

## A Cross-Cultural Study to Stress of Parents Rearing the Handicapped Children.

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In 1973, Holroyd developed an instrument which purposed to inquire the impact of the handicapped children on the other family members. She named it the Questionnaire on Resources and Stress (QRS). Using the QRS, she reported stress of parents of the handicapped children.<sup>1)2)3)4)</sup>

We translated the QRS into Japanese, and utilized it to survey the parental attitudes and feelings for the handicapped children from 1978 through 1980.<sup>5)6)7)</sup> And, we designed to make a short-form of the QRS.

Friedrich and his colleagues published three articles.<sup>8)9)10)</sup> They reported a measured family response to the handicapped children. They, also, made a short-form of the QRS in 1983.

In this paper, we compared (1) our short-form of the QRS with Friedrich's short-form of it, (2) the measured impact of our mothers of the handicapped children with that of Friedrich's parents of them.

### Method

#### a *The QRS*

The QRS is a true-false questionnaire, which inquires widely stress of the family of the handicapped children. There are three parts: the parental problems, problems of the family, and problems of the child.

The parental problems have seven scales: Poor Health/Mood (Scale 1, 11 items), Excess Time Demands (Scale 2, 14 items), Negative Attitude toward Index Case (Scale 3, 23 items), Overprotection/Dependency (Scale 4, 13 items), Lack of Social Support (Scale 5, 10 items), Overcommitment/Martyrdom (Scale 6, 7 items) and Pessimism (Scale 7, 13 items).

Problems of the family have three scales: Lack of Family Integration (Scale 8, 23 items), Limits on Family Opportunity (Scale 9, 9 items), and Financial Problems (Scale 10, 17 items).

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Problems of the child have five scales: Physical Incapacitation (Scale 11, 14 items), Lack of Activities for Index Case (Scale 12, 6 items), Occupational Limitations for Index Case (Scale 13, 7 items), Social Obtrusiveness (Scale 14, 7 items), and Difficult Personality Characteristics (Scale 15, 32 items).

#### b Subjects

QRSs were sent to the principals of several primary schools with special classes, two special schools for the mentally retarded, one special school for the crippled, and one special school for the blind.

We asked the principals to pass QRSs to parents of the handicapped children. Three hundreds and two QRSs were returned to us through principals.

To make a short form of the QRS, we used two hundred and thirty six QRSs which were answered by twenty eight mothers of the autistic children, one hundred and eight mothers of the mental retarded, sixty seven mothers of the crippled, and thirty three mothers of the blind (Table 1).

Among those mothers, one hundred and twenty six mothers missed to answer some question (1 question—21 questions) of 206 items. Only one hundred and ten mothers—twenty one of the autistic children, thirty one of the mental retarded children, forty of the crippled, and eighteen of the blind—completely answered to 206 items of the QRS. We used those 110 QRSs to measure means and standard deviations of 15 scales.

**Table 1** Characteristics of Samples

	N	Children			Mothers	
		Sex		Age	Age	Educational Career
		Boy	Girl			
Autism	28 (21)	20 (14)	8 (7)	4.6~ 15.0	31~ 46	9~16
Mental Retardation	108 (31)	60 (16)	48 (15)	6.0~ 17.8	29~ 57	6~16
Cripple	67 (40)	34 (21)	33 (19)	6.9~ 19.9	30~ 53	8~16
Blind	33 (18)	14 (8)	19 (10)	8.2~ 18.9	25~ 60	6~16

( ) : Numbers which were completely answered to 206 Items of the QRS.

## Results

#### a Response scores of 206 items

Response scores were the percentage of the answers agreeing with items when scoring directions were true, or the percentage of the answers disagreeing with items when scoring directions were false. Those response scores of 206 items of 236 QRSs were showed in Table 2.

The minimum response score was 0.9%. The question of the item was; One of us had to pass up a chance for a job because \_\_\_ could not be removed from a clinic or a special school, etc (Scale 9, Holroyd's Item Number 73). The maximum response score was 89.4%. The question of the item was; It is easy to do much for \_\_\_ (Scale 4, Holroyd's Item Number 245). The number of items showing the different percentage of response scores were the following; 26 items were 0%-under 10%, 45 items were 10%-under 20%, 39 items were 20%-under 30%, 32 items were 30%-under 40%, 20 items were 40%-under

