

The Resilience, Adaptation and Well-Being Project



Coping Health Inventory for Parents

CHIP

CHIP:

Coping Health Inventory for Parents

Overview

The Coping Health Inventory for Parents (CHIP) was developed by Hamilton McCubbin, Marilyn McCubbin, Robert Nevin, and Elizabeth Cauble (1981). It was developed to assess parents' appraisal of their coping responses to the management of family life when they have a child member who is seriously and/or chronically ill. The instrument is available in English and Spanish. In order to describe or predict how a family adapts under a chronic stress situation, the Resiliency Model of Family Stress, Adjustment and Adaptation calls for information about coping behaviors.

Development of CHIP

The concept of coping and the examination of specific coping behaviors which families use to manage stressful situations has been of interest to both researchers and clinicians. Family stress and resiliency theories include coping as an active process encompassing both the utilization of existing family resources and the development of new behaviors and resources which will help to strengthen the family unit and alleviate or reduce the impact of stressor events and facilitate their recovery (H.I. McCubbin, 1979). In this context, coping behaviors become part of Hill's B factor-family resources-and part of the BB factor and the PSC (problem solving coping) factor in the Resiliency Model of Family Stress, Adjustment and Adaptation (M.A. McCubbin & H.I. McCubbin, 1989).

When a child in a family is chronically ill or has a disability or handicap, the family is called upon to provide long term care and support for the child as well as manage day to day family life; oftentimes over the member's life cycle. A total family system perspective on coping is needed to view the impact on the family and what steps can be taken to help the family adapt. Researchers have been concerned with what coping behaviors families use to manage this type of situation; what existing resources families employ and what new supports are developed to deal with the multiple demands these families face. How to define coping behaviors, how to measure them, and how they influence other outcomes such as family adaptation and the child's health and/or development are a critical part of research efforts to analyze the family's response to this stressor event.

Clinicians working with families who have a chronically ill child have a need to assess parental coping to see if these parents are adapting successfully or if they may need further assistance and professional intervention to enhance coping and improve family life. There is a need to assess and evaluate how each parent is coping and whether these coping behaviors are having a positive or deleterious effect on the chronically ill member and the family as a unit. A valid and reliable measure of parental coping which could be administered in a non-threatening manner to parents would seem to help clinicians in their contact with these families. With these purposes in mind, the Coping Health Inventory for Parents (H.I. McCubbin, M.A. McCubbin, Nevin, & Cauble, 1983) was developed as a measurement instrument for parental coping.

With the introduction of CHIP in 1981 and its subsequent widespread use, the instrument developers felt it was important to compile information about the instrument and to systematically review the strengths and limitations of this research/clinical tool.

The construction of CHIP was guided by the inclusion of important behavior items used in prior

studies of family coping responses to stress (Boss, H.I. McCubbin, & Lester, 1979; H.I. McCubbin, Boss, Wilson, & Lester, 1980; H.I. McCubbin, Dahl, Lester, Benson, & Robertson, 1976) with the development of additional behavior items focusing on: (a) social support theory (Caplan, 1976; Cobb, 1976), that is, the family members' relationship to the community and each other to obtain emotional, esteem, and network support; (b) family stress theory (Burr, 1973; Hill, 1949), which emphasizes the resources and perceptions the family employs in the management of a stressor event; (c) theories of the individual psychology of coping (Lazarus, 1966; Pearlin & Schooler, 1978), which focus on active and passive psychological adjustments needed to manage anxieties and emotional tensions; and (d) family health care support to include the parents' communications with the health care team and other parents of chronically ill children as well as parental attempts to master the illness related home care issues for the affected child.

The Coping Health Inventory for Parents (CHIP) was designed to assess parents' appraisal of behaviors they are currently using to manage family life when they have a seriously ill or chronically ill child. CHIP is a self-report instrument consisting of a checklist of forty-five specific behaviors such as believing that my child is getting the best medical care possible, or talking with other parents in the same type of situation. Parents are asked to record how helpful (on a scale of 0 to 3) each behavior is in their particular family situation. If a coping behavior is not used, the respondent records why by either checking a) I do not cope this way because I/we chose not to use it, or b) coping behavior is not possible in our family, not applicable to us.

The development of CHIP was influenced by a hierarchical approach to the organization of behavior. In the application of this approach, two general levels of coping are defined: 1) coping behaviors as defined by each item on the inventory, and 2) coping patterns which are combinations of specific coping behaviors. The original version of the CHIP instrument had 80 items.

Conceptual Organization

The CHIP consists of three subscales:

- I. **Coping Pattern I: Family Integration, Cooperation and An Optimistic Definition of the Situation.** Composed of 19 behaviors that focus on strengthening family life and relationships, and the parents' outlook on life with a chronically ill child. Items include 1, 3, 6, 8, 11, 13, 16, 18, 21, 23, 26, 28, 31, 36, 38, 41, 43, 44, and 45.
- II. **Coping Pattern II: Maintaining Social Support, Self Esteem and Psychological Stability.** Consists of 18 items which involve the parents' efforts to develop relationships with others, engage in activities which enhance feelings of individual identity and self worth, plus behaviors to manage psychological tensions and pressures. Items include 2, 4,7,9,12,14,17,19,22,24,27,29,32,33,34,37, 39, and 42.
- III. **Coping Pattern III: Understanding the Health Care Situation Through Communication with Other Parents and Consultation with the Health Care-Team.** Contains eight behaviors directed at the parents' relationships with health care professionals and other parents of chronically ill children. These behaviors include developing more knowledge and understanding of the illness, and mastering any home care treatments and prescribed medical regimens. Items include 5, 10, 15, 20, 25, 30, 35, and 40.

Reliability

The reliability (Cronbach's alpha) for Coping Pattern I: Family Integration, Cooperation and an Optimistic Definition of the Situation is .79. The alpha reliability for Coping Pattern II: Maintaining Social Support, Self Esteem and Psychological Stability is .79. The alpha reliability for Coping Pattern III: Understanding the Health Care Situation Through Communication with Other Parents and Consultation with the Health Care Team is .71.

