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Utilization of child health services, stress, social support and child characteristics in primiparous and multiparous mothers of 18-month-old children

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ABSTRACT

Aim: Traditionally, the child health services have laid emphasis on first-time mothers. Some researchers have argued that the needs of multiparous mothers must be considered equally important. The aim of this paper was to analyse parity-related characteristics in pairs of mothers and 18-month-old children.

Methods: The study was population-based and cross-sectional. 586 primiparous mothers and 821 mothers with at least one previous child completed a questionnaire. Additional information was extracted from the child health records by the nurses. Data were collected in 2002–2003 and 2004–2005.

Results: Compared to multiparous mothers, primiparous mothers had a higher utilization of child health services. Multiparous mothers scored higher on parental incompetence stress and felt that their work load was more demanding. Multiparous mothers reported less social support, particularly in practical respects such as baby-sitting. They considered their interaction with the child as less satisfactory than did primiparous mothers; their children participated less in shared reading and had a more restricted vocabulary. Fewer multiparous mothers assessed their own and their child's total situation as very good.

Conclusion: The child health services should develop competence and methods to support multiparous mothers and alleviate their workload when caring for several children.

Key Words

Child behaviour, child health services, child language, parenthood stress, parity, post-partum depression, social support, work load

INTRODUCTION

Becoming a mother for the first time is a major life event with long-lasting emotional, practical and social implications. It is not surprising, therefore, that health care systems have generally given priority to first-time mothers.

The Swedish child health services (CHS) are organized in child health centres headed by nurses. The children are followed from 0–5 years [1]. The CHS are widely appreciated and used by practically all parents [2].

Already several decades ago, the traditional emphasis on almost exclusive support to primiparous mothers began to be questioned [3]. Authors have addressed the need for differentiated services for primiparous and multiparous mothers [4].

Parity and utilization of services

More primiparous mothers are offered home visits by the nurse after childbirth, and are invited to parent groups; they also have a higher participation rate [2]. The low frequency of home visits to multiparous mothers may not encourage breastfeeding. In a Danish study [5], early postpartum home-visiting was studied in relation to mothers' duration of breastfeeding. During a period of labour market striking, the nurses offered home visits only after individual risk assessment, instead of visiting all families as before the strike. Comparing the two time periods, the duration of full breastfeeding was shorter in both primi- and multiparous mothers when the home visits failed in the strike period.

Parity and aspects of parenting

Primiparous mothers have been found to run a higher risk of *postpartum depression* than multiparous mothers [6], but also the opposite [7,8] and about the same risk [9].

Parenthood stress has been reported to correlate with depression and with perceived child difficultness [10]. Higher stress levels have been found among mothers with more children [11]. A Swedish study of families with 1-year-old children found a significantly higher level of incompetence stress in multiparous than in primiparous mothers, and a similar tendency in role restriction stress [12]. However, this study suffered from a large drop-out rate. Higher role restriction stress in multiparous mothers has also been reported by Ackland [13].

Work in combination with household and child-caring tasks is a major cause of stress affecting parents' total work load and leading to conflicting tasks. A comparison of aspects of paid and unpaid activities of male and female white collar workers revealed more work overload, stress and conflict in female than in male respondents; the number of children at home was a contributing factor to stress [14].

Social support is favourable in many ways, e.g. in alleviating stress [10], mitigating punitive maternal attitudes to child rearing [15] and influencing maternal satisfaction and interaction [16]. Support is both quantitative and qualitative and may be different in content: practical, emotional or purely social. An important factor is the satisfaction experienced by the subject with the support [16].

Parity and child-related factors

A qualitative interview study found that primiparous mothers felt a lack of preparedness and got most information from family and friends, not from healthcare professionals [17]. According to the study, the mothers felt overwhelmed, exhausted and isolated. It may therefore be assumed that they perceived more common problems with the child, e.g. concerning feeding and sleeping.

It has been difficult to find any relevant literature about possible correlations between parity and perceived *child temperament and behaviour*. Ackland [13] found no significant differences in ratings of child temperament between mothers of first-born and later-born children.