**Table 2a** Response Scores\* of QRS Items of 236 Mothers

Horloyd's Item Number	Question	Scoring	Response
		Direction	Scores
<b>Scale 1</b>			
36	Thinking about the future makes me sad.	T	53.4
128	I get upset with the way my life is going.	T	27.5
176	I get almost too tired to enjoy myself.	T	8.9
180	If I were healthier, it would be easier to care for _____.	T	22.5
222	I feel sad when I think of _____.	T	56.8
229	Caring for _____ puts a strain on me.	T	33.3
241	Sometimes the demands _____ makes drive me out of my mind.	T	12.1
254	I am as healthy as I ever was.	F	21.7
268	It is easy for me to relax.	F	27.1
270	I rarely feel blue.	F	32.8
278	I am worried much of the time.	T	24.2
<b>Scale 2</b>			
23	I always watch to make sure _____ does not do physical harm to himself/herself or others.	T	57.9
42	When _____ is not well, I can't go out.	T	47.2
54	I get out of the house to do something interesting at least once a week.	F	85.6
60	I have given up things I have really wanted to do in order to care for _____.	T	11.9
116	I can go visit with friends whenever I want.	F	43.8
127	Sometimes I need to get away from the house.	T	15.4
150	I have no time to give the other members of the family.	T	9.4
200	I have enough time to myself.	F	39.7
218	The constant demands to care for _____ limit my growth and development.	T	13.2
224	I have had to give up a chance for a job because of _____.	T	19.3
226	Outside activities would be easier without _____.	T	29.9
256	Most of _____'s care falls on me.	T	64.1
274	I have chances to carry on interests outside the home.	F	25.2
284	_____ 's needs come first.	T	47.0
<b>Scale 3</b>			
15	Even if people don't look at _____, I am always wondering what they might think.	T	52.1
17	_____ has some unusual habits which draw attention.	T	27.5
22	_____ is a very capable, well functioning person despite his/her other problems.	F	30.5
35	If _____ were more pleasant to be with it would be easier to care for him/her.	T	27.5
37	Much of the time I think about _____ dying.	T	3.4
38	If I knew when _____ would die I wouldn't worry so much.	T	10.7
43	I am afraid that by limiting _____'s activities he/she will not develop on his/her own.	T	31.4
55	I am very careful about asking _____ to do things which might be so hard for him/her own.	T	16.9
77	Sometime I avoid taking _____ in public.	T	27.5
89	It is easier for me to do something for _____ than to let him/her do it himself/herself and make a mess.	T	22.5
98	It bothers me that _____ will always be this way.	T	63.0
105	I feel tense whenever I take _____ out in public.	T	35.2
106	_____ is easy to live with.	F	39.9
129	Sometimes I feel very embarrassed because of _____.	T	35.6
142	I hate to see _____ try to do something and fail.	T	32.8
159	Caring for _____ gives one a feeling of worth.	F	20.6
166	I am disappointed that _____ does not lead a normal life.	T	12.4
173	I worry about what will be done with _____ when he/she gets older.	T	75.7
185	I don't mind when people look at _____.	F	43.6
191	I am not embarrassed when others question me about _____'s condition.	F	25.2
217	I have become more understanding in my relationship with people as a result of _____.	T	73.2
228	I enjoy church.	T	27.2
266	_____ will always be a problem to us.	T	37.9
<b>Scale 4</b>			
65	At time I fear _____ will not be able to function in society if he/she is out of our house.	T	45.5
82	I tend to do things for _____ that he/she can to himself/herself.	T	48.7
91	I don't think that _____ depends too much on me or other member's of the family.	F	39.9
102	_____ has a handicap which prevents him/her from improving.	T	71.4
133	_____ doesn't do as much as he/she should be able to do.	T	26.4

\* : Response scores were percentage agreeing with items when scoring direction were true, or percentage disagreeing with items when scoring direction were false.

**Table 2b** Response Scores of QRS Items of 236 Mothers

Horloyd's Item Number	Question	Scoring Direction	Response Scores
<b>Scale 4</b>			
140	Others do for _____ what he/she could do for himself/herself.	T	17.4
155	_____ is over-protected.	T	41.3
183	_____ wants more freedom than he/she has.	T	39.5
214	_____ wants to do things for himself/herself.	F	23.9
215	In the future _____ will be more able to help himself/herself.	F	9.0
234	I feel that _____ would prefer a professional (nurse, day care helper, etc) to care for him/her rather than a member of our family.	T	6.9
243	_____ could do more for himself/herself.	T	73.3
245	It is easy to do too much for _____.	T	89.4
<b>Scale 5</b>			
61	My family argues about how to care for _____.	T	67.7
69	Some members of my family don't like the way I do things.	T	12.9
73	Many people simply don't understand what it is like live with _____.	T	46.7
85	I belong to organizations which help with problems I have with _____.	T	48.2
95	Just talking about problems with close friends makes life easier.	F	25.8
107	The doctor sees _____ at least once a year.	T	51.9
113	Some friends are very helpful when it comes to _____.	F	49.4
165	There is an organization for families who share our problems.	T	46.3
244	My family understands the problems I have.	F	16.2
263	We have lost most of our friends because of _____.	T	3.4
<b>Scale 6</b>			
16	I take on responsibility for _____ because I know how to deal with him/her.	T	75.5
46	_____ feels that I am the only one who understands him/her.	T	8.9
48	I worry about what will happen to _____ when I can no longer take care of him/her.	T	67.2
139	It makes me feel good to know I can take care of _____.	F	38.1
203	I have too much responsibility.	T	32.9
213	It makes me feel worthwhile to help _____.	T	42.6
230	I often worry about what will happen to _____ when I no longer can take care of him/her.	T	52.1
<b>Scale 7</b>			
13	I know _____'s condition will improve.	F	27.4
28	I feel that our family situation will get better.	F	18.6
49	I think in the future _____ will take up more and more of my time.	T	16.9
51	I fear the day when other members of the family leave home and I am left alone with _____.	T	20.4
59	I have accepted the fact that _____ might have to live out his/her life in some special setting (i.e. hospital, institution, foster home).	T	29.7
66	It is difficult for me to stand back and watch _____'s condition get worse.	F	70.4
84	As the time passes I think it will take more and more to care for _____.	T	14.1
114	I worry that _____ may sense that he/she does not have long live.	T	2.6
188	_____ will never be any brighter than now.	T	11.1
202	I am afraid _____ will not get the individual attention, affection, and care that he/she is used to if he/she goes somewhere else to live.	F	70.7
206	_____ is better off in our home than somewhere else.	F	53.0
211	I am afraid that as _____ gets older it will be harder to manage him/her.	T	44.1
219	_____ cannot get any better.	T	14.9
<b>Scale 8</b>			
4	_____ is cared for equally by all members of our family.	F	18.0
9	_____ would not resent being left at home while the family went on vacation.	T	32.6
10	Members of our family praise each other's accomplishments.	F	14.3
18	In our house the whole family eats dinner together.	F	13.7
33	_____ 's problems or illness do not stand in the way of our family progress.	F	88.6
40	Our family agrees important matters.	F	10.7
47	In his/her own way _____ brings as much pleasure to our family as the other members.	F	14.4
56	The attitude of our family makes it impossible for _____ to live with us any longer.	T	3.4
62	_____ is able to fit into the family social group.	F	32.3
86	There have been serious emotional problems for someone in our family.	T	8.5
87	Our relatives have been very helpful.	F	40.9
99	No one in our family drinks alcohol too much.	F	28.4
108	_____ eats his/her meals with other members of the family.	F	9.4
118	We enjoy _____ more and more as a person.	F	30.2
119	We have changed our house because of _____.	T	10.6

