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Establishing child-care support: Perspective-patterns on child-rearing, derived from the CPS-M97 measurement scale for professional mothers of infants and toddlers

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Abstract

Both qualitative and quantitative social support is imperative for mothers of infants and toddlers. To address this issue, this study ascertained four perspective patterns on child-rearing amongst "professional mothers" (*senyō haha-oya*) of children ages 0-3. This was accomplished through use of the CPS-M97 Perspectives on Child-Rearing Measurement Scale, comprising five conceptual subscales designed explicitly for the purpose of gauging views on child-rearing amongst the aforementioned target group (Naitoh et al. 1998). The study focuses on two subscales in particular: 1) "Maternal Satisfaction and Sense of Fulfillment"; and 2) "Maternal Burden and Sense of Anxiety." In addition to these, the CPS-M97 measurement also featured a 3-item section concerning "Child-Centrism and the Strengthening of the Mother's Role," and another 3-item section addressing a mother's "Image of [her] Child," constituting, in total, a set of 18 questions with a factor contribution of 58.6%.

Data used for our analysis were 303 returned questionnaires (an effective respondent rate of 30.3%) from professional mothers at an average age of 30.93 years (SD=5.55 years). The framework of the study took mothers' perspectives on child rearing as an independent variable and analyzed it through three different models in relation to the following dependent variables: a) the level of child-rearing activity; b) the level of spousal verbal support; c) the level of mothers' self-esteem. Mothers' perspectives in and of themselves were analyzed through the subscale of "Maternal Satisfaction and Sense of Fulfillment", plotted on a rectangular coordinate plane against the subscale of "Maternal Burden and Sense of Anxiety." Four distinct perspective patterns emerged. We calculated the correlation coefficient to be -0.395 ($p < 0.001$), indicating to us that, although some correlation existed, it was not sufficiently prominent.

We thus decided to proceed using the four patterns. A one-way fixed-effects analysis of variance (ANOVA) run on the comparative number of self-esteem points scored between each of these perspective patterns revealed significant differences amongst the patterns. The result of multiple comparisons using the LSD method revealed that mothers of the Negative type had significantly lower levels of self-esteem than Natural and Positive types. Meanwhile, mothers of the ambivalent type had lower levels of self-esteem than Positive types. We conclude that the development of an objective taxonomy vis-à-vis CPS-M97 will enable public health centers, day care facilities, etc. to screen mothers experiencing feelings of anxiety or burden, fostering a new awareness of maternal roles and responsibilities. As a method of social support, its ultimate effect will be to raise the quality of life for professional mothers and unlock a hidden potential for joy in the duties of child-rearing.

Key words: perspectives on child-rearing measurement, child-rearing perspective patterns and types, child-rearing support, parenthood, self-esteem, infants and toddlers

I. Introduction

In modern-day Japan, the environment of parenting is rapidly being restructured in response to a declining birth rate and an aging

population. Despite these efforts, further social support mechanisms—both qualitative and quantitative—are necessary for families, and more specifically for "professional mothers" (*senyō haha-oya*) of infants and toddlers. A

persistent effort is imperative in light of such contemporary problems as mothers who either remain unmarried or postpone marriage and ill-prepared parents who resort to child abuse. So as to best address these pivotal issues, the authors have developed the CPS-M97 measurement scale, a system rooted in five conceptual subscales, which together comprise the total psychic environment of professional mothers of children ages 0-3 (Diagram 1) (Naitoh et al. 1998). It is my belief that by establishing a concrete support system capable of practically assessing two of these subscales — maternal satisfaction/fulfillment and maternal burden/anxiety — institutions and personal agents will be in a position to better cultivate in mothers positive attitudes towards child-rearing.

