



Infancy in Hungary

Report on the Second Wave of Cohort '18 – Growing Up in Hungary

Zsuzsanna Veroszta – Julianna Boros – Balázs Kapitány – Krisztina Kopcsó
– Fruzsina Leitheiser – Nikolett Gabriella Sándor – Laura Szabó – Zsolt Spéder

Hungarian Demographic Research Institute, 2022



SZÉCHENYI 2020



HUNGARIAN
GOVERNMENT

European Union
European Social
Fund



INVESTING IN YOUR FUTURE

Imprint

Please cite the publication as follows: Veroszta, Zsuzsanna – Boros, Julianna – Kapitány, Balázs – Kopcsó, Krisztina – Leitheiser, Fruzsina – Sándor, Nikolett Gabriella – Szabó, Laura – Spéder, Zsolt (2022). *Infancy in Hungary. Report on the Second Wave of Cohort '18 – Growing Up in Hungary*. Working Papers on Population, Family and Welfare, No. 40. Hungarian Demographic Research Institute, Budapest.

DOI 10.21543/WP.2022.40

The research was funded and the report was published within the framework of the European Union project: EFOP-1.9.4-VEKOP-16-2016-00001, 'Renewal of Methodological and Information Systems in the Social Sector'.

Source for all the tables below: Cohort '18 – Growing Up in Hungary 2nd wave. Hungarian Demographic Research Institute, 2022.

© Zsuzsanna Veroszta, Julianna Boros, Balázs Kapitány, Krisztina Kopcsó, Fruzsina Leitheiser,¹ Nikolett Gabriella Sándor, Laura Szabó, Zsolt Spéder

Editor: Zsuzsanna Veroszta

Translation: Lukacs Hayes

English proofreading: Clive Liddiard

Copy editor: Ágnes Törő

Graphics & design: Büro Zrt.

The illustrations in this publication were provided by Igazgyöngy Foundation.

Hungarian Demographic Research Institute
1024 Budapest, Buday László u. 1–3.
nki@demografia.hu
www.demografia.hu

Cohort '18 – Growing Up in Hungary

info@kohorsz18.hu | www.kohorsz18.hu/en
ISSN 0236736X | ISBN 978-963-9597-64-8

¹ Chapter 4.4, written by Fruzsina Leitheiser, was prepared with the professional support of the Doctoral Scholarship Program of the Co-operative Doctoral Program of the Ministry of Innovation and Technology financed from the National Research, Development and Innovation Fund.



Introduction

In 2018–2019, a sample of expectant mothers was surveyed for the first wave of Cohort '18 – Growing Up in Hungary – a longitudinal study run by the Hungarian Demographic Research Institute. For the second wave of the study, the same families were visited when the children were 6 months old.

This is the second study report of the Cohort '18 Study. It presents the daily lives of families raising 6-month-old children, together with the development of those children after the gestation period. In addition to the situation of the family, it looks in detail at the course of childbirth and its circumstances, as well as at the condition, early development and care of the recently born child.

During the second wave of the research, all of the approximately 8,500 respondents involved in the pregnancy wave again shared with the health visitors who attended them their experiences as mothers. And at this stage, some of those who missed out on the pregnancy wave survey were now included in the study for the first time, when they had an opportunity to report on their experiences during pregnancy. There are also new respondents, from families where the 6-month-old child's carer is not the birth mother.

Infancy in Hungary is our report on the second wave of the Cohort '18 – Growing Up in Hungary survey, and it paints a comprehensive picture of the main characteristics of early childhood in Hungary, based on the responses of the parents of children born in 2018–19.

We hope that this picture will be further nuanced in the later stages of development.

Zsolt Spéder

Director

HCSO Hungarian Demographic Research Institute

Table of contents

1.	Second Wave of the Cohort '18 Study	16
1.1.	Visiting families with a 6-month-old child	16
1.2.	Data collection in the 6-month study wave	16
1.3.	Database of the 6-month study wave.....	18
1.4.	Structure of the report	19
2.	Childbirth.....	24
2.1.	Circumstances of childbirth	24
2.2.	Expenditure surrounding childbirth	31
2.3.	Childbirth	37
2.4.	Arrival of the baby.....	43
2.5.	Summary	48
3.	Family Environment of 6-month-old Children	52
3.1.	Partnership status of the parents and composition of the household	52
3.2.	Grandparents in the family	60
3.3.	Denominational affiliation, religiosity, ethnicity	64
3.4.	Financial situation of families	74
3.5.	Sharing housework within the family.....	79
3.6.	Summary	85

