
7-8	-2.3	2.5
9	-2.1	4.1
10	-1.9	6.1
11	-1.7	7.1
12	-1.5	8.1
13	-1.3	11.7
14	-1.0	14.2
15	-0.8	21.8
16	-0.6	27.9
17	-0.4	34.5
18	-0.2	43.7
19	0.0	52.3
20	+0.2	62.9
21	+0.5	69.5
22	+0.7	79.2
23	+0.9	85.8
24	+1.1	89.8
25	+1.3	93.9
26	+1.5	96.4
27	+1.7	98.0
28-30	+2.0	100.0

Mean = 18.843

SD = 4.664

Range = 25

Kurtosis = .714

Skewness = -.601

Mode = 20.0

Table 21.19
Single-Parent Families of Native Hawaiian Ancestry Personal Problem Solving and Communication
Affirming Communication Scale (N=109)

Raw Scores	Standard Scores	Cumulative Percentiles
0	-3.6	.9
1-2	-2.9	1.8
3-4	-2.2	4.6
5	-1.9	9.2
6	-1.6	10.1
7	-1.3	11.9
8	-0.9	16.5
9	-0.6	27.5
10	-0.3	36.7
11	+0.1	52.3
12	+0.4	70.6
13	+0.7	83.5
14	+1.0	89.9
15	+1.4	100.0

Mean = 10.817

SD = 3.043

Range =15

Kurtosis = 1.226

Skewness = -1.033

Mode = 12.0

Table 21.20
Single-Parent Families of Native Hawaiian Ancestry Personal Problem Solving and Communication
Incendiary Communication Scale (N=109)

Raw Scores	Standard Scores	Cumulative Percentiles
0-1	-2.7	.9
2	-1.9	4.6
3	-1.5	11.1
4	-1.1	16.7
5	-0.7	30.6
6	-0.3	45.4
7	+0.1	59.3
8	+0.5	75.0
9	+0.8	88.0
10	+1.2	90.7
11	+1.6	95.4
12	+2.0	99.1
13-15	+2.4	100.0

Mean = 6.824

SD = 2.564

Range = 13

Kurtosis = -.141

Skewness = .016

Mode = 8.0

Table 21.21
Single-Parent Families of Native Hawaiian Ancestry Personal Problem Solving and Communication
Total Scale (N=109)

Raw Scores	Standard Scores	Cumulative Percentiles
0-3	-3.3	.9
4-6	-2.6	1.8
7-8	-2.2	2.6
9	-2.0	5.3
10	-1.8	7.9
11	-1.6	9.6
12	-1.4	11.4
13	-1.2	14.0
14	-1.0	15.8
15	-0.8	22.8
16	-0.6	26.3
17	-0.4	32.5
18	-0.2	42.1
19	-0.1	51.8
20	+0.3	64.0
21	+0.5	70.2
22	+0.7	78.9
23	+0.9	84.2
24	+1.1	89.5
25	+1.3	94.7
26	+1.5	96.5
27	+1.7	99.1
28-30	+1.9	100.0

Mean = 18.746

SD = 4.828

Range = 25

Kurtosis = .478

Skewness = -.670

Mode = 20.0

Table 21.22
Two-Parent Families of Native Hawaiian Ancestry Personal Problem Solving and Communication
Affirming Communication Scale (N=80)

Raw Scores	Standard Scores	Cumulative Percentiles
0-4	-3.9	1.3
5	-2.2	2.5
6	-1.8	3.8
7	-1.4	6.3
8	-1.1	18.8
9	-0.7	30.0
10	-0.3	45.0
11	0.0	52.5
12	+0.4	72.5
13	+0.8	82.5
14	+1.1	88.8
15	+1.5	100.0

Mean = 10.913
SD = 2.729
Range = 15
Kurtosis = 1.916
Skewness = .269
Mode = 12.0

Table 21.23
Two-Parent Families of Native Hawaiian Ancestry Personal Problem Solving and Communication
Incendiary Communication Scale (N=80)