Validity

Initial validity checks using the scales from CHIP were made by doing a discriminant analysis between low conflict and high conflict families who had a child with cerebral palsy.

Table 14.1 reveals that mothers' use of all three coping patterns was significantly higher in high conflict families than in low conflict families. Similarly, the father's coping pattern (Table 14.2) reveals that fathers' use of all three coping patterns was significantly higher in the high conflict families.

While at first glance these findings may appear to be in the opposite direction of what would be expected (i.e., use of these coping behaviors would be associated with low conflict), these findings are consistent with our theoretical understanding of coping. Coping behaviors are developed in response to stressful situations and high conflict in a family is one index of family stress. Consequently, one would expect mothers and fathers in high conflict families to record greater use of the coping behaviors assessed by CHIP since this reflects an active effort on their part to manage the conflict and adapt to the situation.

Table 14.1
Mother's Coping Patterns in Low Versus High Conflict Cerebral Palsy Families

Coping Patterns	Low Conflict Families		High Conflict Families		F	P
	Mean	SD	Mean	SD		
Integration, Cooperation, Optimism	36.3	19.4	42.8	10.4	9.28	.0026
Support, Esteem, Stability	24.0	14.4	30.9	8.4	18.01	.0001
Medical Communication & Consultation	13.7	8.0	15.8	5.1	5.15	.0242

Table 14.2
Father's Coping Patterns in Low Versus High Conflict Cerebral Palsy Families

Coping Patterns	Low Conflict Families		High Conflict Families		F	P
	Mean	SD	Mean	SD		
Integration, Cooperation, Optimism	30.5	21.7	36.1	17.2	4.4	.0037
Support, Esteem, Stability	19.4	14.8	24.5	16.7	6.9	.0088
Medical Communication & Consultation	9.9	8.2	12.0	7.0	3.9	.0471

In the study of families of children with cystic fibrosis cited earlier (H.I. McCubbin, M.A. McCubbin et al., 1983), validity assessments of CHIP were done using the Family Environment Scale (Moos, 1976) and two indices of the health status of the chronically ill child (height/weight index and pulmonary functioning index). It was hypothesized that the coping patterns directed at maintaining family integration, strengthening self and understanding the health care situation would be associated with dimensions of the family environment (Table 14.3).

The mother's use of all three coping patterns was associated with the family interpersonal relationship dimensions of family life. Coping Patterns I and III were positively associated with family cohesiveness ($r = .21, p < .01$; $r = .19, p < .05$) and Coping Pattern II was positively associated with family expressiveness ($r = .19, p < .05$). When used by the father, Coping Pattern I was again positively related to family cohesiveness ($r = .36; p < .01$) and in addition, inversely related to family conflict ($r = -.21; p < .05$). Two of the father's Coping Patterns were also associated with the system maintenance dimensions of family life. Specifically, use of Coping Pattern I by the father was positively associated with family organization ($r = .32; p < .01$) and use of Coping Pattern III was positively associated with both family organization ($r = .22; p < .05$) and family control ($r = .19; p < .05$).

Table 14.3
Correlations Between Parental Coping (CHIP) and Family Environment (FES)

Coping Scales	Family Environment Scales					
	Cohesiveness	Expressiveness	Conflict	Independence	Organization	Control
<i>Mother</i>						
Integration, Cooperation, Optimism	.21**	.11	-.13	.07	.14	-.15
Support, Esteem, Stability	.08	.19*	.12	.05	.11	.06
Medical Communication & Consultation	.19*	.03	.00	-.01	.09	.11
<i>Father</i>						
Integration, Cooperation, Optimism	.36**	.07	-.21*	.13	.32**	.09
Support, Esteem, Stability	.08	.02	.07	-.02	-.04	.14
Medical Communication & Consultation	.07	-.02	-.03	.03	.22*	.19*

* $p \leq .05$

** $p \leq .01$

Test-Retest Reliability

No additional studies to report at this time.

Additional Validity Checks

It was also hypothesized that the parents' use of the three coping patterns would be positively associated with improvements in the child's health status (Table 14.4). This was supported in this study, Mothers' use of Coping Pattern I was associated with gains in the child's height/weight index ($r = .20$; $p < .05$) and use of Coping Pattern II was associated with improvements in the pulmonary functioning index ($r = .23$; $p < .05$). The fathers' use of Coping Pattern II was associated with improvements in both height/weight ($r = .22$, $p < .05$) and pulmonary functioning ($r = .31$; $p < .01$).

Table 14.4
Correlations Between Parental Coping (CHIP) and Indices of Children's Health Status

Coping Scales	Height/Weight Index	Pulmonary Functioning Index
<i>Mother</i>		
Integration, Cooperation, Optimism	.20*	.12
Support, Esteem, Stability	.12	.23*
Medical Communication & Consultation	-.03	.15
<i>Father</i>		
Integration, Cooperation, Optimism	.10	.08
Support, Esteem, Stability	.22*	.31**
Medical Communication & Consultation	.09	.04

* $p \leq .05$

** $p \leq .01$

Scoring Procedures

A total Coping score may be obtained by summing the number circled by the respondent (i.e., 0 = Not Helpful, 1 = Minimally Helpful, 2 = Moderately Helpful, and 3 = Extremely Helpful) for each item in the CHIP instrument. Disregard the I do not cope this way because column since these responses are equivalent to 0.

Subscale scores are obtained by summing the number circled by the respondent (i.e., 0 = Not Helpful, 1 = Minimally Helpful, 2 = Moderately Helpful, and 3 = Extremely Helpful) for the items in each subscale. Once again, disregard the I do not cope this way because column since these responses are equivalent to 0. The list below will help you determine which items belong to each subscale.