4.	Mothers Raising a 6-month-old Child	90
4.1.	Psychological characteristics	90
4.2.	Social relationships.....	95
4.3.	Health and lifestyle.....	99
4.4.	Employment and future plans.....	104
4.5.	Summary	108
5.	The Children at 6 months	112
5.1.	Everyday life of 6-month-old children	112
5.2.	Feeding children.....	117
5.3.	Infants' health	122
5.4.	The infant's temperament.....	128
5.5.	Summary	131

List of Figures

Figure 2.1.1. Place of delivery	24	Figure 3.5.4. Changes in household workload after childbirth, by number of children.....	82
Figure 2.1.2. The proportion of births in private hospital and at home, according to the demographic characteristics of the mother	25	Figure 3.5.5. Division of childcare duties	83
Figure 2.1.3. Plans and realization: women giving birth in a private hospital or at home, according to the demographic characteristics of the mother.....	26	Figure 3.5.6. Changes in household workload and satisfaction.....	84
Figure 2.1.4. People present at childbirth.....	27	Figure 3.5.7. Changes in the number of childcare tasks performed jointly or shared by parents	85
Figure 2.1.5. Presence of the child's father at birth according to the demographic characteristics of the mother	28	Figure 4.1.1. Frequency with which symptoms of generalized anxiety were experienced.....	90
Figure 2.1.6. Presence of the chosen obstetrician at the birth, according to the demographic characteristics of the mother	29	Figure 4.1.2. Incidence of depressive symptoms by socio-demographic group.....	92
Figure 2.1.7. Average number of nights spent in hospital before and after the birth, based on socio-demographic and health status variables.....	31	Figure 4.1.3. Number of negative life events reported for pregnancy and for the period between childbirth and data collection	92
Figure 2.2.1. Expenditure associated with childbirth	32	Figure 4.1.4. Incidence of negative life events during pregnancy and in the 6 months after the birth	93
Figure 2.2.2. Pregnancy health expenditure, by type of pregnancy care	32	Figure 4.1.5. Distribution of life satisfaction	94
Figure 2.2.3. Costs of using public and private maternity care.....	33	Figure 4.2.1. Number of close friends.....	95
Figure 2.2.4. Childbirth costs, by place of care	33	Figure 4.2.2. Frequency of contact of mothers with their family members and acquaintances.....	96
Figure 2.2.5. Childbirth costs, by type of service	35	Figure 4.2.3. Mean scores of items measuring the frequency of relationship interactions when the child is 6 months old.....	97
Figure 2.2.6. Average cost of having a child, by background variables.....	36	Figure 4.2.4. The prevalence of the idea or intention of breaking up, by socio-demographic group	98
Figure 2.3.1. Types of delivery	37	Figure 4.3.1. Mothers' perceived state of health when their child was aged 6 months	99
Figure 2.3.2. Incidence of caesarean section, by maternal characteristics.....	38	Figure 4.3.2. Prevalence of postpartum health problems among mothers	100
Figure 2.3.3. Reasons for caesarean section	39	Figure 4.3.3. Mothers' smoking habits when their child was 6 months old	101
Figure 2.3.4. Choice of position during childbirth	41	Figure 4.3.4. Mothers' smoking habits when their child is 6 months old	102
Figure 2.3.5. Interventions during childbirth	42	Figure 4.3.5. Maternal alcohol consumption habits 12 months before pregnancy and when the child was 6 months old.....	103
Figure 2.3.6. Satisfaction with childbirth experience.....	43	Figure 4.3.6. Number of times a night that mothers with a 6-month-old child woke up	104
Figure 2.4.1. Childbirth by duration of pregnancy.....	44	Figure 4.4.1. Employment and employment plans along certain socio-demographic dimensions	106
Figure 2.4.2. Proportion of preterm infants	45	Figure 4.4.2. Aspects of employment.....	107
Figure 2.4.3. Proportion of low-birthweight infants.....	46	Figure 4.4.3. Planned and active employment according to previous workplace.....	108
Figure 2.4.4. Proportion of preterm and low-birthweight infants, according to maternal smoking habits	47	Figure 5.1.1. Frequency of sleeping through the night	112
Figure 3.1.1. Relationship status of the primary caregiver of a 6-month-old child, according to key socio-demographic characteristics of the mother.....	53	Figure 5.1.2. Incidence of sleep problems among 6-month-old children by socio-demographic group	113