**Table 2c** Response Scores of QPS Items of 236 Mothers

Horloyd's Item Number	Question	Scoring Direction	Response Scores
<b>Scale 8</b>			
120	Taking _____ on a vacation spoils pleasure for the whole family.	T	12.9
125	_____ prevents any communication within our family.	T	7.2
130	Having to care for _____ has enriched our family life.	F	23.4
141	Because of _____ our family has never enjoyed a meal.	T	32.8
143	_____ is accepted by other members of the family.	F	4.3
160	We have discussed his/her death with _____.	T	4.7
192	There is a lot of anger and resentment in our family.	T	8.9
252	Members of my family are able to discuss personal problems.	F	14.1
<b>Scale 9</b>			
6	A member of my family has had to give up education (or job) because of _____.	T	2.1
32	Other member of the family have to do without things because of _____.	T	25.6
45	The constant demands for care for _____ limit growth and development of someone else in our family.	T	4.3
67	In the future our family's social life will suffer because of increased responsibilities and financial pressure.	T	23.7
73	One of us has had to pass up a chance for a job because _____ could not be removed from a clinic or a special school, etc.	T	0.9
121	The family does as many things together now as we ever did.	F	6.4
153	There are many places where we can enjoy ourselves as a family when _____ comes along.	F	22.5
162	One of us has had to pass up a chance for a job because _____ could not be left without someone to watch him/her.	T	6.8
236	Members of our family get to do the same kinds of things other families do.	F	22.1
<b>Scale 10</b>			
5	It will take us three years of more to pay off our debt.	T	34.4
25	Our house is comfortably arranged to meet _____'s needs without making it difficult for other members of the family.	F	61.5
44	Our family's income has dropped over the past 5 years.	T	13.6
52	It would be better for _____ if our house could be remodeled.	T	31.9
80	Every member of our family has had to do without things because of money spent on _____.	T	17.4
94	We can afford to pay for the care _____ needs.	F	65.8
111	Caring for _____ has been a financial burden for our family.	T	15.8
134	Our family has been on welfare.	T	13.6
156	Our family income is more than average.	F	72.3
167	We spend up to 25 percent of our income on medical care (or care for _____).	T	6.4
178	We owe a great deal of money.	T	16.6
194	Our family has managed to save money or make investments.	F	65.8
195	We own or are buying our own home.	F	70.9
199	We can have no luxuries.	T	50.6
249	We can hardly make ends meet.	T	32.9
261	_____ has his/her own room.	F	70.5
271	We have good laundry facilities at home.	F	24.9
<b>Scale 11</b>			
29	Medicine does not have to be given to _____ at a set time.	F	40.7
81	_____ can feed himself/herself.	F	61.4
104	_____ has a lot of pain.	T	2.6
110	An electricity failure would endanger _____'s life or health.	T	27.3
138	We take _____ along when we go out.	F	13.7
144	I fear _____ might get hurt while playing games or sports.	T	34.5
148	_____ 's health is not getting worse.	F	12.7
161	_____ is able to take part in games or sports.	F	31.8
190	I believe _____ should go places as often as others in the family.	F	11.5
201	_____ is able to go to the bathroom alone.	F	11.9
265	_____ can ride a bus.	F	25.5
269	_____ has to use a bedpan or a diaper.	T	13.6
272	_____ can walk without help.	F	17.9
273	_____ needs help in the bathroom.	T	26.4
<b>Scale 12</b>			
154	It is hard to think of enough things to keep _____ busy.	T	34.9
164	_____ has too much time on his/her hands.	T	3.4
168	Time drags for _____ -especially free time.	T	26.5
177	_____ has things to entertain him/her (TV, radio) in his/her room.	F	63.1
212	It is easy to keep _____ entertained.	F	37.6