Subscale 1:	Maintaining Family Integration, Cooperation & an Optimistic Definition of the Situation	1,3,6,8,11,13,16,18, 21, 23, 26, 28, 31, 36, 38, 41,43, 44, 45
Subscale 2:	Maintaining Social Support, Self Esteem & Psychological Stability	2,4,7,9,12,14,17,19, 22, 24, 27, 29, 32, 33, 34, 37, 39, 42
Subscale 3:	Understanding the Health Care Situation Through Communication with Other Parents & Consultation with the Health Care Team	5, 10, 15, 20, 25, 30, 36, 40

Norms and/or Comparative Data

The means and standard deviations, using data from a sample of 308 mothers and fathers who have a chronically ill child, are presented in Table 14.5.

Additional comparative data from a recent study of families with children with chronic illness are presented in Tables 14.6 through 14.21.

Instrument Utilization for Research

To facilitate the review of research involving the use of CHIP, 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 CHIP are presented in Table 14.22.

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., McCubbin, M.A., Nevin, R., & Cauble, E. (1981). *Coping-Health Inventory for Parents (CHIP)*. In H.I. McCubbin, A.I. Thompson, & M.A. McCubbin (1996). *Family assessment: Resiliency, coping and adaptation-Inventories for research and practice*. (pp. 407-453). Madison: University of Wisconsin System.
3. The version of CHIP that appears in this manual has some items reordered based on suggestions from researchers using the instrument. Items within subscales have not changed, however, so all scoring procedures remain the same.

Table 14.5
Means and Standard Deviations for CHIP Scales

Scale	Number of Items	Mother		Father	
		Mean	SD	Mean	SD
Integration, Cooperation, Optimism	19	40	15	36	20
Support, Esteem, Stability	18	28	12	25	15
Medical Communication & Consultation	8	15	7	12	8

Table 14.6
Mothers of Children with Cardiac Illness Time 1 Coping Health Inventory for Parents Coping
Pattern 1 (Maintaining Family Integration) (N=107)

Raw Scores	Standard Scores	Cumulative Percentiles
0-24	-2.6	1.9
25	-2.4	2.8
26-29	-1.8	3.7
30	-1.7	7.5
31	-1.6	11.2
32-33	-1.3	14.0
34	-1.1	15.9
35	-1.0	20.6
36-37	-0.7	25.2
38	-0.6	28.0
39	-0.4	30.8
40	-0.3	39.3
41	-0.1	43.0
42	0.0	49.5
43	+0.2	57.0
44	+0.3	61.7
45	+0.5	67.3
46	+0.6	71.0
47	+0.7	78.5
48	+0.9	85.0
49	+1.0	87.9
50	+1.2	89.7
51	+1.9	94.4
52	+1.5	95.3
53	+1.6	96.3
54	+1.7	98.1
55	+1.9	99.1
56-57	+2.0	100.0

Mean = 41.850

SD = 6.985

Range = 32

Kurtosis = -.172

Skewness = -.428

Mode = 40.0

Table 14.7
Mothers of Children with Cardiac Illness Time 1 Coping Health Inventory for Parents Coping
Pattern 2 (Maintaining Social Support) (N=107)

Raw Scores	Standard Scores	Cumulative Percentiles
0-9	-2.9	.9
10-15	-2.1	2.8
16	-2.0	3.7
17	-1.8	4.7
18	-1.7	8.4
19	-1.6	9.3
20	-1.5	11.2
21	-1.3	12.1
22	-1.2	15.0
23	-1.1	17.8
24	-0.9	20.6
25	-0.8	23.4
26	-0.7	26.2
27	-0.6	28.0
28	-0.4	33.6
29	-0.3	36.4
30	-0.2	39.3
31	0.0	45.8
32	+0.1	51.4
33	+0.2	55.1
34	+0.3	63.6
35	+0.5	67.3
36	+0.6	73.8
37	+0.7	79.4
38	+0.9	82.2
39	+1.0	86.0
40	+1.1	90.7
41	+1.2	93.5
42	+1.4	95.3
43-44	+1.6	93.3
45	+1.8	98.1
46-54	+2.0	100.0

Mean = 31.299

SD = 7.780

Range = 38

Kurtosis = -.195

Skewness = -.409

Mode = 34.0

Table 14.8
Mothers of Children with Cardiac Illness Time 1 Coping Health Inventory for Parents Coping
Pattern 3 (Understanding the Medical Situation) (N=107)

Raw Scores	Standard Scores	Cumulative Percentiles
0-4	-2.3	.9
5	-2.1	1.9
6-7	-1.7	8.4
8	-1.5	9.3
9	-1.3	12.1
10	-1.1	18.7
11	-0.8	26.2
12	-0.6	33.6
13	-0.4	38.3
14	-0.2	47.7
15	-0.0	53.3
16	+0.2	57.0
17	+0.4	66.4
18	+0.7	73.8
19	+0.9	80.4
20	+1.1	86.9
21	+1.3	94.4
22	+1.5	95.3
23	+1.7	99.1
24	+1.9	100.0

Mean = 14.944

SD = 4.666

Range = 20

Kurtosis = -.790

Skewness = -.161

Mode = 14.0

Table 14.9
Mothers of Children with Cardiac Illness Time 1 Coping Health Inventory for Parents Total Scale
(N=107)

Raw Scores	Standard Scores	Cumulative Percentiles
0-47	-2.7	.9
48-49	-2.5	1.9
50-51	-2.4	2.8
52-55	-2.1	3.7
56-59	-1.9	4.7
60-61	-1.8	5.6
62-65	-1.5	6.5
66	-1.4	8.4
67-68	-1.3	9.3
69-70	-1.2	13.1
71	-1.1	14.0
72-73	-1.0	15.0
74	-0.9	16.8
75-76	-0.8	19.6
77-78	-0.7	24.3
79	-0.6	27.1
80-81	-0.5	31.8
82	-0.4	36.4
83-84	-0.3	42.1
85	-0.2	43.0
86-87	-0.1	46.7
88	0.0	49.5
89-90	+0.1	57.0
91	+0.2	59.8
92-93	+0.3	61.7
94-95	+0.4	67.3
96	+0.5	68.2
97-98	+0.6	71.0
99	+0.7	72.9
100-101	+0.8	79.4
102	+0.9	83.2
103-104	+1.0	91.6
105	+1.1	92.5
106-108	+1.3	93.5
109-110	+1.4	94.4
111-114	+1.7	95.3
115-116	+1.8	96.3
117-135	+2.1	100.0