Figure 3.1.2. Average household size by socio-demographic characteristics of mother	54	Figure 5.1.3. Frequency of sleeping with a parent, by socio-demographic group	114
Figure 3.1.3. Members of the household of 6-month-old children (in addition to the mother, father and siblings).....	55	Figure 5.1.4. Rate of pacifier use, according to certain sleeping and breastfeeding characteristics of the infants	115
Figure 3.1.4. Changes in the structure of the household between the survey in the seventh month of pregnancy and when the child is 6 months old.....	56	Figure 5.1.5. Number of nights spent apart from the mother in the 6 months since birth	116
Figure 3.1.5. Change in the women's relationship status between conception and the seventh month of pregnancy	57	Figure 5.2.1. Breastfeeding of children	117
Figure 3.1.6. Change in the women's relationship status between the seventh month of pregnancy and the 6-month survey	57	Figure 5.2.2. Breastfeeding plans during pregnancy and breastfeeding after the birth.....	118
Figure 3.1.7. Maintenance of the mother's relationship status between conception and the time the child turned 6 months.....	58	Figure 5.2.3. Breastfeeding of children according to certain maternal and child characteristics	119
Figure 3.1.8. Changes in the relationship status of the woman between conception and when their child turned 6 months, according to the demographic characteristics of the mother	59	Figure 5.2.4. Ways of breastfeeding children	119
Figure 3.2.1. Distribution of 6-month-old children by the number of grandparents and great-grandparents.....	60	Figure 5.2.5. Ways of breastfeeding and the mother's characteristics.....	120
Figure 3.2.2. Number of grandparents and great-grandparents of a 6-month-old child, according to the demographic characteristics of the mother.....	61	Figure 5.2.6. Reasons for stopping breastfeeding.....	121
Figure 3.2.3. The frequency of the child's encounters with the grandparent seen most often	62	Figure 5.3.1. The general health of 6-month-olds, according to their mother...	122
Figure 3.2.4. Proportion of children who met their grandparents daily	62	Figure 5.3.2. The general health of the 6-month-old babies, according to certain characteristics of the mother and the child	123
Figure 3.2.5. Grandparents living in a household with a 6-month-old child, by their presence in the household at the seventh month of pregnancy	63	Figure 5.3.3. Incidence of illnesses and birth defects in 6-month-old children, by sex	124
Figure 3.2.6. How often does the mother talk to her parents and parents-in-law (in person, on the phone, or via the internet).....	64	Figure 5.3.4. General health of 6-month-old children still being breastfed and no longer being breastfed, as assessed by their mothers.....	125
Figure 3.3.1. Distribution of mothers, by denomination and religion	66	Figure 5.3.5. Frequency of hospital treatment (with overnight stay) among 6-month-old children, according to certain characteristics of the mother and the child	127
Figure 3.3.2. The religiosity of mothers, by educational attainment groups	67	Figure 5.4.1. Distribution of responses by mothers concerning their child's behaviour in the week before the survey	129
Figure 3.3.3. Distribution of mothers, by denomination and frequency of church attendance.....	68	Figure 5.4.2. Average scores for the temperament dimensions in each socio-demographic group.....	130
Figure 3.3.4. Total number of children born and planned, by denomination and religion	70		
Figure 3.3.5. Primary and secondary ethnicity of mothers.....	71	List of tables	
Figure 3.3.6. Roma and non-Roma mothers, according to the most relevant social criteria.....	73	Table 1.2.1. Data-collection methods in the second wave	
Figure 3.4.1. The family's subjective financial status	74	Table 1.3.1. Number of observations in the research databases.....	18
Figure 3.4.2. Proportion of families in great financial difficulty.....	75	Table 3.3.1. Denominational distribution of mothers, compared to census results	65
Figure 3.4.3. Use of family support benefits and allowances	76		
Figure 3.4.4. Utilizing CSOK	77		
Figure 3.4.5. Distribution of the utilization of CSOK.....	78		
Figure 3.5.1. Sharing household chores in the family	79		
Figure 3.5.2. Number of household chores predominantly performed by mothers.....	80		
Figure 3.5.3. Changes in the number of household chores performed by mothers.....	81		