Using experimental results derived from the CPS-M97 scale, we have developed four principal pattern types in child-rearing perspectives (Naitoh et al. 2004). Through these four pattern types, we hope to establish an objective support system that is easily tailored to the pattern-specific needs of each mother. The results of this study point to a practical strategy for implementing screening systems at public health centers, day-care facilities, etc., screening systems that effectively cater to the needs of women suffering from the burdens and anxieties of motherhood. Pending further streamlining, our research should also prove effective as a means of early prevention against potential cases of child-abuse. Our ultimate aim, in a word, is to improve the quality of life for mothers of infants and toddlers, bringing about a new maternal self-awareness and sense of fulfillment (Naitoh et al. 2003).

In addition to the two 6-item subscales of satisfaction and burden mentioned above, the CPS-M97 scale also includes a three-item subscale addressing the centrality of the child and strengthening the maternal role, as well as another three-item subscale addressing the mother's impressions of her child(ren), making for a total of 18 questions, with a cumulative factor contribution ratio of 58.6%.

II. Research Method

1. Data Collection Procedures and Survey Aims

Data collection subjects were mothers of children aged 0-3 years residing in Osaka and Nara Prefectures and making use of public health centers, nurseries, day-care facilities, birth clinics, and child education centers. Questionnaires were distributed to subjects both in person and by mail with an attached SASE.

The survey ran from January 1996 to March of the same year. Of 1001 distributed questionnaires, 512 were returned, yielding a return rate of 51.1%. Given that this study was conducted as part of ongoing research with CPS-M97, the subjects for data analysis were limited to professional mothers with children from 0-3 years of age. As a result, discounting 206 returned questionnaires from working mothers and three improperly completed ballots, 303 returned questionnaires were analyzed (an effective return rate of 30.3%).

The average age for respondents was 30.93+/-5.55 years. This information and the relevant attributes for respondents are detailed in Table 1.

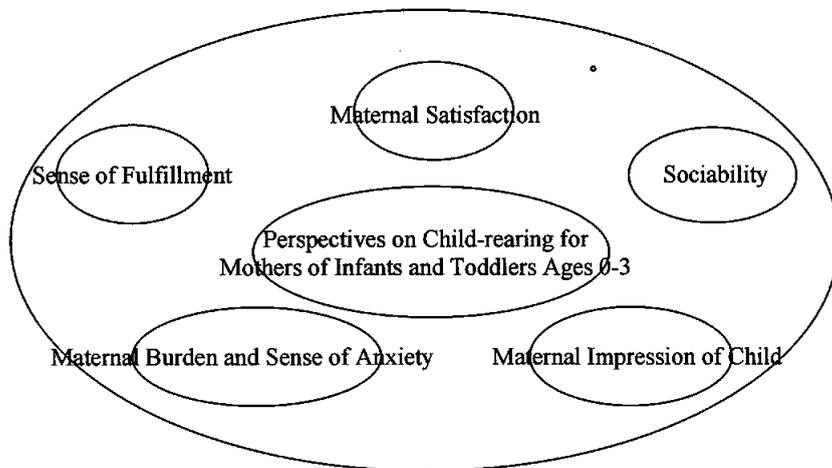


Diagram 1 Perspectives on Child-Rearing in Mothers of Infants and Toddlers, Ages 0-3: Five Conceptual Subscales

Table 1 Relevant Attributes of Survey Respondents (N=303)

| Age | | Number of Children | |
|---|---------------|--------------------|---------------|
| (years) | (respondents) | (number) | (respondents) |
| 20-24 | 13 (4.3%) | 1 | 136 (45.2%) |
| 25-29 | 108 (35.8%) | 2 | 130 (43.2%) |
| 30-34 | 130 (43.0%) | 3 | 28 (9.3%) |
| 35-39 | 47 (15.6%) | 4 | 4 (1.3%) |
| Over 40 | 4 (1.3%) | Over 5 | 3 (1.0%) |
| No reply | 1 | No reply | 2 |
| Household Living Situation | | | |
| w/child (ren) and spouse's family | | 4 (1.3%) | |
| w/child (ren) and spouse | | 245 (82.2%) | |
| w/child(ren), spouse, and respondent's family | | 7 (2.3%) | |
| w/child(ren), spouse, and spouse's family | | 42 (14.1%) | |
| No reply | | 5 | |

2. Basic Analytic Divisions

As indicated in Diagram 1, the three analytic models all took perspectives on child-rearing amongst professional mothers as an independent variable. From there, we sought to find potential correlations among the following three projected dependent variables: 1) quantity of child-rearing activity (1); 2) quantity of verbal support from spouses concerning child-rearing (2); 3) level of self-esteem (3).