Mean = 88.093
SD = 15.453
Range = 74
Kurtosis = .149
Skewness = -.237
Mode = 82.0

Table 14.10
Fathers of Children with Cardiac Illness Time 1 Coping Health Inventory for Parents Coping
Pattern 1 (Maintaining Family Integration) (N=92)

Raw Scores	Standard Scores	Cumulative Percentiles
0-8	-3.7	1.1
9-14	-3.0	2.2
15-16	-2.7	3.3
17-18	-2.5	4.3
19	-2.4	5.4
20-21	-2.2	6.5
22-26	-1.6	7.6
27-30	-1.1	9.8
31	-1.0	13.0
32	-0.9	14.1
33	-0.8	16.3
34	-0.7	20.7
35	-0.5	23.9
36	-0.4	27.2
37	-0.3	34.8
38	-0.2	35.9
39	-0.1	40.2
40	0.0	46.7
41	+0.1	52.2
42	+0.3	59.8
43	+0.4	64.1
44	+0.5	67.4
45	+0.6	73.9
46	+0.7	79.3
47	+0.8	82.6
48	+0.9	85.9
49	+1.1	91.3
50	+1.2	92.4
51	+1.3	97.8
52-57	+1.4	100.0

Mean = 39.750

SD = 8.695

Range = 44

Kurtosis = 2.242

Skewness = -1.299

Mode = 37.0

Table 14.11
Fathers of Children with Cardiac Illness Time 1 Coping Health Inventory for Parents Coping
Pattern 2 (Maintaining Social Support) (N=92)

Raw Scores	Standard Scores	Cumulative Percentiles
0-8	-2.6	1.1
9-10	-2.3	2.2
11-12	-2.1	3.3
13-14	-1.8	5.4
15	-1.7	6.5
16	-1.6	7.6
17	-1.4	8.7
18	-1.3	9.8
19	-1.2	15.2
20	-1.1	16.3
21	-1.0	17.4
22	-0.8	25.0
23	-0.7	27.2
24	-0.6	29.3
25	-0.5	33.7
26	-0.3	37.0
27	-0.2	46.7
28	-0.1	50.0
29	0.0	52.2
30	+0.1	53.3
31	+0.3	56.5
32	+0.4	62.0
33	+0.5	66.3
34	+0.6	70.7
35	+0.8	75.0
36	+0.9	79.3
37	+1.0	85.9
38	+1.1	91.3
39	+1.3	93.5
40	+1.4	96.7
41-42	+1.6	98.9
43-54	+2.4	100.0

Mean = 28.783

SD = 8.133

Range = 40

Kurtosis = -.398

Skewness = -.302

Mode = 27.0

Table 14.12
Fathers of Children with Cardiac Illness Time 1 Coping Health Inventory for Parents Coping
Pattern 3 (Understanding the Medical Situation) (N=92)

Raw Scores	Standard Scores	Cumulative Percentiles
0	-2.1	2.2
1	-2.0	4.3
2	-1.8	6.5
3	-1.6	7.6
4	-1.5	13.0
5	-1.3	15.2
6	-1.1	17.4
7	-1.0	20.7
8	-0.8	25.0
9	-0.6	27.2
10	-0.5	31.5
11	-0.3	34.8
12	-0.1	44.6
13	0.0	52.2
14	+0.2	59.8
15	+0.4	64.1
16	+0.5	71.7
17	+0.7	77.2
18	+0.9	80.4
19	+1.0	87.0
20	+1.2	93.5
21	+1.4	94.6
22	+1.6	95.7
23	+1.7	97.8
24	+1.9	100.0

Mean = 12.761

SD = 5.957

Range = 24

Kurtosis = -.582

Skewness = -.308

Mode = 12.0

Table 14.13
Fathers of Children with Cardiac Illness Time 1 Coping Health Inventory for Parents Total Scale
(N=92)

Raw Scores	Standard Scores	Cumulative Percentiles
0-20	-3.2	1.1
21-35	-2.4	2.2
36-39	-2.2	5.4
40-42	-2.0	6.5
43-50	-1.6	7.6
51-53	-1.5	9.8
54-57	-1.3	12.0
58	-1.2	13.0
59-61	-1.1	14.1
62-64	-0.9	17.4
65	-0.8	22.8
66-68	-0.7	25.0
69-70	-0.6	28.3
71-74	-0.4	31.5
75-76	-0.3	34.8
77-78	-0.2	37.0
79-80	-0.1	38.0
81-82	0.0	40.2
83-84	+0.1	46.7
85-86	+0.2	52.2
87-88	+0.3	62.0
89	+0.4	65.2
90-91	+0.5	68.5
92-93	+0.6	72.8
94-95	+0.7	77.2
96-97	+0.8	79.3
98	+0.9	81.5
99-101	+1.0	84.8
102	+1.1	89.1
103-105	+1.2	93.5
106-107	+1.3	96.7
108-109	+1.4	97.8
110-111	+1.5	98.9
112-115	+1.6	100.0

Mean = 81.293
SD = 19.281
Range = 92
Kurtosis = .461
Skewness = -.840
Mode = 65.0

Table 14.14
Mothers of Children with Diabetes Time 1 Coping Health Inventory for Parents Coping Pattern 1
(Maintaining Family Integration) (N=72)