**Table 2d** Response Scores of QRS Items of 236 Mothers

Horloyd's Item Number	Question	Scoring Direction	Response Scores
Scale 12			
240	_____ has many things to keep him/her busy.	F	69.7
Scale 13			
24	The special opportunities needed by _____ are available in our community.	F	75.6
53	A counselor or a teacher sees _____ at least once a month.	T	10.7
58	_____ is limited in the kind of work he/she can do to make a living.	T	67.0
146	_____ spends time at a special day center or in special classes at school.	T	85.8
170	The part that worries me most about _____ going on his/her own is his/her ability to make a living.	T	78.7
196	Information and encouragement is available to those who seek it.	F	48.6
197	We get special funds because of _____'s problem.	T	11.3
Scale 14			
34	When others are around _____ I cannot relax ; I am always on guard.	T	26.3
93	I feel that I must protect _____ from the remarks of children.	T	44.7
100	The community is used to people like _____.	F	29.4
103	_____ is sometimes too sexual.	T	7.7
225	_____ accepts himself/herself as a person.	T	73.0
247	It is easier for our family to do things with people we know than with strangers.	F	10.2
264	_____ has an attractive, clean appearance.	F	58.8
Scale 15			
1	_____ demands that others do things for him/her more than is necessary.	T	26.8
2	_____ understands the idea of time.	F	58.5
11	_____ has a pleasing personality.	F	14.5
30	_____ doesn't communicate with others of his/her age group.	T	41.6
90	_____ is easy to manage most of the time.	F	31.3
115	_____ will not do something for himself/herself if he/she knows someone will do it for him/her.	T	27.2
122	_____ knows his/her own address.	F	24.7
123	_____ get along very well with others.	F	39.7
124	_____ is aware of who he/she is (for example, male 14 years old).	F	16.2
145	It is difficult to communicate with _____ because he/she has difficulty understanding what is being said to him/her.	T	18.6
147	_____ is very anxious most of the time.	T	11.0
172	_____ can't pay attention very long.	T	55.7
179	_____ is depressed most of the time.	T	7.2
182	_____ can get around the neighborhood quite easily.	F	33.1
184	One of the things I appreciate about _____ is his/her confidence.	F	55.8
189	One of the things I appreciate about _____ is his/her ability to recognize his /her own limits.	F	63.1
198	One of the things I enjoy about _____ is his/her sense of humor.	F	45.2
205	_____ cannot remember what he/she says from one moment to the next.	T	14.5
207	_____ can describe himself/herself as a person.	F	30.6
220	_____ is very tense in strange surroundings.	T	54.1
221	It is easy to communicate with _____.	F	20.5
225	_____ accepts himself/herself as a person.	F	24.5
231	_____ can use the bus to go wherever he/she wants.	F	51.9
232	People can't understand what _____ tries to say.	T	31.8
239	_____ uses the phone frequently.	F	66.4
246	_____ appreciates the interest others show in him/her.	F	34.3
250	_____ rarely has nightmares.	F	11.7
259	It is fortunate how _____ has adjusted to life.	F	7.7
262	_____ is very irritable.	T	11.9
267	_____ is able to express his/her feelings to others.	F	26.5
281	One of the things I appreciate about _____ is his/her sensitivity to others.	F	32.3
283	_____ likes to follow the same schedule all the time.	T	46.3

50%, 14 items were 50%-under 60%, 13 items were 60%-under 70%, 17 items were 70% and over (Table 3).

b *The means and standard deviations of 15 scales*

The means and standard deviations of fifteen scales of one hundred and ten mothers who answered all items of the QRS were showed on Table 4.

As to six scales; Poor Health/Mood (Scale 1), Excess Time Demands (Scale 2), Negative Attitude toward Index Case (Scale 3), Overcommitment/Martyrdom (Scale 4), Occupational Limitations for Index Case (Scale 12), Difficult Personality Characteristics (Scale 15), mothers of the autistic children showed statistically significant much more stress than mothers of three other groups. And, as to two scales; Physical Incapacitation (Scale 11), and Lack of Activities for Index Case (Scale 12), mothers of the crippled showed statistically significant more higher scores than mothers of three other groups.

### Discussion

#### a Both short forms of the QRS

The QRS is an useful inventory. It inquires the problems of parents who take care of the handicapped child. It investigates not only the parental problems, but problems of the family and the handicapped child. But, it is too long to ask for the parents. For example, the Parents Attitude Research Instrument (PARI) which is the most popular questionnaire to examine the parental attitudes, requests to answer 115 items, while the QRS has 206 items. And, there is no verification that 15 logically determined scales are, in fact, valid.

Thus, we factor analysed 236 QRSs for the purpose of developing a shorter and psychometrically stronger questionnaire.

**Table 3** The Number of Items Showing the Different Response Scores

	Holroyd's Item Number													
0~ Under 10% 26 items	176, 160,	150, 192,	37, 6,	215, 45,	234, 73,	263, 121,	46, 162,	114, 167,	56, 104,	86, 164,	108, 103,	125, 179,	141, 259	
10%~ Under 20% 45 items	241, 84, 111, 124,	60, 188, 134, 145,	127, 219, 178, 147,	218, 4, 138, 205,	224, 10, 148, 262	38, 18, 190, 201,	55, 40, 269, 272,	166, 47, 201, 269,	140, 119, 272, 53,	63, 120, 197, 225,	244, 44, 11,	28, 80,	49, 80,	
20%~Under 30% 39 items	128, 228, 271,	180, 133, 110,	254, 214, 265,	268, 95, 273,	278, 13, 168,	226, 51, 34,	274, 59, 100,	17, 99, 1,	35, 143, 115,	77, 32, 122,	89, 67, 221,	159, 153, 225,	191, 236, 267	
30%~ Under 40% 32 items	229, 203, 123,	270, 9, 182,	200, 62, 207,	22, 118, 232,	43, 130, 246,	105, 5, 281	106, 52, 249,	129, 249, 144,	142, 161, 154,	266, 161, 154,	91, 154, 212,	183, 90,	139, 90,	
40%~ Under 50% 20 items	42, 87,	116, 29,	284, 196,	185, 93,	65, 30,	82, 198,	155, 283	79, 283	85, 283	113, 283	165, 283	213, 283	211, 283	
50%~ Under 60% 14 items	36, 231	222, 231	23, 231	15, 231	107, 231	230, 231	206, 231	199, 231	264, 231	2, 231	172, 231	184, 231	220, 231	
60%~ Under 70% 13 items	256, 239	98, 239	61, 239	48, 239	25, 239	94, 239	194, 239	81, 239	177, 239	240, 239	58, 239	189, 239	239, 239	
70%~ 17 items	54, 24,	173, 146,	217, 170,	102, 247	243, 247	245, 247	16, 247	66, 247	202, 247	33, 247	156, 247	195, 247	261, 247	