The team working on the Cohort '18 Study

THE STUDY TEAM

Julianna Boros, sociologist, epidemiologist. Chief Researcher in the 'Health' work group

Gabriella Gresits, sociologist

Balázs Kapitány, sociologist, demographer. Head of Methodology in the Cohort '18 Study. Chief Researcher in the 'Demographic' work group

Krisztina Kopcsó, psychologist. Chief Researcher in the 'Mental Development and Health' work group

Fruzsina Leitheiser, sociologist

Nikolett Gabriella Sándor, psychologist

Zsolt Spéder, economist, demographer. Director of the Hungarian Demographic Research Institute. Consultant for the Cohort '18 Study

Laura Szabó, sociologist

Zsuzsanna Veroszta, sociologist. Head of the Cohort '18 Study. Chief Researcher in the 'Socio-Demographic Background' work group

MANAGEMENT AND ORGANIZATION

Ildikó Fábrián, Data Collection Coordinator of the Cohort '18 Study

Anna Hortobágyi, economist. Project Manager of the Cohort '18 Study

Réka Kis, sociologist. Database Manager of the Cohort '18 Study

Mónika Monori, economist. Financial Manager of the Cohort '18 Study

Orsolya Sármásy, sociologist. Communications Officer of the Cohort '18 Study



Acknowledgements

The team working on Cohort '18 – Growing Up in Hungary would like once again to thank the families involved in the research, especially the responding mothers and caregivers. Thanks to their trust and helpfulness, we were able to collect data for a second time on the living conditions of families with children and on the development of babies born in Hungary.

We hope that the study results published in this volume will consolidate the trust and collaboration that we also anticipate at later stages of the research.

We also thank the health visitors who carried out the data collection and the experts who supported the research for their cooperative help.

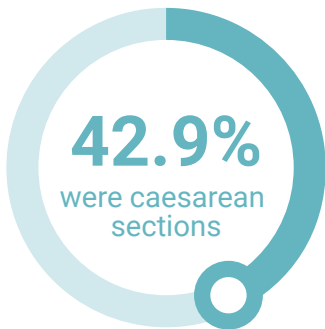
Births in Hungary



97.6%
took place in a public hospital



56.7% the father was present



50.5%
a chosen doctor was present



They cost
108,000 forints
on average.