According to a Norwegian study [18], first-time parents found their family dynamics more positive than did second-time parents. Primiparous mothers may have more time for interaction with their children. Parents have been found to read more with their first-born children [19], and first-born children have been described as having a more advanced language than later-born children at the age of 18 months [20]. The same associations have been identified in a previous paper from the present project [21]. The reason why we report these finding again is that in the former study our focus was on reading and language, whereas here it is on parity and mothers' possibilities to stimulate their children.

AIM

The aim of this study was to explore differences in utilization of child health services, aspects of parenting and some child-related factors between primiparous and multiparous mothers with about 18-month-old children.

METHODS

The study was cross-sectional. Our data were collected from a comprehensive Swedish intervention study with the aim to test new psychosocial methods for the child health centres. The intervention will not be described in the present paper [for details, see 22]. Since practically all parents avail themselves of the child health services, the study can be considered population-based. Eighteen child health centres in the county of Uppsala and 18 centres from five other counties were included in the study.

There were two waves of measurements on two different cohorts. Each cohort included both first-born and later-born children. The children were born September 2000–August 2001 and April 2003–March 2004. The child health nurses distributed questionnaires with prepaid envelopes to the mothers when the children came for their 18-month check-up. In order to eliminate possible influences from the intervention, all intervention children were excluded from the present study. Data were collected in the years 2002–2003 and 2004–2005. Twins and triplets were excluded.

There were 2291 eligible children. After exclusion of 189 children who moved out of the area before their 18-month check-up and 179 children of mothers who declined or were not asked to participate, 1923 children remained. The questionnaire was completed by mothers of 1493 children. After exclusion of 86 questionnaires with discrepant information as to parity and number of siblings, the final study sample consisted of 1407 children with questionnaires (73.2%). The nurses complemented the questionnaires with data from health records which were available for 1405 of the children.

Independent variables

Parity (first-born yes/no) and the child's *gender* were extracted from the questionnaire and the CHC record. The following were taken from the questionnaire: *mother's year of birth* (age was dichotomized by the median into younger (18–32 years) and older (33–48 years); *mother's country of birth* (Sweden/other); *mother's education: college or university*; *mother's education: elementary or less*; *mother's marital status* (single/married or cohabiting); *mother's contact with a social worker during the last 12 months* (e.g. for financial support) (no/yes). Socio-demographic characteristics by parity are shown in Table I.

The proportion of primiparous mothers was 41.6% (586/1407); 33.2% had two children, 16.3% had three children, and 6.9% had four or more children. Finally, there were 28 multiparous mothers with an unspecified number of children (2.0%).

Dependent variables

Utilization of health services: Information about home visits, visits at the nurse's office and parent groups was extracted from the CHC record. Information about parent groups was also extracted from the questionnaire.

Recall of lowness/sadness (questionnaire). Item: "Were you low/sad after delivery?" ("no, not at all" versus "yes, somewhat" or "yes, much"). Recall of sadness was our only available measure. At the time of the study, screening for depression was not made on a regular basis by the child health services.

Parenthood stress (questionnaire). Mean scores from the Swedish Parenthood Stress Questionnaire [SPSQ; 10]. The SPSQ gives one total score and five sub-scores. The subscales are: Social isolation, Role restriction (giving up one's own interests to meet the child's needs), Incompetence, Spouse problems, and Health problems. Scores were 1 to 5, low scores being favourable. Scale dimensionality was good to adequate: standardized Cronbach's alpha was 0.90 for the total scale and 0.66–0.84 for the subscales.

Household chores and workload (questionnaire). A series of items with scores ranging from 1 to 7. The items dealt with whether the mother found her tasks demanding or stressing, her satisfaction with the distribution of her time, conflicting tasks, etc. [23].

Mother's overall situation (questionnaire). Item: "Considering your present total situation, your child, your adult life, etc., how would you describe your situation?" Scores went from 1 (very bad) to 5 (very good).

Mother's social support (questionnaire) was tapped by 10 items covering social, emotional and practical aspects. Each question was divided into one quantitative (e.g. number of supporting persons) and one qualitative item (mother's satisfaction). Scores went from 1 (low) to 5 (high).

Three items about *feeding*, *food refusal* and *sleep (questionnaire)* had been used in the same wordings in a previous study [24]. "Have you been unsure regarding your child's feeding?" "Has your child, over a long period, refused to eat?" "Has your child, over a long period, had sleeping disturbances?"