3. Variable Indices

a) Maternal Satisfaction and Sense of Fulfillment vs. Maternal Burden and Sense of Anxiety

The above variables were calculated using the CPS-M97 Measurement Scale as developed by the authors. The former — the maternal satisfaction and sense of fulfillment scale — signifies affirmative emotions gained from child-rearing and were obtained using a set of six question items, as illustrated in Table 2.

On the other hand, a measure of maternal burden and sense of anxiety signifies negative emotions found in child-rearing. This measure was

Table 2 Maternal Satisfaction and Sense of Fulfillment Question Items

| |
|---|
| 1) I am encouraged daily simply by the existence of my child. |
| 2) Things that positively concern my child make me happy. |
| 3) Raising my child is my reason for living. |
| 4) Raising my child leads to my own growth. |
| 5) Raising my child is always a pleasure. |
| 6) As a mother, I feel happy. |

* Results were evaluated along the following evaluation indices: Strongly Agree (5 points); Agree (4 points); Don't Know (3 points); Disagree (2 points); Strongly Disagree (1 point).

also obtained through a six-item question set, laid out in Table 3.

In terms of evaluation indices, both measurement scales employed a five-tiered response system ranging from "Strongly Agree" (5 points) to "Strongly Disagree" (1 point). Thus, the total number of points scored represented maternal satisfaction/sense of fulfillment and maternal burden/sense of anxiety. The Cronbach's α coefficients were as follows: for satisfaction and fulfillment, 0.84; for burden and anxiety, 0.75. In addition, the scale was designed so that for both measures, a higher score represented a higher level of either affirmative or negative emotions. The average scores for both scales are displayed in Table 4.

b) Quantity of Child-Rearing Activity

The measure of child-rearing activity took into account the following nine factors:

baths, meals, walks, playtime, diaper-changing, clothes-changing, fretting, putting one's child to bed, and comforting one's child at night. We sought to evaluate these on a five-tiered response system ranging from "Everyday" (5 points) to "Not at all" (1 point), the total sum of points being a direct reflection of the level of child-rearing activity.

c) Quantity of Verbal Support from Spouses Concerning Child-Rearing

We designed a set of questions that inquired into the level of communication between husband and wife regarding the difficulties of child-rearing. As before, the critical index in this study employed a five-tiered response system, this time

Table 3 Maternal Burden and Sense of Anxiety Question Items

| |
|---|
| 1) I am afraid I might be left behind in society while I devote time to the care of my child. |
| 2) Child care is the daily repetition of the same things. |
| 3) I envy childless people with paying jobs. |
| 4) My child irritates me. |
| 5) I want to spend as little time as possible with my child. |
| 6) I cannot do my favorite activities because I have a child. |

* Results were evaluated along the following evaluation indices: Strongly Agree (5 points); Agree (4 points); Don't Know (3 points); Disagree (2 points); Strongly Disagree (1 point).

Table 4 Average Points Scored on CPS-M97 Subscales and Standard Deviation

| Total Points Scored | N | Mean | SD |
|---|-----|-------|------|
| Maternal Satisfaction and Sense of Fulfillment Subscale | 292 | 24.67 | 3.79 |
| Maternal Burden and Sense of Anxiety Subscale | 296 | 16.74 | 4.65 |

ranging from “We speak very often” (5 points) to “We do not speak to one another” (1 point).

d) Self-Esteem Level

The ten-item Rosenberg Self-Esteem Scale, as translated by Yamamoto,

Matsui, and Yamashiro, was used to gauge self-esteem (Hori et al. 1994).