**Table 4** The Means and Standard Deviations of 15 Scales of 110 Mothers

	Scale	Numbers of items	AU	MR	CR	BL	Total
			N=21	N=31	N=40	N=18	N=110
			M/SD	M/SD	M/SD	M/SD	M/SD
<b>Parent problems</b>							
Poor Health/Mood	1	11	5.14/3.38	2.25/2.09	3.80/2.65	3.38/4.10	3.55/3.07
Excess Time Demands	2	14	6.95/3.55	4.45/2.69	5.62/2.40	4.33/3.08	5.33/2.96
Negative Attitude toward Index Case	3	23	10.52/4.61	6.67/3.91	7.92/3.33	6.72/5.16	7.87/4.27
Overprotection/Dependency	4	13	6.76/2.21	4.58/2.20	5.90/2.48	5.44/2.47	5.62/2.45
Lack of Social Support	5	10	4.00/1.14	3.61/1.35	3.45/1.15	3.44/1.75	3.60/1.32
Overcommitment/Martyrdom	6	7	3.00/1.37	2.80/1.35	3.55/1.33	2.77/1.21	3.11/1.36
Pessimism	7	13	3.52/1.69	3.29/1.34	4.27/1.96	4.27/1.96	3.85/1.79
<b>Family problems</b>							
Lack of Family Integration	8	23	5.76/2.71	4.25/2.17	4.47/2.65	4.38/2.81	4.65/2.59
Limits on Family Opportunity	9	9	1.80/1.66	0.93/1.18	1.20/1.04	1.05/1.25	1.22/1.27
Financial Problems	10	17	5.76/3.25	5.58/2.47	7.75/3.09	6.61/3.23	6.57/3.10
<b>Problems of the Child</b>							
Physical Incapacitation	11	14	3.28/1.79	2.29/1.96	4.62/2.81	2.77/2.55	3.41/2.55
Lack of Activities for Index Case	12	6	3.33/1.19	2.22/1.02	2.32/1.30	2.16/1.33	2.46/1.28
Occupational Limitations for Index Case	13	7	4.42/0.97	3.74/1.38	3.95/1.01	3.50/1.09	3.91/1.16
Social Obtrusiveness	14	7	2.23/0.88	2.61/0.98	2.65/1.14	2.33/0.97	2.51/1.03
Difficult Personality Characteristics	15	32	15.28/5.93	9.38/5.88	9.65/5.01	9.94/5.71	10.52/5.96

AU : Autism

MR : Mental Retardation

CR : Cripple

BL : Blind

M : Mean

SD : Standard deviation

We did previously two analysis. First, we calculated corrected item-total correlation in 206 items. Correlation above .50 were seventeen items. Second, we factor analysed items in each scale by means of principal component method. The first factor extracted, accounted for low proportions of the total variance in each scale.

Then, using the VARIMAX method, we factor analysed 206 items which was separately divided in three categories: parent problems, family problems, and child problems.

As to 91 items of parent problems, we extracted five factors. As to 49 items of family problems, we extracted three factors. And, as to 66 items of child problems, we extracted three factors. Thus, we reduced the QRS a short form of it with 11 factors.

We examined every factor loading and decided to make the 11 five-item scales (Table 5).

Scale 1, which was labeled Mother's Affliction, consisted of 5 items of the QRS (Holroyd's Item Number: 278, 127, 128, 180, 226). Scale 2, Pessimism about Child Development, consisted of 4 items of it (Holroyd's Item Number: 215, 84, 49, 219) and the newly added item: \_\_\_ has not developed well (T). Scale 3, Overprotection/Dependency, consisted of 5 items of it (Holroyd's Item Number: 22, 133, 214, 218, 82). Scale 4, Anxiety for the Future of Index Case, consisted of 5 items of it (Holroyd's Item Number: 36, 98, 222, 266, 48). Scale 5, Social Isolation, consisted of 4 items of it (Holroyd's Item Number: 95, 113, 191, 159) and the newly added item: all people are warm-hearted (F).

Scale 6, Burden for Members of the Family consisted of 4 items of it (Holroyd's Item Number: 32, 67, 33, 111) and the newly added item: \_\_\_ is cared for equally by all mem-

**Table 5** Our Short Form of the QRS

	Holroyd's Items Numbers
Parental problems	
Mother's Affliction	278, 127, 128, 180, 226
Pessimism about Child Development	215, 84, 49, 219
Overprotection/Dependency	22, 133, 214, 218, 82
Anxiety for the Future of Index Case	36, 98, 222, 266, 48
Social Isolation	95, 113, 191, 159
Family problems	
Burden for Members of the Family	32, 67, 33, 111
Financial Problems	156, 194, 199, 195
Lack of Family Integration	143, 10, 121, 118
Child problems	
Intellectual Incapacitation	225, 123, 267, 122, 281
Physical Incapacitation	272, 269, 265, 201, 273
Need for the Care of Index Case	34, 93, 115, 172
	New items
Parental problems	
Pessimism about Child Development	_____ has not developed well (T)
Social Isolation	All people are warm-hearted (F)
Family problems	
Burden for Members of the Family	_____ is cared for equally by all members of our _____ family (F)
Financial Problems	Caring for _____ costs much money (T)
Lack of Family Integration	Everyone in our family agrees (F)
Child problems	
Need for the Care of Index Case	_____ is dear to me (F)

bers of our family (F). Scale 7, Financial Problems, consisted of 4 items of it (Holroyd's Item Number: 156, 194, 195, 199) and the newly added item: caring for \_\_\_ costs much money (T). Scale 8, Lack of Family Integration, consisted of 4 items of it (Holroyd's Item Number: 143, 10, 121, 118) and the newly added item: everyone in our family agrees (F).

Scale 9, Intellectual Incapacitation, consisted of 5 items of it (Holroyd's Item Number: 225, 123, 267, 122, 281). Scale 10, Physical Incapacitation, consisted of 5 items of it (Holroyd's Item Number: 272, 269, 265, 201, 273). Scale 11, Need for the Care of Index Case, consisted of 4 items of it (Holroyd's Item Number: 34, 93, 115, 172) and the newly added item: \_\_\_ is dear to me (F).

Thus, for a short form, we remained 49 items of the QRS and newly adopted 6 items. (Appendix A)

Friedrich and his colleagues made a short form of the QRS. Their short form had four scales which were cut down 52 items. (Appendix B)

When comparing our short form with Friedrich's short form, ours had 11 scales which contained Holroyd's 49 items, theirs had 4 scales which were made of Holroyd's 52 items.