Child difficultness (questionnaire). Mean score from the Child difficultness scale by Bates et al. [25]. The scale consists of nine items asking the mother to compare her child with an "average" child. The contents address fussiness, easiness to calm the child, irritability, temper, etc., with score 1 representing low difficultness, 7 high difficultness, and 4 "about average". Scale dimensionality was good (standardized Cronbach's alpha = 0.83).

Quality of interaction (questionnaire). The mother was asked to assess 8 items describing the themes of a particular parent education curriculum, International Child Development Programmes, ICDP [26], namely her perceived capacity to: 1) convey her love to the child; 2) be aware of the child's needs and wishes; 3) communicate about things of interest to the child; 4) encourage the child; 5) help the child to give attention to things and events around him/her; 6) describe shared experiences to the child; 7) explain shared experiences to the child; 8) control the child's behaviour in a positive way.

Scores ranged from 1 to 5, higher scores being favourable. Scale dimensionality was good (standardized Cronbach's alpha = 0.92).

Reading (questionnaire). Item “How many times, per week, do you or someone else in the family look in a book together with your child?” Possible answers: 10 or more times, 6–9 times, 3–5 times, 1–2 times, never. Dichotomized into “6 or more times/week” vs. “less than 6 times/week.”

Expressive vocabulary (questionnaire). Number of words spoken by the child and recorded by the mother on a checklist of 90 common words. This instrument, SCS18, is a screening version of the Swedish Communicative Development Inventories [27]. Only children aged 17–19 months were included in this analysis.

Child's overall situation (questionnaire). Item: “Considering your child's present total situation (situation at home, in preschool, peers etc.), how would you describe his/her situation?” Scores went from 1 (very bad) to 5 (very good).

Data analysis

The SAS package, version 9.3 for personal computers, was used [28]. Crude differences between the two parity groups were tested for significance with the X^2 test (percentages) and Student's t test (means). P values below .05 were considered significant. All observations with missing values were excluded from the relevant computations.

Multiple logistic regressions with dichotomized variables were performed to control for possible confounders: maternal age, low maternal education, contact with a social worker, marital status (Table I). All scale variables were dichotomized into low/high by the medians. Example: number of nurse visits above the median (>15) was coded 1, number below or equal to the median (≤ 15) was coded 0. Dichotomizations were required to have the results expressed as odds ratios.

Ethical considerations

The study was approved by the Research Ethics Committees of the universities involved [Dnr Ups 01-342]. The mothers received both written and oral information from the CHC nurse. They were informed that participation was voluntary and that they could withdraw from the study at any time. Mothers were also informed that all information about mother and child would be treated confidentially. The nurses could not take part of the mother's answers.

RESULTS

Comparisons between primiparous and multiparous mothers and their children are presented in Tables II–IV. Findings from the bivariate analyses are shown in columns 2–6, with unadjusted p values. The last three columns present the results from the logistic regression analyses, with p values for the parity variable, OR:s (odds ratios) and 95% confidence intervals adjusted for maternal age, education, contact with social worker, and marital status.

Utilization of services

First-time mothers received more attention from the child health services than multiparous mothers. They made more visits to the nurse and received more home visits. They were invited to parent groups to a larger extent and participated more. Even among those invited by the nurse to a parent group, more primiparous than multiparous mothers accepted the invitation (Table II).

Aspects of parenting

Differences in parenting variables are shown in Table III. As appears from the table, some originally significant differences were not significant according to the logistic regression. This was particularly the case for parenthood stress. Most significant differences were in favour of first-time mothers, that is, incompetence stress (and an adjusted tendency for role restriction), work load, social support (particularly practical) and mother's perception of her total situation. The only exception was postpartum sadness, which was recalled less frequently by multiparous mothers.

In many respects, first-time mothers reported better social support than mothers with more than one child (Table IV). In particular, primiparous mothers had more access to practical help from baby-sitters and grandparents and were more satisfied in these respects. They also had more people to turn to for support if they felt "really angry or irritated."