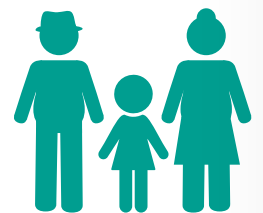
Average weight of newborns



Six-month-old children



44.7% never slept through the night



41.4%
met a grandparent every day



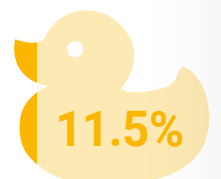
63.0% used a pacifier



48.6% had all four grandparents living



53.9%
were still breastfeeding at 6 months



11.5%
were bathed by their father

Mothers of 6-month-old children



4.0% were single



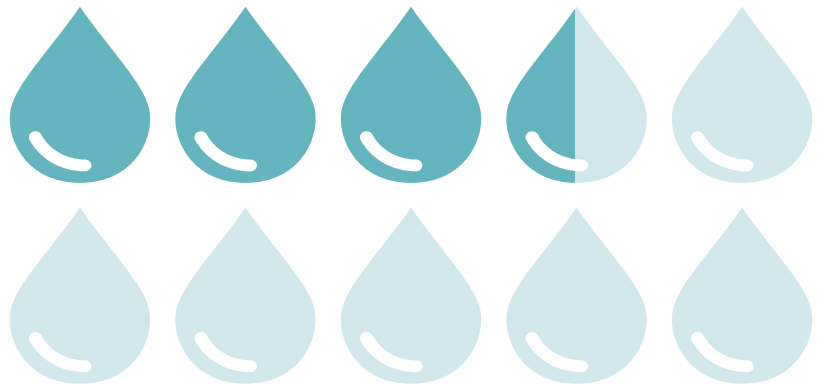
talked to their mother daily



had
3-4
close friends



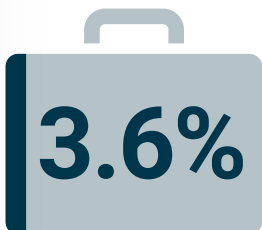
talked to their father daily



had breastfeeding difficulties



smoked



were working
6 months after
giving birth

24.0%



1. Second Wave of the Cohort '18 Study

1. Second Wave of the Cohort '18 Study

1.1. Visiting families with a 6-month-old child

In 2018, the Hungarian Demographic Research Institute launched the first data-collection wave of the Growing Up in Hungary study. That survey of pregnant women, which was undertaken between July 2018 and November 2019, was followed up by a further visit when the child was aged 6 months. The birth cohort that was examined during this second wave was still those children who were due to be born in 2018/19, and the sample was based on those women who had been enrolled in the first stage of the study.

This longitudinal research aims to explore the factors of childhood development in Hungary, and the intention is to follow the development of children into adulthood. The families sampled will be visited periodically and asked about their living and working conditions, family formation, their well-being and their child's development.

The main topics of the study wave that examined 6-month-old children focused on the circumstances of childbirth and on the development and developmental characteristics of early childhood care.

The Cohort '18 Study is part of the European Union project EFOP-1.9.4-VEKOP-16: Renewal of Methodological and Information Systems in the Social Sector.

For respondents invited to the study, participation was based on voluntary, written consent. The management of their data follows a strict and transparent protocol.

1.2. Data collection in the 6-month study wave

The baseline population of the Cohort '18 Study is children born in Hungary between 1 April 2018 and 30 April 2019, and covers approximately 90,000 children. Our study drew a sample of nearly 10 per cent. The first wave of data collection took place from 1 January 2018, during weeks 28–31 of pregnancy. The survey of mothers lasted for a year. Those women invited to participate in this first wave of research form the sample of the initial cohort on which further data-collection phases are based.

The Cohort '18 Study relies heavily on the Hungarian health visitor system: it was the health visitors who collected the data in the first two waves of research (i.e. when the women were pregnant and then when their child was aged 6 months). Moreover, it was the health visitor districts that provided the basis for the design of the sample: approximately 600 districts were included in the initial sample of the study, which adopted a multi-stage sampling procedure that mapped the entire Hungarian pregnant population across several dimensions. The survey carried out when the child was aged 6 months (henceforth the '6-month survey') was based on a database of 8,287 respondents (8,409 fetuses) surveyed during the pregnancy wave. In addition to these respondents, the sample during the 6-month data-collection wave was augmented by mothers (or caregivers) from the core sample population who had failed to respond during the first (pregnancy) wave (e.g. due to preterm birth). They were integrated into the study sample at the time of the 6-month survey by having them complete a proxy questionnaire. In the case of multiple births, further twin questionnaires of the child module of the main questionnaire had to be used. Since the Cohort '18 Study tracks children, the 6-month survey was conducted even if the child's primary caregiver was not the biological mother. A special version of the questionnaire was prepared for those instances, along with a consent form to be completed by the new respondent.

Data collection took place in person, at a time agreed between the mother (or the child's primary caregiver) and the health visitor, when the child was aged 6 months (more or less: from 1 week before the 6-month mark to 3 weeks after, with only a small number of deviations). The survey period was adjusted to the date of birth in the case of preterm infants. The planning of the data collection was based on information received by the health visitor about the birth of the cohort child. A combination of paper-based and web-based tools was available for data recording.

During the data collection, the answers to the questions on the main questionnaire could be recorded directly by the health visitor, either via a web interface (computer-assisted personal interviewing – CAPI) or using the pen-and-paper interviewing (PAPI) technique. In the latter case, online data recording took place later. The self-administered questionnaire, which typically contained sensitive questions, could only be completed on paper by the respondent; the information was subsequently input electronically by the data collector. Finally, the data from the health visitor questionnaire were recorded afterwards, using the web interface; this was also done by the health visitor conducting the survey. In addition, health visitors continuously recorded the details of successful interviews conducted during the research, using a folder specially prepared for them, as well as any changes to the personal data and address of the respondents, and general information in the event of interviews that failed to be completed.