And, both short forms had 19 common items (Table 6).

It is interesting to find that using different subjects and different factor analysis, both short forms show similar lengths and have about one third common items.

b *Mean scores of 15 scales for both groups*

As presented in Table 7, comparing our 110 QRSs with Friedrich's 254 QRSs showed statistically significant differences on 6 scales: Negative Attitude toward Index Case, Financial Problems, Social Obtrusiveness, Lack of Activities for Index Case, Occupational Limitations for Index Case, and Difficult Personality Characteristics.

Financial Problems, Social Obtrusiveness, Lack of Activities for Index Case, Occupational Limitations for Index Case of our group showed higher scores than Friedrich's group. Negative Attitude toward Index Case and Difficult Personality Characteristics of our group showed lower scores than Friedrich's group.

According to the previous comparison, our mothers of the handicapped children and Holroyd's mothers of the handicapped children pointed out very similar scores. Among 15 scales, it was only on the scale of Lack of Social Support that our QRSs with autistic children differed from Holroyd's QRSs with them. And there were differences of 2 scales (Lack of Activities for Index Case, Difficult Personality Characteristics) between our QRSs of mentally retardation and Holroyd's QRSs of them.

In this study, we found some differences between both data. As to financial needs, how to keep the handicapped child active and enthusiastic in a daily life, how to protect the child from people gazing him/her, and real jobs of the child, our mothers felt more bur-

**Table 6a** Two Short Forms of the QRS ——— Common Items

Holroyd's Item Number	Our Scale	Friedrich's Scale	Holroyd's Scale
278	Mother's Affliction	Parent and Family Problems	Poor Health/Mood
128	"	"	"
218	Overprotection/Dependency	"	Excess Time Demands
133	"	Pessimism	Overprotection/Dependency
222	Anxiety for the Future of Index Case	Parent and Family Problems	Poor Health/Mood
98	"	Pessimism	Negative Attitude toward Index Case
266	"	"	"
48	"	"	Overcommitment/Martyrdom
32	Burden for Members of the Family	Parent and Family Problems	Limits on Family Opportunity
67	"	"	"
121	Lack of Family Integration	"	"
225	Intellectual Incapacitation	Child Characteristics	Difficult Personality Characteristics
267	"	"	"
122	"	"	"
272	Physical Incapacitation	Physical Incapacitation	Physical Incapacitation
269	"	"	"
265	"	"	"
201	"	"	"
172	Need for the Care of Index Case	Child Characteristics	Difficult Personality Characteristics

**Table 6b** Two Short Forms of the QRS ——— Our Items

Holroyd's Item Number	Our Scale	Holroyd's Scale
180	Mother's Affliction	Poor Health/Mood
127	"	Excess Time Demands
226	"	"
215	Pessimism about Child Development	Overprotection/Dependency
84	"	Pessimism
49	"	"
219	"	"
22	Overprotection/Dependency	Negative Attitude toward Index Case
214	"	Excess Time Demands
82	"	Overprotection/Dependency
36	Anxiety for the Future of Index Case	Poor Health/Mood
95	Social Isolation	Lack of Social Support
113	"	"
191	"	Negative Attitude toward Index Case
159	"	"
33	Burden for Members of the Family	Lack of Family Integration
111	"	"
156	Financial Problems	Financial Problems
194	"	"
199	"	"
195	"	"
143	Lack of Family Integration	Lack of Family Integration
10	"	"
118	"	"
123	Intellectual Incapacitation	Difficult Personality Characteristics
281	"	"
273	Physical Incapacitation	Physical Incapacitation
34	Need for the Care of Index Case	Social Obtrusiveness
93	"	"
115	"	Difficult Personality Characteristics

dens than Friedrich's parents. Our mothers showed lower negative attitudes toward the child and less burdens to his/her characteristics than Friedrich's parents. For what reason we had the differences of both data? Was that because of the differences of the parents? Our subjects were only mothers. We did not survey kinds of mothers, but they were customarily biological mothers, in Japan. Friedrich's subjects were not only biological mothers, but biological fathers, adoptive parents, and step parents. Was that because of the differences of the disability of the child? Our subjects included the autistic children whose mothers presented more affliction than the other mothers (Holroyd, Inanami). Was that because of the differences of situations, in which the families of the child were living? There were many cross-cultural differences between both

**Table 6c** Two Short Forms of the QPS ——— Friedrich's Items

Holroyd's Item Number	Friedrich's Scale	Holroyd's Scale
176	Parent and Family Problems	Poor Health/Mood
229	"	"
268	"	"
270	"	"
60	"	Excess Time Demands
116	"	"
40	"	Lack of Family Integration
62	"	"
120	"	"
192	"	"
45	"	Limits on Family Opportunity
153	"	"
236	"	"
166	Pessimism	Negative Attitude toward Index Case
173	"	"
155	"	Overprotection/Dependency
230	"	"
59	"	Pessimism
164	"	Lack of Activities for Index Case
168	"	"
77	Child Characteristics	Negative Attitude toward Index Case
105	"	"
129	"	"
58	"	Occupational Limitations for Index Case
30	"	Difficult Personality Characteristics
124	"	"
145	"	"
172	"	"
184	"	"
205	"	"
221	"	"
81	Physical Incapacitation	Physical Incapacitation
161	"	"

countries. This problem should be examined in future research.

But, nine scales showed no differences between our group and Friedrich's group. We concluded that, the group of parents rearing the handicapped child had the similar afflictions as regards to problems of the parents, the family, and the child.