Child-related factors

With the exception of sleep and feeding problems, the children of first-time mothers were in an equal or better position than children of multiparous mothers (Table V). The significant difference as to food refusal in favour of multiparous mothers diminished to just a tendency in the logistic regression analysis. First-time mothers rated their interaction with the children as better than did multiparous mothers, and they engaged their children in shared reading more frequently. Their children had a more extended expressive vocabulary, and the general situation of these children was rated as better, on average. There were no significant differences in perceived difficultness of the child.

DISCUSSION

Study limitations

This study took place between 2000 and 2005, and the stability of the results over time may be questioned. However, our results can be assumed to be still contemporarily relevant. During later years, the services for multiparous mothers have become even more restricted than about a decade ago. The general trend in Sweden is shown in Annual Report Uppsala [29]. This means that the differences in utilization are increasing. Since our study was cross-sectional, no causal inferences can be drawn. Our findings about postpartum sadness may suffer from some recall bias, since the mothers were asked this question about 18 months after childbirth.

Our dichotomization into primiparous and multiparous mothers did not catch the possibility that most of the differences may have been accounted for by mothers with three or

more children. The reason for not dividing the sample further was that we wanted reasonably large groups for the analyses. Only 23% had three or more children. However, the situation of mothers with several children is well worth of study.

Main findings

Our central finding was that mothers with two or more children had a much tougher life situation, in several respects, than first-time mothers. The work load of multiparous mothers was heavier than that of first-time mothers, and they felt more stressed due to perceived incompetence. This latter finding may sound surprising since experienced mothers could be expected to feel less incompetent than first-time mothers. As a matter of fact, they did not, possibly because of the heavier workload associated with having more than one child. Maybe they felt that they were able to stimulate the first child in various activities, but had less time to do the same when they had more than one. Furthermore, there was a tendency for multiparous mothers to feel more stress due to role restriction than primiparous mothers. Interestingly, we found the same association between multiparity and higher stress as other authors, who reported a significant difference between multiparous and primiparous mothers in incompetence [12] and role restriction stress [12 tendency, 13].

The Swedish gender equality system seemed to be rather well established among the parents. Only a minority of mothers considered the child's father as not being helpful with the child, and there was no parity-related difference. However, multiparous mothers had access to less social support in the form of baby-sitters and helpful grandparents

than first-time mothers. They were also less satisfied with their possibilities to find support when they felt angry or upset. These findings point to the vulnerability of mothers with several children having to struggle for themselves in emotionally-trying situations. Our results are parallel to reports by Östberg [10] and Lavee et al. [11].

There was one exception to the general picture, namely that more first-time mothers reported having felt sad after childbirth. Our study thus supported the findings of Glavin et al. [6]. However, others have found more depression in multiparous mothers [7,8], and parity-related differences in the development of adjustment problems over time [30]. Our results mainly caught the first postpartum period, but the CHC professionals should be aware of the risk for depression in multiparous mothers and later than closely after childbirth.

First-time mothers reported a better interaction with their children, they involved their children in reading to a greater extent, and their children's expressive vocabulary was larger. The fact that fewer multiparous mothers assessed their own and their children's total situation as very good was a sad finding.

In view of the difficulties encountered by multiparous mothers, it could be expected that the child health services would give particular attention to these mothers. This was not the case. As we have reported, more services in terms of office visits, home visits and parent groups were offered to primiparous mothers. Thus the child health services still seem to adhere to the model of giving priority to first-time mothers. They have not fol-

lowed the recommendations of Norr et al. [3] to revise their traditional priorities and also look to the needs of mothers with more than one child.

Implications

Many studies concentrate on primiparous mothers and the unique situation to build a family, but for multiparous mothers, it is also a unique situation to incorporate a new baby into an existing family system.

We believe that one crucial point is lack of time. The fact is that mothers with several children really do have less time compared to primiparous mothers. Their lives are full of conflicting demands from the home and the labour market.

In Sweden, the parental assurance comprises a total of 480 days with 80% of the parent's income up to a certain level. Both parents can stay home together for 30 days. Parents should be encouraged to avail themselves of these days, which would give them opportunities to concentrate on one child at a time.

The child health services could provide opportunities for parents to meet other parents and share their experiences. More services should be offered to families with more than one child in terms of parent groups, office visits and home visits. Home visits are important to get to know the family, build a working relationship, and may even affect the duration of breastfeeding [5].