The evaluation indices of the self-esteem scale, per each individual question, used a five-tiered response system ranging from “I agree” (5 points) to “Not at all” (1 point).

The total sum of points represented the level of self-esteem (Cronbach’s α coefficient was 0.75). Moreover, the scale was designed so that the higher the total number of points earned, the higher the level of self-respect.

III. Results

1. Distinguishing Patterns in Perspectives on Child-Rearing

Table 5 indicates the basic divisions between mothers in terms of their score on the CPS-M97 scale. Starting from this basic distinction, we ascertained a set of dominant patterns in child-rearing perspectives, shown here in Diagram 2.

Maternal satisfaction and sense of fulfillment was plotted against maternal burden and sense of anxiety on a rectangular coordinate system, allowing for four patterns to emerge. Prior to this, we had calculated a correlation coefficient of -0.395 ($p < 0.001$) between these two variables, indicating the existence of a meaningful correlation. However, having decided that the coefficient was not large enough, in this study we chose to stay with our simple rectangular plane.

Mothers displaying low maternal satisfaction/sense of fulfillment coupled with a high maternal burden/sense of anxiety were labeled “Negative Types.” In the survey of the present study, there were 77 mothers who fell into this category, i. e. 25.4% of all respondents.

Mothers who scored high in all categories of maternal satisfaction/sense of fulfillment and maternal burden/sense of anxiety were labeled “Ambivalent Types.” Seventy-one persons, 23.4 % of the respondents, were of this type.

Low scoring mothers on both scales were branded “Natural Types.” Mothers of the natural type in this study were 41 in number, comprising 13.5% of the entire respondent body.

Finally, mothers with high maternal satisfaction/sense of fulfillment combined with low maternal burden/sense of anxiety were labeled “Affirmative Types.” Affirmative types within

Table 5 Basic Distinctions in High- and Low-Scoring Groups on CPS-M97 subscales (out of a total of 30 possible points)

| Total Points Scored | Low-Scoring | High-Scoring |
|---|------------------|------------------|
| Maternal Satisfaction and Sense of Fulfillment Subscale | 24 pts. or below | 25 pts. or above |
| Maternal Burden and Sense of Anxiety Subscale | 16 pts. or below | 17 pts. or above |

| Maternal Satisfaction and Sense of Fulfillment vs. Maternal Burden and Sense of Anxiety | Pattern Name |
|---|-----------------|
| Low - High | Negative Type |
| High - High | Ambivalent Type |
| Low - Low | Natural Type |
| High - Low | Positive Type |