**Table 7** Means and Standard Deviations of Two Groups Showing Statistically Significant Differences

	Our group	Friedrich's group	
Number	110	254	
Parents	Mother+	Biological mother(71%) Biological father(20%) Adoptive and step parents(9%)	
Kind of the child	Autistic children(21) Mentally retarded(31) Clipped(40) Blind(18)	Mother disability(30) Deaf or blind(80) Mentally retarded(144)	
Means and Standard Deviations	Mean (SD)	Mean (SD)	t Ratios
Negative Attitude toward Index Case	7.87(4.27)	9.1(4.4)	2.471*
Financial Problems	6.57(3.10)	4.3(3.4)	-6.004***
Lack of Activities for Index Case	2.46(1.28)	1.9(1.8)	-2.954**
Occupational Limitations	3.91(1.16)	3.5(1.4)	-2.696**
Social Obtrusiveness	2.51(1.03)	1.8(1.2)	-5.402***
Difficult Personality Charactersties	10.52(5.96)	12.4(7.9)	2.235*

\* :  $p < .05$  \*\* :  $p < .01$  \*\*\* :  $p < .001$

+ : We did not survey kinds of mothers. But they were customarily biological mothers.

### Summary

In this study, we tried to make a short form of the QRS, and compared our questionnaire with Friedrich's short form of it.

Using the data of 236 QRSs, we factor analysed each of the three categories of the QRS: the parent problems, the family problems, and the child problems.

We extracted 5 factors out of the parent problems, 3 factors out of the family problems, and 3 factors out of the child problems. To make 11 five-item scales, we remained 49 items of the QRS and newly added 6 items.

Friedrich and his colleagues made their short form, which had 4 scales (52 items). It is interesting to find that both short forms have like lengths, and 19 common items.

Then, we compared 15 scales of the QRS of our 110 mothers with those of Friedrich's 254 parents.

Financial Problems, Lack of Activities for Index Case, Occupational Limitations for Index Case, and Social Obtrusiveness of our mothers showed more stressful scores than Friedrich's parents. Negative Attitude toward Index Case and Difficult Personality Characteristics of our mothers showed lower scores than Friedrich's parents.

We have to research where those differences come from: Is that because of the differences of the subjects or the differences of the culture in which those subjects are living? But, 9 scales of the QRS showed same burdens. We guessed that even in the different culture the parents who reared the handicapped child had similar heavy loads.

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### Appendix A

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|--|---------|----------|------------|--------------|
| 1. _____ is a very capable, well functioning person.                         | (a)True | (b)False | (c)Neither | (d)Not Apply |
| 2. Just talking about my problems with close friends makes life easier.      | (a)     | (b)      | (c)        | (d)          |
| 3. I am worried much of the time.  | (a)     | (b)      | (c)        | (d)          |
| 4. In the future _____ will be more able to help himself/herself.            | (a)     | (b)      | (c)        | (d)          |
| 5. Thinking about the future makes me sad.                                   | (a)     | (b)      | (c)        | (d)          |
| 6. _____ is accepted by other members of the family.                         | (a)     | (b)      | (c)        | (d)          |
| 7. Other members of the family have to do without things because of _____.   | (a)     | (b)      | (c)        | (d)          |
| 8. Our family income is average.   | (a)     | (b)      | (c)        | (d)          |
| 9. _____ accepts himself/herself as a person.                                | (a)     | (b)      | (c)        | (d)          |
| 10. _____ can walk without help.   | (a)     | (b)      | (c)        | (d)          |
| 11. When others are around _____ I can not relax ; I am always on guard.     | (a)     | (b)      | (c)        | (d)          |
| 12. _____ doesn't do as much as he/she should be able to do.                 | (a)     | (b)      | (c)        | (d)          |
| 13. Some friends are very helpful to _____.                                  | (a)     | (b)      | (c)        | (d)          |
| 14. Sometimes I want to get away from the house.                             | (a)     | (b)      | (c)        | (d)          |
| 15. As the time passes I think it will take more and more to care for _____. | (a)     | (b)      | (c)        | (d)          |
| 16. It bothers me that _____ will always be this way.                        | (a)     | (b)      | (c)        | (d)          |
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| 17. Member of our family praise each other's accomplish-<br>ments.  | (a) | (b) | (c) | (d) |
| 18. In the future our family's social life will suffer because<br>of increased responsibilities and financial pressure. | (a) | (b) | (c) | (d) |
| 19. Our family has managed to save money or make invest-<br>ments.  | (a) | (b) | (c) | (d) |
| 20. _____ gets along very well with others.   | (a) | (b) | (c) | (d) |
| 21. _____ still has to use a diaper.  | (a) | (b) | (c) | (d) |
| 22. I feel that I must protect _____ from the other children.   | (a) | (b) | (c) | (d) |
| 23. _____ wants to do things for himself/herself.   | (a) | (b) | (c) | (d) |
| 24. I am not embarrassed when others question me about _____<br>_____ 's condition.                                     | (a) | (b) | (c) | (d) |
| 25. I get upset with the way my life is going.  | (a) | (b) | (c) | (d) |
| 26. I think in the future _____ will take up more and<br>more of my time.   | (a) | (b) | (c) | (d) |
| 27. I feel sad when I think of _____ .  | (a) | (b) | (c) | (d) |
| 28. The family does as many things together now as we<br>ever did.  | (a) | (b) | (c) | (d) |
| 29. _____ 's problems or illness do not stand in the way<br>of our family progress.                                     | (a) | (b) | (c) | (d) |
| 30. We can not afford luxuries.   | (a) | (b) | (c) | (d) |
| 31. _____ is able to express his/her feelings to others.  | (a) | (b) | (c) | (d) |
| 32. _____ can ride a bus.   | (a) | (b) | (c) | (d) |
| 33. _____ will not do something for himself/herself if<br>he/she knows sometime will do it for him/her.                 | (a) | (b) | (c) | (d) |
| 34. The constant demands to care for _____ limit my<br>growth and development.  | (a) | (b) | (c) | (d) |
| 35. Caring for _____ gives me a feeling of worth.   | (a) | (b) | (c) | (d) |
| 36. If I were healthier, it would be easier to care for<br>_____.   | (a) | (b) | (c) | (d) |
| 37. _____ cannot get any better.  | (a) | (b) | (c) | (d) |
| 38. _____ will always be a problem to us.   | (a) | (b) | (c) | (d) |
| 39. We are happy with _____ s' growth.  | (a) | (b) | (c) | (d) |
| 40. Caring for _____ has been a financial burden for<br>our family.   | (a) | (b) | (c) | (d) |
| 41. We own our own home.  | (a) | (b) | (c) | (d) |
| 42. _____ knows his/her own address.  | (a) | (b) | (c) | (d) |
| 43. _____ is able to go to the bathroom alone.  | (a) | (b) | (c) | (d) |
| 44. _____ can't pay attention very long.  | (a) | (b) | (c) | (d) |
| 45. I tend to do thing for _____ that he/she can do himself/<br>hereself.   | (a) | (b) | (c) | (d) |
| 46. All people are warm-hearted.  | (a) | (b) | (c) | (d) |
| 47. Outside activities would be easier without _____.   | (a) | (b) | (c) | (d) |
| 48. _____ has not developed well.   | (a) | (b) | (c) | (d) |
| 49. I worry about what will happen to _____ when I can<br>no longer take care of him/her.                               | (a) | (b) | (c) | (d) |
| 50. Everyone in our family agrees.  | (a) | (b) | (c) | (d) |
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|--|-----|-----|-----|-----|
| 51. _____ is cared for equally by all members of our family.                     | (a) | (b) | (c) | (d) |
| 52. Caring for _____ costs much money.   | (a) | (b) | (c) | (d) |
| 53. One of the things I appreciate about _____ is his/her sensitivity to others. | (a) | (b) | (c) | (d) |
| 54. _____ needs help in the bathroom.  | (a) | (b) | (c) | (d) |
| 55. _____ is dear to me.   | (a) | (b) | (c) | (d) |
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#### Appendix B