It is a challenge of considerable public health relevance for the CHC professionals to develop effective methods to meet the needs of all parents, first-time and experienced alike.

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CONFLICTS OF INTEREST

The authors declare that there is no conflict of interest.

ETHICAL APPROVAL

The study was approved by the Research Ethics Committees of the universities involved [Dnr Ups 01-342].

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Table I. Socio-demographic characteristics by parity. Questionnaire data.

Socio-demographic characteristic	Primiparous		Multiparous		<i>P</i>
	<i>n/N</i>	%	<i>n/N</i>	%	
Older mother (33–48)	146/578	25.3	523/818	63.9	<.0001
Mother's education university/college	240/582	41.2	374/811	46.1	.0705
Mother's education elementary or lower	50/582	8.6	104/811	12.8	.0130
Mother's country of birth not Sweden	109/580	18.8	165/820	20.1	.5370
Male child	285/586	48.6	419/821	51.0	.3747
First-born child	586/586	100.0	–	–	<.0001
Mother in contact with social services	72/551	13.1	59/763	7.7	.0014
Single mother	67/584	11.5	41/820	5.0	<.0001

Sample: 586 primiparous and 821 multiparous mothers, total: 1407.

Significance tests by X^2 .

All mothers did not answer all questions. Therefore, the *N* values varied between different items.

Table II. Utilization of child health services by parity.

Variable	Bivariate analyses					Multiple logistic regressions		
	Primiparous		Multiparous		<i>P</i> un-adj	<i>P</i> adj ¹	OR	95 % CI
	<i>n/N</i>	Mean or %	<i>n/N</i>	Mean or %				
Child health centre record								
Number of nurse visits, mean	583/583	17.8	821/821	13.7	<.0001	<.0001	3.885	3.007-5.021
Home visit yes/no (%)	541/583	92.8	635/820	77.4	<.0001	<.0001	3.887	2.622-5.762
Number of home visits, mean	541/541	1.32	635/635	1.25	.0209	.0484	1.356	1.002-1.834
Invited to parent group (%)	507/581	87.3	450/815	55.2	<.0001	<.0001	6.506	4.711-8.986
Accepted parent group if invited (%)	448/505	88.7	298/448	66.5	<.0001	<.0001	4.841	3.245-7.224
Mother participated in parent group (%)	416/569	73.1	291/818	35.6	<.0001	<.0001	6.249	4.715-8.282
Father participated in parent group (%)	105/569	18.5	41/818	5.0	<.0001	<.0001	3.943	2.580-6.026
Questionnaire								
Invited to parent group (%)	468/576	81.3	428/801	53.4	<.0001	<.0001	3.991	2.999-5.312
Mother participated in parent group (%)	399/572	69.8	279/795	35.1	<.0001	<.0001	4.699	3.593-6.145
Father participated in parent group (%)	172/554	31.0	55/775	7.1	<.0001	<.0001	6.065	4.188-8.784

¹ Adjusted for maternal age (dichotomized), maternal education (elementary or lower vs. higher), contact with social worker (yes/no) and marital status (single vs. married or cohabiting).

Unadj: unadjusted. Adj: adjusted. OR: odds ratio. CI: confidence interval.

Significance tests by X^2 and Student's *t* test.

Figures in bold letters: most unfavourable value (if the difference between the parity groups was significant according to the logistic regression).

Sample: 586 primiparous and 821 multiparous mothers, total: 1407.

Only observations with complete information on the respective item were included in the bivariate analyses. The logistic regressions excluded all observations with lacking information on the dependent or any of the independent variables, including confounders. Therefore, the *N* values varied between different items.

Table III. Aspects of parenting by parity. Questionnaire data.