Raw Scores	Standard Scores	Cumulative Percentiles
0-30	-2.3	1.4
31	-2.1	2.8
32-33	-1.8	5.6
34	-1.7	8.3
35	-1.5	9.7
36	-1.3	11.1
37	-1.2	15.3
38	-1.0	20.8
39	-0.9	26.4
40	-0.7	27.8
41	-0.5	33.3
42	-0.4	36.1
43	-0.2	40.3
44	-0.1	48.6
45	+0.1	54.2
46	+0.3	56.9
47	+0.4	62.5
48	+0.6	70.8
49	+0.7	76.4
50-51	+1.0	87.5
52	+1.2	91.7
53	+1.4	97.2
54	+1.5	98.6
55-57	+2.0	100.0

Mean = 44.403

SD = 6.297

Range = 27

Kurtosis = -.703

Skewness = -.315

Mode = 51.0

Table 14.15
Mothers of Children with Diabetes Time 1 Coping Health Inventory for Parents Coping Pattern 2
(Maintaining Social Support) (N=72)

Raw Scores	Standard Scores	Cumulative Percentiles
0-15	-2.5	1.4
16	-2.4	2.8
17	-2.2	4.2
18-20	-1.8	5.6
21-22	-1.5	8.3
23	-1.4	12.5
24	-1.2	13.9
25	-1.1	15.3
26	-1.0	16.7
27	-0.8	18.1
28	-0.7	19.4
29	-0.5	29.2
30	-0.4	30.6
31	-0.3	44.4
32	-0.1	51.4
33	0.0	56.9
34	+0.2	61.1
35	+0.3	65.3
36	+0.5	66.7
37	+0.6	73.6
38	+0.7	77.8
39-40	+1.0	84.7
41	+1.2	86.1
42	+1.3	90.3
43	+1.5	97.2
44	+1.6	98.6
45-54	+1.7	100.0

Mean = 32.764

SD = 7.014

Range = 30

Kurtosis = -.134

Skewness = -3.98

Mode = 31.0

Table 14.18
Mothers of Children with Diabetes Time 1 Coping Health Inventory for Parents Coping Pattern 3
(Understanding the Medical Situation) (N=72)

Raw Scores	Standard Scores	Cumulative Percentiles
0-5	-3.1	1.4
6-8	-2.4	2.8
9	-2.2	4.2
10	-1.9	5.6
11	-1.7	6.9
12	-1.4	9.7
13	-1.2	12.5
14	-0.9	22.2
15	-0.7	27.8
16	-0.4	29.2
17	-0.2	43.1
18	0.0	55.6
19	+0.3	62.5
20	+0.5	69.4
21	+0.8	79.2
22	+1.0	87.5
23	+1.3	97.2
24	+1.5	100.0

Mean = 17.806

SD = 4.069

Range = 19

Kurtosis = .439

Skewness = -.737

Mode = 17.0

Table 14.17
Mothers of Children with Diabetes Time 1 Coping Health Inventory for Parents Total Seale (N=72)

Raw Scores	Standard Scores	Cumulative Percentiles
0-64	-2.2	1.4
65-68	-1.9	4.2
69	-1.8	5.6
70-73	-1.5	6.9
74-75	-1.4	8.3
76	-1.3	9.7
77-78	-1.2	16.7
79	-1.1	19.4
80	-1.0	22.2
81-82	-0.9	26.4
83-84	-0.8	29.2
85	-0.7	30.6
86-88	-0.5	31.9
89-91	-0.3	40.3
92	-0.2	41.7
93	-0.1	45.8
94-95	0.0	48.6
96-97	+0.1	52.8
98	+0.2	55.6
99-100	+0.3	59.7
101	+0.4	66.7
102	+0.5	68.1
103-104	+0.6	72.2
105	+0.7	73.6
106	+0.8	75.0
107-108	+0.9	76.4
109-110	+1.0	80.6
111	+1.1	81.9
112	+1.2	84.7
113-114	+1.3	95.8
115	+1.4	97.2
116-120	+1.7	98.6
121-135	+1.9	100.0

Mean = 94.972
SD = 14.384
Range = 74
Kurtosis = -.881
Skewness = -.200
Mode = 101.0

Table 14.18
Fathers of Children with Diabetes Time 1 Coping Health Inventory for Parents Coping Pattern 1
(Maintaining Family Integration) (N=82)

Raw Scores	Standard Scores	Cumulative Percentiles
0-11	-3.4	1.6
12-21	-2.2	3.2
22-26	-1.6	4.8
27	-1.5	6.5
28	-1.4	9.7
29-30	-1.2	12.9
31	-1.0	16.1
32	-0.9	19.4
33	-0.8	22.6
34	-0.7	25.8
35	-0.6	32.3
36	-0.5	35.5
37	-0.3	38.7
38	-0.2	40.3
39	-0.1	43.5
40	0.0	45.2
41	+0.1	53.2
42	+0.3	56.5
43	+0.4	62.9
44	+0.5	67.7
45	+0.6	69.4
46	+0.7	74.2
47	+0.9	79.0
48	+1.0	85.5
49	+1.1	88.7
50	+1.2	91.9
51	+1.3	96.8
52	+1.4	98.4
53-57	+1.6	100.0

Mean = 39.806

SD = 8.435

Range = 42

Kurtosis = .889

Skewness = -.787

Mode = 41.0

Table 14.19
Fathers of Children with Diabetes Time 1 Coping Health Inventory for Parents Coping Pattern 2
(Maintaining Social Support) (N=62)

Raw Scores	Standard Scores	Cumulative Percentiles
0-10	-2.1	3.2
11-13	-1.8	4.8
14-15	-1.6	8.1
16	-1.4	11.3
17-18	-1.2	16.1
19	-1.1	19.4
20-21	-0.9	22.6
22	-0.7	25.8
23	-0.6	30.6
24	-0.5	33.9
25	-0.4	37.1
26	-0.3	38.7
27	-0.2	43.5
28	0.0	48.4
29	+0.1	51.6
30	+0.2	53.2
31	+0.3	59.7
32	+0.4	67.7
33	+0.5	71.0
34	+0.7	74.2
35	+0.8	77.4
36-37	+1.0	85.5
38	+1.1	88.7
39	+1.3	91.9
40-41	+1.5	96.8
42-43	+1.7	98.4
44-54	+1.8	100.0