Raw Scores	Standard Scores	Cumulative Percentiles
0-1	-2.2	1.3
2	-1.8	7.9
3	-1.4	11.8
4	-1.0	19.7
5	-0.6	35.5
6	-0.2	50.0
7	+0.2	60.5
8	+0.5	75.0
9	+0.9	88.2
10	+1.3	94.7
11	+1.7	96.1
12	+2.0	98.7
13-15	+2.5	100.0

Mean = 6.605
SD = 2.603
Range = 12
Kurtosis = -.332
Skewness = .047
Mode = 5.0

Table 21.24
Two-Parent Families 01 Native Hawaiian Ancestry Personal Problem Solving and Communication
Total Scale (N=80)

Raw Scores	Standard Scores	Cumulative Percentiles
0-3	-3.6	1.2
4-8	-2.5	2.4
9-10	-2.0	3.6
11-13	-1.3	8.4
14	-1.1	12.0
15	-0.9	20.5
16	-0.7	30.1
17	-0.4	37.3
18	-0.2	45.8
19	0.0	53.0
20	+0.2	61.4
21	+0.5	68.7
22	+0.7	79.5
23	+0.9	88.0
24	+1.1	90.4
25	+1.4	92.8
26	+1.6	96.4
27-30	+2.0	100.0

Mean = 18.976

SD = 4.456

Range = 25

Kurtosis = 1.194

Skewness = -.474

Mode = 22.0

Table 21.25
Rural Bank Employees Personal Problem Solving and Communication Affirming Communication
Scale (N=743)

Raw Scores	Standard Scores	Cumulative Percentiles
0	-3.4	2.7
1-2	-2.8	3.1
3	-2.5	3.6
4	-2.1	4.1
5	-1.8	5.0
6	-1.5	7.2
7	-1.2	10.4
8	-0.9	15.7
9	-0.6	22.4
10	-0.3	52.4
11	+0.1	60.0
12	+0.4	68.5
13	+0.7	76.6
14	+1.0	84.9
15	+1.3	100.0

Mean = 10.807

SD =3.184

Range = 15

Kurtosis =2.022

Skewness =-1.047

Mode =10.0

Table 21.26
Rural Bank Employees Personal Problem Solving and Communication Incendiary Communication
Scale (N=740)

Raw Scores	Standard Scores	Cumulative Percentiles
0	-1.4	13.6
1	-1.0	20.2
2	-0.7	36.2
3	-0.3	47.5
4	+0.1	59.8
5	+0.4	75.8
6	+0.8	86.0
7	+1.1	90.0
8	+1.5	94.1
9	+1.9	96.0
10	+2.2	98.4
11	+2.6	99.1
12	+2.9	99.2
13	+3.3	99.5
14	+3.7	99.7
15	+4.0	100.0

Mean = 3.851

SD = 2.768

Range = 15

Kurtosis = .686

Skewness = .712

Mode = 2.0

*Note: A total scale score was not reported in this study

Table 21.27
Spouses of Rural Bank Employees Personal Problem Solving and Communication Affirming
Communication Scale (N=413)

Raw Scores	Standard Scores	Cumulative Percentiles
0	-2.6	6.8
1	-2.3	7.3
2	-2.0	8.0
3	-1.8	9.9
4	-1.5	10.7
5	-1.3	13.1
6	-1.0	15.3
7	-0.8	17.4
8	-0.5	20.6
9	-0.2	31.0
10	0.0	53.3
11	+0.3	63.4
12	+0.5	74.6
13	+0.8	82.6
14	+1.0	90.8
15	+1.3	100.0

Mean = 9.954

SD = 3.892

Range = 15

Kurtosis = .937

Skewness = -1.138

Mode = 10.0

Table 21.28
Spouses of Rural Bank Employees Personal Problem Solving and Communication Incendiary
Communication Scale (N=413)

Raw Scores	Standard Scores	Cumulative Percentiles
0	-1.4	10.7
1	-1.1	21.5
2	-0.7	32.9
3	-0.4	46.0
4	0.0	59.6
5	+0.4	70.2
6	+0.7	84.7
7	+1.1	90.6
8	+1.4	93.5
9	+1.8	96.1
10	+2.2	98.8
11-13	+3.2	99.0
14	+3.6	99.8
15	+3.9	100.0