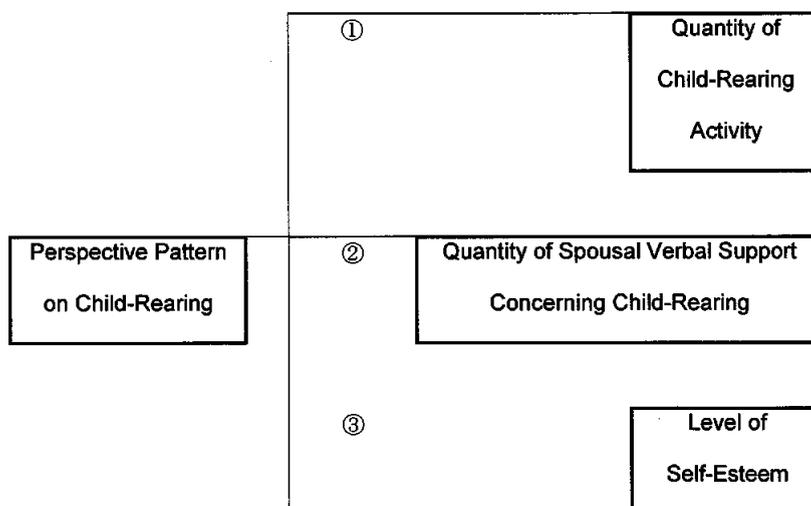
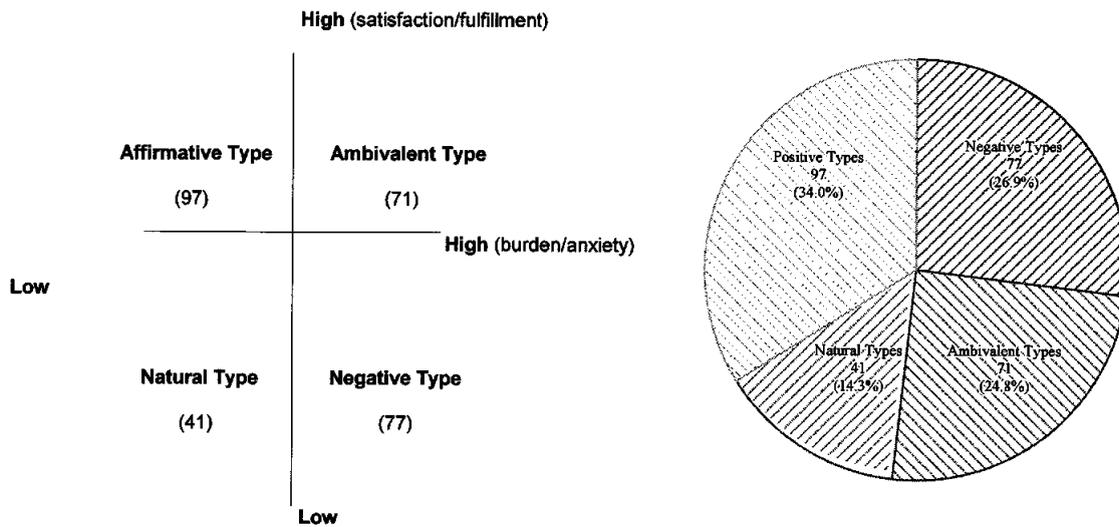


Diagram 2 Analytic Model

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Figures appearing within parentheses () reflect number of persons falling into the pattern type.

Diagram 3 Distribution of Child-Rearing Perspective Patterns in Survey Respondents (based on the Hashimoto-Naitoh model, as derived from CPS-M97 subscales)

this study came out to a total of 97 persons, or 32.0% of the whole respondent pool.

The above ratios are portrayed in Diagram 3.

2. Perspective Patterns and Their Influence on the Child-Rearing Activity of Professional Mothers

Table 6 compares the level of child-rearing activity with each perspective pattern through a one-way fixed-effects analysis of variance (ANOVA). No significant difference in the level of child-rearing activity was found.

3. Perspective Patterns and Their Influence on the Quantity of Verbal Support from Spouses

Table 7 compares the quantity of verbal support between mother and spouse against each perspective pattern through a one-way fixed-effects analysis of variance (ANOVA). We found here a significant correlation.

Given this significant correlation, we performed multiple comparisons using the LSD method. Negative Type mothers were found to have a

Table 7 Influence of Perspective Patterns on Quantity of Spousal Verbal Support Concerning Child-Rearing (ONE-WAY)

| | Negative Type | Ambivalent Type | Natural Type | Positive Type | F-Value |
|------|---------------|-----------------|--------------|---------------|---------|
| N | 77 | 71 | 40 | 96 | 5.43*** |
| Mean | 3.94 | 4.38 | 4.35 | 4.40 | |
| SD | 0.92 | 0.78 | 0.77 | 0.81 | |

***p<.001

significantly lower level of communication with their spouses than mothers of the other types (Ambivalent, Natural, and Affirmative).

4. Perspective Patterns and Their Influence on the Self-Esteem Levels

Table 8 illustrates the comparative level of self-respect within each perspective pattern by way of a one-way fixed-effects analysis of variance (ANOVA). Here too we discovered a significant correlation.