Mean = 28.323

SD = 8.525

Range = 34

Kurtosis = -.703

Skewness = -.250

Mode = 32.0

Table 14.20
Fathers of Children with Diabetes Time 1 Coping Health Inventory for Parents Coping Pattern 3
(Understanding the Medical Situation) (N=62)

Raw Scores	Standard Scores	Cumulative Percentiles
0-3	-2.3	3.2
4-5	-1.8	4.8
6	-1.6	9.7
7	-1.4	12.9
8-9	-1.0	16.1
10	-0.8	21.0
11	-0.6	27.4
12	-0.4	38.7
13	-0.2	48.4
14	0.0	53.2
15	+0.2	61.3
16	+0.4	66.1
17	+0.7	79.0
18	+0.9	83.9
19	+1.1	88.7
20	+1.3	91.9
21	+1.5	93.5
22	+1.7	96.8
23-24	+1.9	100.0

Mean = 13.871

SD = 4.796

Range = 20

Kurtosis = -.279

Skewness = -.248

Mode = 17.0

Table 14.21
Fathers of Children with Diabetes Time 1 Coping Health Inventory for Parents
Total Scale (N=62)

Raw Scores	Standard Scores	Cumulative Percentiles
0-33	-2.6	1.6
34-43	-2.1	4.8
44-51	-1.7	6.5
52-54	-1.5	8.1
55	-1.4	11.3
56-58	-1.3	12.9
59	-1.2	14.5
60-62	-1.1	16.1
63	-1.0	19.4
64-66	-0.9	22.6
67	-0.8	24.2
68-71	-0.6	29.0
72	-0.5	30.6
73-75	-0.4	33.9
76-78	-0.2	37.1
79-81	-0.1	41.9
82	0.0	46.8
83	+0.1	48.4
84-85	+0.2	53.2
86-88	+0.3	56.5
89-90	+0.4	61.3
91-92	+0.5	69.4
93-94	+0.6	75.8
95-96	+0.7	80.6
97	+0.8	82.3
98	+0.9	83.9
99-101	+1.0	85.5
102	+1.1	87.1
103-105	+1.2	88.7
106	+1.3	91.9
107-109	+1.4	96.8
110-113	+1.7	98.4
114-135	+1.9	100.0

Mean = 82.000
SD = 18.739
Range = 85
Kurtosis = -.220
Skewness = -.461
Mode = 82.0

Table 14.22
Coping Health Inventory for Parents (CHIP): Select Published Reports

Author(s)	Sample	N Count	Alpha Reliability	Validity Notes
Allen, R. (1994)	N/A	N/A	N/A	<ul style="list-style-type: none"> • Doctoral Dissertation
Auslander, W.F., Bubba, J., Rogge, M., & Santiago, J.V. (1993)	Children Recently diagnosed with insulin-dependent diabetes mellitus	53	N/A	<ul style="list-style-type: none"> • Maintaining family integration (Coping I) the most helpful coping strategy in year following diagnosis.
Austin, J.K., & McDermott, N. (1988)	Parents in families in which a child (6-16 years old) has epilepsy	27	N/A	<ul style="list-style-type: none"> • Parents' attitude toward child epilepsy was positively related to coping abilities.
Balachandra, A (1995)	N/A	N/A	N/A	<ul style="list-style-type: none"> • Doctoral Dissertation
Birenbaum, L.K. (1990)	Families in which a child has cancer	82	N/A	<ul style="list-style-type: none"> • Coping levels were similar to other studies of families with chronically ill children
Block, K., Brandt, P., & Magyary, D. (1995)	Families with a child with cerebral palsy	2	N/A	<ul style="list-style-type: none"> • Case study method to examine coping: emotion focused coping & problem focused coping in evidence along with family focused coping.
Cameron, M.E. (1993)	N/A	N/A	N/A	<ul style="list-style-type: none"> • Doctoral Dissertation
Cappelli, M., McGrath, P.J., MacDonald, N.E., Boland, M., Fried, P., & Katsanis, J. (1988)	CF children aged 7 years or older & their parents	33	N/A	<ul style="list-style-type: none"> • Burden exerted a significant negative effect on coping.
Carlson, C.K. (1994)	N/A	N/A	N/A	<ul style="list-style-type: none"> • Master's Thesis
Carlson-Green, B., Morris, R., & Krawiecki, N. (1995)	Families of children with heterogeneous brain tumors	63	N/A	<ul style="list-style-type: none"> • Maternal coping was inversely related to child's intellectual functioning.

Table 14.22 (continued)
Coping Health Inventory for Parents (CHIP): Select Published Reports

Author(s)	Sample	N Count	Alpha Reliability	Validity Notes
Clause, R. (1993)	N/A	N/A	N/A	<ul style="list-style-type: none"> • Master's Thesis
Davis, D. (1994)	N/A	N/A	N/A	<ul style="list-style-type: none"> • Master's Thesis
Faier-Routman, J. (1994)	N/A	N/A	N/A	<ul style="list-style-type: none"> • Doctoral Dissertation
Failla, S., & Jones, L.C. (1991)	Mothers with one developmentally disabled child, aged 6 years or younger	57	.79	<ul style="list-style-type: none"> • Family integration (Pattern I) was positively correlated with higher levels of satisfaction with family functioning.
Gibson, C.H. (1986)	Parents of children under 10 years old diagnosed with cystic fibrosis	56	N/A	<ul style="list-style-type: none"> • Coping levels were similar to other CF studies.
Goldbeck, L. (1994)	N/A	N/A	N/A	<ul style="list-style-type: none"> • Doctoral Dissertation
Grey, M., Gameron, M.E., & Thurber, F.W. (1991)	Children with insulin-dependent diabetes mellitus (8-18 years) & their parents	103	N/A	<ul style="list-style-type: none"> • Family integration (Coping I) was most important for preadolescent children. • Parental coping styles not related to children's coping or adaptation.
Guys, M. (1995)	N/A	N/A	N/A	<ul style="list-style-type: none"> • Master's Thesis
Hankin, D. (1994)	N/A	N/A	N/A	<ul style="list-style-type: none"> • Doctoral Dissertation
Huang, C. (1993)	N/A	N/A	N/A	<ul style="list-style-type: none"> • Doctoral Dissertation
Johnsonius, J.R. (1995)	N/A	N/A	N/A	<ul style="list-style-type: none"> • Doctoral Dissertation