Variable	Bivariate analyses					Multiple logistic regressions		
	Primiparous		Multiparous		<i>P</i> unadj	<i>P</i> adj ¹	OR	95 % CI
	<i>n/N</i>	Mean or %	<i>n/N</i>	Mean or %				
Recall of postpartum low-ness/sadness (%)								
Mother felt low/sad after childbirth	189/561	33.7	185/797	23.2	<.0001	.0071	1.458	1.108-1.919
Parenthood stress, means (low values are favourable)								
SPSQ: total	582/582	2.43	809/809	2.51	.0062	.1041	1.223	0.959-1.559
SPSQ: social isolation	581/581	2.07	806/806	2.10	.4739	.3723	1.117	0.876-1.425
SPSQ: role restriction	582/582	3.36	808/808	3.51	.0006	.0670	1.256	0.984-1.603
SPSQ: incompetence	582/582	2.13	809/809	2.22	.0113	.0327	1.303	1.022-1.662
SPSQ: spouse relationship ²	510/510	2.14	760/760	2.16	.7114	.7405	0.958	0.743-1.235
SPSQ: health	581/581	2.58	808/808	2.70	.0104	.1594	1.193	0.933-1.524
Work load, means (low values are favourable except for “Satisfied with time distribution” and “Influence on time”)								
Household chores demanding	574/574	4.41	798/798	4.87	<.0001	<.0001	1.877	1.467-2.403
Household chores stressing	573/573	3.75	799/799	4.08	.0002	.0011	1.512	1.179-1.939
Satisfied with time distribution	572/572	4.08	793/793	3.90	.0225	.0612	1.281	0.988-1.659
Work tasks in conflict	564/564	3.71	791/791	4.04	<.0001	.0253	1.337	1.037-1.725
Total work load demanding	565/565	4.38	788/788	4.76	<.0001	.0004	1.557	1.216-1.992
Influence on time	558/558	4.65	787/787	4.35	.0001	.0003	1.579	1.234-2.021
Total work load stressing	566/566	3.92	790/790	4.14	.0088	.0016	1.509	1.168-1.950
Overall situation (%)								
Mother's own situation very good	197/579	34.0	222/804	27.6	.0105	.0050	1.460	1.121-1.901

¹Adjusted for maternal age (dichotomized), maternal education (elementary or lower vs. higher), contact with social worker (yes/no) and marital status (single vs. married or cohabiting).

²Spouse relationship: single mothers were excluded from the analyses, and the single mother variable was not included in the logistic regression.

Unadj: unadjusted. Adj: adjusted. OR: odds ratio. CI: confidence interval.

Significance tests by X^2 and Student's *t* test.

Figures in bold letters: most unfavourable value (if the difference between the parity groups was significant according to the logistic regression).

Sample: 586 primiparous and 821 multiparous mothers, total: 1407.

Only observations with complete information on the respective item were included in the bivariate analyses. The logistic regressions excluded all observations with lacking information on the dependent or any of the independent variables, including confounders. Therefore, the N values varied between different items.

Table IV. Social support by parity. Questionnaire data.

Variable	Bivariate analyses					Multiple logistic regressions		
	Primiparous		Multiparous		<i>P</i> unadj	<i>P</i> adj ¹	OR	95 % CI
	<i>n/N</i>	%	<i>n/N</i>	%				
<i>People available for baby-sitting</i>								
0-2 people	302/580	52.1	481/805	59.8	.0044	.0393	0.772	0.603-0.987
Not satisfied ² with baby-sitting help	152/567	26.8	303/800	37.9	<.0001	<.0001	0.575	0.440-0.750
<i>Monthly help from grand-parents</i>								
Never	80/569	14.1	178/796	22.4	.0001	.0076	0.637	0.457-0.887
Not satisfied with help from grand-parents	136/557	24.4	283/771	36.7	<.0001	<.0001	0.546	0.415-0.719
<i>Help from child's father</i>								
Dad does very little-rather little	79/558	14.2	101/796	12.7	.4331	.5842	0.892	0.593-1.343
Not satisfied with help from father	134/561	23.9	195/795	24.5	.7858	.3302	0.862	0.639-1.162
<i>Contacts with neighbours</i>								
No contacts	104/575	18.1	70/801	8.7	<.0001	.0051	1.711	1.174-2.493
Not satisfied with neighbour contact	236/563	41.9	298/800	37.3	.0821	.9639	0.994	0.774-1.278
<i>Weekly contacts (including telephone) with friends/relatives</i>								
No contacts/once a week	47/575	8.2	95/805	11.8	.0288	.4884	0.863	0.569-1.309
Not satisfied with contact	120/576	20.8	236/803	29.4	.0003	.0008	0.614	0.462-0.817
<i>Number of people to turn to in case of minor child problem</i>								
0-2 people	116/580	20.0	176/807	21.8	.4150	.8294	0.966	0.707-1.321
Not satisfied with the situation	71/580	12.2	113/805	14.0	.3313	.5897	0.902	0.621-1.311
<i>If angry or irritated with the child</i>								
0-2 people	238/579	41.1	350/802	43.6	.3471	.0939	0.807	0.628-1.037
Not satisfied with support in this situation	104/571	18.2	184/797	23.1	.0293	.0180	0.690	0.507-0.938
<i>If really angry or irritated (all causes)</i>								
0-2 people	320/575	55.7	495/803	61.6	.0257	.0090	0.719	0.562-0.921
Not satisfied with support in this situation	107/566	18.9	190/799	23.8	.0315	.0167	0.689	0.508-0.935
<i>If really happy</i>								
0-2 people	145/578	25.1	212/804	26.4	.5913	.4647	0.897	0.672-1.199