We therefore performed multiple comparisons

Table 6 Influence of Perspective Patterns on the Quantity of Child-Rearing Activity (ONE-WAY)

| | Negative Type | Ambivalent Type | Natural Type | Positive Type | F-Value |
|------|---------------|-----------------|--------------|---------------|---------|
| N | 75 | 71 | 40 | 95 | 1.32 |
| Mean | 44.09 | 4.35 | 4.50 | 43.99 | |
| SD | 1.82 | 1.46 | 0.93 | 1.75 | |

Table 8 Influence of Perspective Patterns on Level of Self-Esteem (ONE-WAY)

| | Negative Type | Ambivalent Type | Natural Type | Positive Type | F-Value |
|------|---------------|-----------------|--------------|---------------|---------|
| N | 75 | 69 | 40 | 94 | 8.42*** |
| Mean | 29.44 | 31.26 | 33.25 | 33.91 | |
| SD | 6.71 | 5.74 | 5.83 | 5.92 | |

***p<.001

using the LSD method and discovered that mothers classified as Negative Types demonstrated significantly lower levels of self-esteem, while Ambivalent Types scored noticeably below Affirmative Types.

IV. Thoughts and Considerations

The key points we wish to emphasize in this article are as follows:

- 1) Professional mothers grappling with a heavy maternal burden and a sense of anxiety do not in fact perform more activities related to child-rearing in comparison to their relatively burden- and anxiety-free counterparts. This may be interpreted as a sign that Negative Type and Ambivalent Type mothers have not necessarily reached the point of child-neglect.
- 2) Depending upon the degree of spousal verbal support, it seems likely that a mother's perspective pattern can shift to other pattern types. If we had not observed a correlation between perspective patterns and spousal support, we would be forced instead to conclude that some other factor was responsible for the mother's sense of anxiety and maternal burden. We found, however, a significant relationship. Should the quantity of spousal verbal support change, it is probable that the mother's perspective pattern will also undergo a shift.
- 3) From the above, we may also conclude that perspective patterns directly influence a mother's mental health.

V. Conclusion

The primary goal in writing this paper has been to touch briefly upon the utility of

four perspective pattern classifications. Developed for the purpose of aiding professional mothers of children ages 0-3, the two subscales of satisfaction and burden of the CPS-M97 measurement system allow us to assess qualitative aspects of parenting and, from there, cultivate positive attitudes of well-being in mothers. In addition, the system of perspective pattern classifications developed here pave the way for a simple but effective method of catering to the specific needs of mothers in a neutral and objective manner.

More concretely, our studies indicate that the quantity of spousal verbal support has a direct and powerful influence upon the perspectives of

mothers: perspective patterns shift in proportion to verbal support levels. We surmise from this that perspective patterns play a significant role in the mental health of professional mothers.

In Japan's modern cities, the trend towards atomic families and private isolation continues its advance. Former avenues of mutual support from both relatives and local community members grows scarce, resulting in diminished satisfaction and sense of achievement in child-rearing. Such an environment can only escalate such dangers as maternal depression and child-abuse, especially amongst "professional mothers" who forsake employment to be with their children. It is an environment which may contribute to an increasingly problematic climate for the task of parenting. As a result, the development of a measurement scale able to grasp objectively the polysemic subjectivities of maternal perspectives on child-rearing is now more imperative than ever.

VI. Suggestions

The author hopes, in concluding, that the research presented above will be received as an innovative method for assessing the diverse qualitative factors that comprise mothers' perspectives on child-rearing. Using the four perspective pattern classifications developed in this paper via the CPS-M97 measurement scale (Kosodate-kan shakudo in 1997; Child-rearing Perspective Scale for Professional Mothers of Children from Ages 0-3: CPS-M97), public health centers, day-care facilities, hospitals, birth clinics, etc., should be able to screen anxious and overburdened mothers, thus allowing these centers to enact positive measures against child-abuse and related problems. The author believes that the work here will contribute to greater social support that heightens the quality of life of mothers, converting negative attitudes into a newfound awareness of parenthood and its pleasures.

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