Table 14.22 (continued)
Coping Health Inventory for Parents (CHIP): Select Published Reports

Author(s)	Sample	N Count	Alpha Reliability	Validity Notes
Kager, V., & Holden, E. (1992)	Children with insulin-dependent diabetes & their mothers	128	.87	<ul style="list-style-type: none"> • Parental coping was inversely related to life events (stressors). • Maternal coping was related to child's coping & to child's psychosocial adjustment.
Kiely, R. (1993)	N/A	N/A	N/A	<ul style="list-style-type: none"> • Doctoral Dissertation
Kunnie, T.Y. (1992)	N/A	N/A	N/A	<ul style="list-style-type: none"> • Doctoral Dissertation
Lai, Y. (1994)	N/A	N/A	N/A	<ul style="list-style-type: none"> • Master's Thesis
Leonetti, J. (1994)	N/A	N/A	N/A	<ul style="list-style-type: none"> • Doctoral Dissertation
Lesar, S., & Maldonado, Y. (1996)	Parents of children with HIV exposure	48	.79	<ul style="list-style-type: none"> • No statistically significant differences between types of caregiver relationship on 3 subscales of CHIP
LoBiondo-Wood, G., Bernier-Henn, M., & Williams, L. (1992)	Family adaptation for mothers of children with liver transplant	58	N/A	<ul style="list-style-type: none"> • Parental coping was positively related to less than 1 year post-transplant adaptation; not related to 1 year post-transplant adaptation.
Maata, P. (1994)	N/A	N/A	N/A	<ul style="list-style-type: none"> • Master's Thesis
Mackenzie, A. (1992)	N/A	N/A	N/A	<ul style="list-style-type: none"> • Master's Thesis
Mason, J. (1994)	N/A	N/A	N/A	<ul style="list-style-type: none"> • Master's Thesis

Table 14.22 (continued)
Coping Health Inventory for Parents (CHIP): Select Published Reports

Author(s)	Sample	N Count	Alpha Reliability	Validity Notes
McCubbin, H.I., McCubbin, M.A., Patterson, J.M., Cauble, A.E., Wilson, L.R., & Warwick, W. (1983)	Families with one or more members diagnosed as having cystic fibrosis	100	.71-.79	<ul style="list-style-type: none"> • Three factors emerged: maintaining family integration; maintaining social support; & medical consultations for mothers: family integration significantly correlated (positive) with family cohesiveness; social support significantly correlated (positive) with family expressiveness; & medical consultation significantly related (positive) to family cohesiveness.
McCubbin, H.I., & Patterson, J.M. (1983)	Families with a child diagnosed with cerebral palsy	217	.71-.79	<ul style="list-style-type: none"> • Initial tests of Double ABCX Model using FILE, CHIP, & FACES (I). Balanced families differentiated from extreme families by significantly greater emphasis (higher scores) on mother's coping (CHIP), family integration ($F = 39.41, p = .001$), social support ($F = 25.74, p = .0001$) & medical consultation ($F = 25.24, p = .0001$).
McCubbin, H.I., Patterson, J., McCubbin, M.A., & Wilson, L. (1983)	Families with 1 or more children with cystic fibrosis	100	.71-.79	<ul style="list-style-type: none"> • Parental coping (CHIP) was significantly related to child's health. Mothers' family integration related to positive gains in child's growth. Mothers' coping-social support related to child's improvement in pulmonary functioning. Fathers' coping through social support also significantly related to child's growth & improvement in pulmonary functioning.
McCubbin, M.A. (1984)	Families with children with cystic fibrosis	100	.71-.79	<ul style="list-style-type: none"> • Parental coping did not differ between mothers & fathers. Additional validity data not reported.

Table 14.22 (continued)
Coping Health Inventory for Parents (CHIP): 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"> • Mothers' efforts at maintaining the family's integration were significantly greater for two-parent families.
McDowell, B. (1994)	N/A	N/A	N/A	<ul style="list-style-type: none"> • Doctoral Dissertation
Moes, D., Koegel, R.L., Schreibman, L., & Loos, L.M. (1992)	Mothers (18) & fathers (12) of children with autism	30	N/A	<ul style="list-style-type: none"> • Mothers indicated greater use of family cooperation as coping strategy in contrast to fathers.
Morena, P. (1995)	N/A	N/A	N/A	<ul style="list-style-type: none"> • Doctoral Dissertation
Overton, J. (1993)	N/A	N/A	N/A	<ul style="list-style-type: none"> • Master's Thesis
Patterson, J.M. (1985)	Two-parent families of children with cystic fibrosis	72	N/A	<ul style="list-style-type: none"> • None of the coping patterns had a significant association with compliance.
Peck, A.L. (1994)	N/A	N/A	N/A	<ul style="list-style-type: none"> • Master's Thesis
Perez, S.M. (1993)	N/A	N/A	N/A	<ul style="list-style-type: none"> • Master's Thesis
Ray, J. (1994)	N/A	N/A	N/A	<ul style="list-style-type: none"> • Doctoral Dissertation
Ray, L.D., & Ritchie, J.A. (1993)	Parents of chronically ill child being cared for at home	29	N/A	<ul style="list-style-type: none"> • Use of family integration as coping strategy was associated with lower appraisals of stressfulness.