Not satisfied with this situation	69/573	12.0	123/803	15.3	.0839	.2389	0.803	0.557-1.157
<i>With whom to share all inner feelings</i>								
None	52/576	9.0	72/803	9.0	.9686	.8921	1.031	0.663-1.605
Not satisfied with this situation	111/574	19.3	169/803	21.0	.4375	.2248	0.827	0.608-1.124

¹Adjusted for maternal age (dichotomized), maternal education (elementary or lower vs. higher), contact with social worker (yes/no), and marital status (single vs. married or cohabiting).

² “Not satisfied” is a combination of the categories “No, I am very dissatisfied”, “I am rather dissatisfied”, “Neither satisfied nor dissatisfied” in contrast to “I am rather satisfied” and “Yes, I am quite satisfied”.

Unadj: unadjusted. Adj: adjusted. OR: odds ratio. CI: confidence interval.

Significance tests by X^2 .

Figures in bold letters: most unfavourable value (if the difference between the parity groups was significant according to the logistic regression).

Sample: 586 primiparous and 821 multiparous mothers, total: 1407.

Only observations with complete information on the respective item were included in the bivariate analyses. The logistic regressions excluded all observations with lacking information on the dependent or any of the independent variables, including confounders. Therefore, the *N* values varied between different items.

Table V. Child-related factors by parity. Questionnaire data.

Variable	Bivariate analyses					Multiple logistic regressions		
	Primiparous		Multiparous		<i>P</i> un-adj	<i>P</i> adj ¹	OR	95 % CI
	<i>n/N</i>	M or %	<i>n/N</i>	M or %				
Feeding problem (%)	126/567	22.2	91/784	11.6	<.0001	<.0001	2.297	1.637-3.224
Food refusal (%)	71/575	12.3	65/803	8.1	.0090	.0599	1.497	0.983-2.280
Sleep problem (%)	135/575	23.5	138/810	17.0	.0030	.0059	1.538	1.132-2.090
Difficultness, Bates, mean	584/584	3.59	816/816	3.55	.3889	.6557	0.947	0.743-1.205
Interaction, ICDP, mean	578/578	4.27	805/805	4.05	<.0001	<.0001	2.239	1.745-2.873
Frequent reading (%)	420/579	72.5	464/813	57.1	<.0001	<.0001	2.399	1.832-3.141
Expressive vocabulary, mean ²	448/448	31.3	561/561	27.6	.0038	.0051	1.502	1.130-1.997
Child's situation very good (%)	340/578	58.8	436/806	54.1	.0804	.0208	1.340	1.045-1.717

¹Adjusted for maternal age (dichotomized), maternal education (elementary or lower vs. higher), contact with social worker (yes/no) and marital status (single vs. married or cohabiting).

² Children aged 17-19 months. *N*=1031 (with information about vocabulary: 1009).

Unadj: unadjusted. Adj: adjusted. OR: odds ratio. CI: confidence interval.

Significance tests by X^2 and Student's *t* test.

Figures in bold letters: most unfavourable value (if the difference between the parity groups was significant according to the logistic regression).

Sample: 586 primiparous and 821 multiparous mothers, total: 1407.

Only observations with complete information on the respective item were included in the bivariate analyses. The logistic regressions excluded all observations with lacking information on the dependent or any of the independent variables, including confounders. Therefore, the *N* values varied between different items.