Mean = 3.990

SD = 2.794

Range = 15

Kurtosis = .790

Skewness = .714

Mode = 6.0

*Note: A total scale score was not reported in this study

Table 21.29
Investment Executives Personal Problem Solving, and Communication Affirming, Communication
Scale (N=297)

Raw Scores	Standard Scores	Cumulative Percentiles
0	-4.2	.3
1-3	-3.0	.7
4	-2.7	1.0
5	-2.3	3.4
6	-1.9	6.1
7	-1.5	9.1
8	-1.2	11.8
9	-0.8	21.2
10	-0.4	45.5
11	0.0	58.9
12	+0.3	68.7
13	+0.7	77.1
14	+1.1	86.2
15	+1.5	100.0

Mean = 11.094

SD = 2.671

Range = 15

Kurtosis = .543

Skewness = -.500

Mode = 10.0

Table 21.30
Investment Executives Personal Problem Solving and Communication Incendiary Communication
Scale (N=298)

Raw Scores	Standard Scores	Cumulative Percentiles
0	-1.5	9.7
1	-1.1	17.4
2	-0.8	28.5
3	-0.4	45.6
4	-0.1	55.7
5	+0.3	73.5
6	+0.6	81.2
7	+1.0	86.2
8	+1.3	89.6
9	+1.7	95.6
10	+2.0	97.7
11	+2.4	98.7
12	+2.7	99.7
13-15	+3.5	100.0

Mean = 4.211

SD = 2.884

Range = 14

Kurtosis = .084

Skewness = .608

Mode = 5.0

*Note: A total scale score was not reported in this study

Table 21.31
Spouses of Investment Executives Personal Problem Solving and Communication Affirming
Communication Scale (N=233)

Raw Scores	Standard Scores	Cumulative Percentiles
0	-4.2	.9
1-3	-3.1	1.3
4	-2.8	1.7
5	-2.4	3.9
6	-2.0	5.2
7	-1.7	7.3
8	-1.3	10.3
9	-1.0	14.2
10	-0.6	30.0
11	-0.3	43.8
12	+0.1	54.9
13	+0.4	64.8
14	+0.8	79.8
15	+1.1	100.0

Mean =11.803

SD =2.832

Range = 15

Kurtosis =2.013

Skewness = -1.154

Mode = 15.0

Table 21.32
Spouses of Investment Executives Personal Problem Solving and Communication Incendiary
Communication Scale (N=233)

Raw Scores	Standard Scores	Cumulative Percentiles
0	-1.3	11.2
1	-1.0	21.0
2	-0.7	34.3
3	-0.3	48.1
4	0.0	60.1
5	+0.3	77.7
6	+0.6	82.0
7	+1.0	88.0
8	+1.3	92.7
9	+1.6	93.6
10	+2.0	94.4
11	+2.3	97.4
12	+2.6	97.9
13	+2.9	99.1
14	+3.3	99.6
15	+3.6	100.0

Mean = 4.030

SD = 3.048

Range = 15

Kurtosis = 1.138

Skewness = 1.007

Mode = 5.0

*Note: A total scale score was not reported in this study

Table 21.33
Family Problem Solving Communication (FPSC): Select Published Reports

Author(s)	Sample	N Count	Alpha Reliability	Validity Notes
McCubbin, H.I., McCubbin, M.A., & Thompson, A.I. (1993)	Families of varying race: Caucasian (78), Asian (49), Hawaiian (37), & mixed race	200	.85-.89	<ul style="list-style-type: none"> • Affirming problem solving was a buffer for maladaptation in Caucasian families • Problem solving (incendiary communication) was a facilitator of maladaptation in Hawaiian families. • Affirming problem-solving communication was a buffer in mixed race families.
McCubbin, H.I., McCubbin, M.A., & Thompson, A.I. (1995)	Native Hawaiian families	155	.85-.89	<ul style="list-style-type: none"> • Structural equation analysis revealed that family problem solving communication was inversely related to family dysfunction.
McCubbin, H.I., & Thompson, A.I. (1989)	Investment executives of a regional investment firm with branch offices in sixteen states, & their spouses	311	.89	<ul style="list-style-type: none"> • Affirming problem-solving communication acted as a buffer for executives' emotional distress following market crisis & for spillover of work stress into marital relationship. • Incendiary communication exacerbated problems such as: a) executives' distress following crisis, b) spouses' distress during & after crisis, & c) spillover of work stress into marital relationship.
McCubbin, H.I., & Thompson, A.I. (1992)	Multiracial families	200	.85	<ul style="list-style-type: none"> • Affirming communication was significantly related to family well-being for Caucasians, Hawaiians & mixed, but not for Asians. • Incendiary communication was inversely related to family well-being for Caucasian & mixed race families.