Table 14.22 (continued)
Coping Health Inventory for Parents (CHIP): Select Published Reports

Author(s)	Sample	N Count	Alpha Reliability	Validity Notes
Reddon, J.E. McDonald, L., & Kysela, G.M. (1992)	Families raising preschoolers with developmental disabilities	16	N/A	<ul style="list-style-type: none"> • Mother's efforts to acquire knowledge (Coping III) were significantly greater than father's. • Age of handicapped child positively correlated with CHIP total score & parental Coping Pattern I: integration, cooperation, optimism • Greater intellectual delay in child, greater use of Coping Pattern III: medical understanding
Roles, S. (1994)	N/A	N/A	N/A	<ul style="list-style-type: none"> • Master's Thesis
Schreeder, C. (1992)	N/A	N/A	N/A	<ul style="list-style-type: none"> • Master's Thesis
Seiman, S. (1993)	N/A	N/A	N/A	<ul style="list-style-type: none"> • Master's Thesis
Sieminska, M.J. (1995)	N/A	N/A	N/A	<ul style="list-style-type: none"> • Doctoral Dissertation
Svavarsdottir, E., & McCubbin, M. (1996)	Two-parent families with an infant 1 year or younger diagnosed with congenital heart disease 2-4 months before data collection	71	.79	<ul style="list-style-type: none"> • Mother's age was negatively correlated with the coping pattern of strengthening family life & relationship. • Negative correlations were found between managing psychological tensions & father's age, length of marriage & number of children • Age of diagnosed infant was negatively correlated with father's coping.
Swift, D.L. (1993)	N/A	N/A	N/A	<ul style="list-style-type: none"> • Doctoral Dissertation

Table 14.22 (continued)
Coping Health Inventory for Parents (CHIP): Select Published Reports

Author(s)	Sample	N Count	Alpha Reliability	Validity Notes
Tak, Y. (1994)	Families with a child under age 12 newly diagnosed with congenital heart disease within the last 3-4 months	92	.79	<ul style="list-style-type: none"> • Doctoral Dissertation • Significant positive correlations between social support and maternal coping were found • The age at diagnosis was positively related to paternal coping.
Van Solkema, J.M. (1995)	N/A	N/A	N/A	<ul style="list-style-type: none"> • Master's Thesis

CHIP

COPING HEALTH INVENTORY FOR PARENTS

Korean Version

※ 다음은 자녀의 입원과 건강상태에 대해 어떤 방법으로 대처하는지에 대한 질문입니다. 다음 질문을 잘 읽고 해당하는 칸에 V 표 하세요.

번호	문항	매우 그렇다	그런 편이다	그렇지 않은 편이다	전혀 그렇지 않다
		3	2	1	0
1	가족의 안정을 유지하려고 노력한다.				
2	나를 알아주는 친구들이나 사람들과 접촉한다.				
3	우리 가족의 앞날에 대하여 남편을 신뢰한다.				
4	많이 잔다.				
5	의료기관에 갔을 때 간호사나 의료관계자와 이야기한다.				
6	내 아이가 차차 나아질 것이라고 믿는다.				
7	직장을 갖는다.				
8	내가 강하다는 것을 보인다.				
9	나 자신과 가족을 위해 선물을 산다.				
10	나와 비슷한 사정을 가진 사람들과 이야기한다.				
11	내 아이가 사용하는 의료기구들을 잘 관리한다.				
12	식사를 잘한다.				
13	가족들이 각자 집안일을 맡아서 나를 돕도록 한다.				
14	나 혼자서 외출한다.				
15	내 아이의 상태에 대해 내가 걱정하는 것들을 의사와 이야기한다.				
16	의료기관에서 우리 가족에게 최선을 다한다고 믿는다.				
17	사람들과 친근하게 지낸다.				
18	가족의 안정을 유지하려고 노력한다.				
19	나를 알아주는 친구들이나 사람들과 접촉한다.				

20	우리 가족의 앞날에 대하여 남편을 신뢰한다.				
21	온 식구가 함께 참여할 수 있는 기회를 만든다.				
22	직장에서 열심히 일한다.(주부는 가사일을 열심히 한다.)				
번호	문항	매우 그렇다	그런 편이다	그렇지 않은 편이다	전혀 그렇지 않다
		3	2	1	0
23	내 아이가 최선의 치료를 받는다고 믿는다.				
24	우리 집에 사람들을 초대한다.				
25	나와 비슷한 사정을 가진 사람들에게 대한 책을 읽는다.				
26	친척들과 가깝게 지낸다.				
27	자신감을 가지고 독립적이 되도록 노력한다.				
28	이 세상에는 내가 감사할 일이 많다고 스스로에게 말한다.				
29	취미생활을 한다.(등산, 산책, 조깅 등도 포함)				
30	다른 사람들이 나를 이해하도록 친한 사람들에게 내 이야기를 한다.				
31	내 아이가 혼자 할 수 있는 건강관리는 혼자 하도록 격려한다.				
32	내 용모에 관심을 가진다.				
33	친구들과 함께 모임을 가진다.				
34	남편과 정기적으로 또는 꽤 자주 외출한다.				
35	의사의 지시를 그대로 따른다.				
36	남편과 더 친밀하게 되도록 노력한다.				
37	화가 날 때는 화를 낸다.				
38	아이들에게 헌신적으로 한다.				
39	내 기분에 대해 전문인이 아닌 다른 친한 사람과 이야기한다.				
40	관심있는 의학 방면에 대한 기사나 책을 읽는다.				

41	남편에게 내 관심사나 감정에 대해 진지하게 이야기한다.				
42	가끔 가사나 양육에서 벗어나 긴장을 해소할 기회를 갖는다.				
43	내 아이가 정기적인 진단을 받도록 한다.				
44	모든 일이 잘 될 것이라고 낙관적으로 생각한다.				
45	될 수 있으면 아이들과 함께 지내는 시간을 갖는다.				