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|---|---|---|
| 1. _____ doesn't communicate with others of his/her age group.  | T | F |
| 2. Others members of the family have to do without things because of _____.   | T | F |
| 3. Our family agrees on important matters.  | T | F |
| 4. I worry about what will happen to _____ when I can no longer take care of him/her.   | T | F |
| 5. The constant demands for care for _____ limit growth and development of someone else in our family.                                | T | F |
| 6. _____ is limited in the kind of work he/she can do to make a living.   | T | F |
| 7. I have accepted the fact that _____ might have to live out his/her life in some special setting (e.g., institutiun or group home). | T | F |
| 8. _____ can feed himself/hereself.   | T | F |
| 9. I have given up things I have really wanted to do in order to care for _____.  | T | F |
| 10. _____ is able to fit into the family social group.  | T | F |
| 11. Sometimes I avoid taking _____ out in public.   | T | F |
| 12. In the future, our family's social life will suffer because of increased responsibilities and financial stress.                   | T | F |
| 13. It bothers me that _____ will always be this way.   | T | F |
| 14. I feel tense whenever I take _____ out in public.   | T | F |
| 15. I can go visit with friends whenever I want.  | T | F |
| 16. Taking _____ on a vacation spoils pleaura for the whole family.   | T | F |
| 17. _____ knows his/her own adress.   | T | F |
| 18. The family does as many things together now as we ever did.   | T | F |
| 19. _____ is aware who he/she is.   | T | F |
| 20. I get upset with the way my life is going.  | T | F |
| 21. Sometimes I feel very embarrassed because of _____.   | T | F |
| 22. _____ dosen't do as much as he/she should be able to do.  | T | F |
| 23. It is difficult to communicate with _____ because he/she has difficulty understanding what is being said to him/her.              | T | F |
| 24. There are many places where we can enjoy ourselves as a family when _____ comes along.  | T | F |
| 25. _____ is over-protected.  | T | F |
| 26. _____ is able to take part in games or sports.  | T | F |
| 27. _____ has too much time on his/her hands.   | T | F |
| 28. I am disappointed that _____ does not lead a normal life.   | T | F |
| 29. Time drags for _____, especially free time.   | T | F |
| 30. _____ can't pay attention very long.  | T | F |
| 31. It is easy for me to relax.   | T | F |
| 32. I worry about what will be done with _____ when he/she gets older.  | T | F |
| 33. I get almost too tired to enjoy myself.   | T | F |
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| 34. One of the things I appreciate about _____ is his/her confidence.                        | T | F |
| 35. There is a lot of anger and resentment in our family.                                    | T | F |
| 36. _____ is able to go to the bathroom alone.   | T | F |
| 37. _____ cannot remember what he/she says from one moment to the next.                      | T | F |
| 38. _____ can ride a bus.  | T | F |
| 39. It is easy to communicate with _____.  | T | F |
| 40. The constant demands to care for _____ limit my growth and development.                  | T | F |
| 41. _____ accepts himself/herself as a person.   | T | F |
| 42. I feel sad when I think of _____.  |   |   |
| 43. I often worry about what will happen to _____ when I no longer can take care of him/her. | T | F |
| 44. People can't understand what _____ tries to say.   | T | F |
| 45. Caring for _____ puts a strain on me.  | T | F |
| 46. Member of our family get to do the same kinds of things other families do                | T | F |
| 47. _____ will always be a problem to us.  | T | F |
| 48. _____ is able to express his/her feelings to others.                                     | T | F |
| 49. _____ has to use a bedpan or diaper.   | T | F |
| 50. I rarely feel blue.  | T | F |
| 51. I am worried much of the time.   | T | F |
| 52. _____ can walk without help.   | T | F |
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