Table 21.33 (continued)
Family Problem Solving Communication (FPSC): Select Published Reports

Author(s)	Sample	N Count	Alpha Reliability	Validity Notes
McCubbin, H.I., & Thompson, A.I., Kretzschmar, H., Smith, F., Snow, P., McEwen, M., Elver, K., & McCubbin, M.A. (1992)	Female & male employees who are part of a longitudinal study of work, families & health	156	.85-.89	<ul style="list-style-type: none"> • Resilient (low health risk) & vulnerable (high health risk) male & female employees were compared. • Resilient male employees were correctly classified (84.6%) on the basis of work & family predictors including 2 family problem solving factors. • Resilient female employees were also classified accurately (87.6%) on the basis of 2 problem solving factors.
McCubbin, H.I., & Thompson, A.I., Elver, K., & McCubbin, M.A. (1994)	Native Hawaiian families	155	.89	<ul style="list-style-type: none"> • In the path analysis, family problem solving was inversely related to family dysfunction & the central predictor of this outcome. Additionally, family problem solving is the central intermediary variable in path analysis through which hardiness, sense of coherence & family schema operate.

Table 21.33 (continued)
Family Problem Solving Communication (FPSC): Select Published Reports

Author(s)	Sample	N Count	Alpha Reliability	Validity Notes
Thompson, A.I. (1994)	228 males & 621 females in a Midwest insurance firm as part of a longitudinal study on the impact of work, family & health	849	.87-.90	<ul style="list-style-type: none"> • Doctoral dissertation • Typologies were created to reflect problem-solving communication in the workplace & in the family, thus creating four types. • The criterion were levels of health risk for men & women separately. • Female employees with low FPS were at greater health risk. • Female employees who belonged to a work-family typology, that is high family & high work communication (OCS), were at significantly less risk.
Thompson, E.A., McCubbin, H.I., Thompson, A.I., & Elver, K. (1995)	Native Hawaiian families representing two-parent households (N=83) & single-parent households (N=114)	197	.89	<ul style="list-style-type: none"> • Family problem solving & particularly incendiary communication significantly related to family distress for two-parent households. • Incendiary communication was also a significant predictor in single-parent households.

FPSC

FAMILY PROBLEM SOLVING COMMUNICATION

Afrikaans Version

Family Problem Solving and Communication Scale (FPSC)

Wanneer ons gesin worstel met probleme of konflik wat ons ontstel, sal ek my gesin op die volgende wyse beskryf:	Vals	Meestal vals	Meestal waar	Waar
1. Ons gil en skree op mekaar	0	1	2	3
2. Ons respekteer mekaar se gevoelens	0	1	2	3
3. Ons praat dinge deur totdat ons 'n oplossing vind	0	1	2	3
4. Ons probeer hard om te verseker dat gesinslede nie emosioneel of fisies seerkry nie	0	1	2	3
5. Na konflik gaan ons sonder baie bevrediging uitmekaar	0	1	2	3
6. Ons deel met mekaar hoeveel ons vir mekaar omgee	0	1	2	3
7. Ons bemoeilik sake deur te baklei en ou sake weer op te haal	0	1	2	3
8. Ons maak tyd om te hoor wat elkeen te sê het of voel	0	1	2	3
9. Ons probeer hard om kalm te bly en sake deur te praat	0	1	2	3
10. Ons raak ontsteld, maar probeer om ons konflikte op 'n positiewe noot te beëindig	0	1	2	3