TABLE 1.2.1. DATA-COLLECTION METHODS IN THE SECOND WAVE OF THE COHORT '18 STUDY

	Main questionnaire	Questionnaire module for twins	Self-administered questionnaire	Primary caregiver main questionnaire	Pregnancy wave proxy survey	Health visitor questionnaire
Method of inquiry	Personal interview recorded electronically or on paper	Personal interview recorded electronically or on paper	Paper based, self-administered	Personal interview recorded electronically or on paper	Personal interview recorded electronically or on paper	Electronically recorded, self-administered
Respondent	Biological mother of the 6-month-old child	Biological mother of the 6-month-old child in the case of twins	Biological mother of the 6-month-old child	Primary caregiver of the 6-month-old child (if not biological mother)	Biological mother of the 6-month-old child in the sample, if the pregnancy-wave survey was missing	Interviewer – health visitor

1.3. Database of the 6-month study wave

The total relevant population of the study was 8,717 mothers and 8,844 children (including those mothers who were missing from the pregnancy wave, but who joined the survey when their child was 6 months old by completing a proxy questionnaire). The database for the 6-month survey consists of 8,243 mothers and 8,365 children – the mothers (or caregivers) who responded to our request to participate in the 6-month wave.

The databases of the two study waves can be linked, based on the respondents' unique identifiers. At the same time, these unique identifiers ensure the separate treatment of personal data. In the case of twins (triplets, etc.), more than one child ID could be associated with the ID of one responding mother in the 6-month survey database.

Following the data-editing procedure, the number of observations for each database element recorded in the 6-month wave were as shown in Table 1.3.1 below.

TABLE 1.3.1. NUMBER OF OBSERVATIONS IN THE RESEARCH DATABASES

Questionnaire type	Sub-population	Number of observations (Mother)	Number of observations (Child)
6-month main questionnaire	Proxy survey to replace the pregnancy-wave questionnaire	383	388
	Biological mother version	8,241	8,363
	Primary caregiver version	29	29
Health visitor questionnaire	Biological mother version	8,241	8,363
	Primary caregiver version	29	29
Self-administered questionnaire	Biological mother version	7,980 (booklet at least partially completed)	8,092 (booklet at least partially completed)

During the weighting, we adjusted the distributions of the 6-month database to those of both the baseline population and the initial pregnancy-wave database using a statistical procedure. During the procedure, two types of weights were generated for the 6-month database connected to the pregnancy-wave database, and were used in the analysis: maternal and child weights. Which weight is used in the analysis depends on whether the unit of analysis is the mother or the child: if our unit of analysis is the mother, we use the weight produced for the mothers; if the unit of analysis is the child, we use the weight produced for the children. Because the frequency of twins in the sample is low, the values obtained using these two weights do not differ significantly.

Structure of the report

1.4.

This is a research report: it undertakes to provide a descriptive presentation of the results of the second (6-month) wave of the Cohort '18 Study.

In order to aid comprehensibility, we have sought to ensure consistency across the data-management principles and the terminology used, which may sometimes lead to simplification. The subheadings of figures and tables indicate the weighting used in each case. Missing responses were also treated uniformly: whether the respondent did not know the answer or refused to answer, this was coded as 'missing data' for the given variables and the information is not presented in the figures (unless its inclusion is particularly justified in terms of content). Missing responses (generally quite few) thus reduced the total number of observations for several variables. The number of cases analysed is indicated for each figure. For multivariate relationships, it is indicated at the level of the variables, but not necessarily at the level of categories. Any pre-selection to help interpret the results is also displayed as part of the subheading of a figure or table.

In some cases, individual differences lie behind the uniform wording and variable names. For example, in some cases, questions about children were answered not

by the biological mother, but by the primary caregiver. Given the low incidence of this, and for the sake of clarity, all respondents are often referred to simply as 'mothers' in the analysis.

In our cross-tabulation analysis, we have sought to use a uniform set of background variables describing the socio-demographic characteristics of families. Some of the variables refer to the mother or other respondent caregiver interviewed during the research; others refer to the situation of the parent or family. Maternal background variables include the mother's age at childbirth (six categories), the mother's (or carer's) educational attainment (four categories) and the number of children the mother (already) has (four categories). Her partnership status is analysed on the basis of a uniform three-item variable where, alongside marital and cohabiting partnerships, mothers who either do not have a partner at the time of the response or who are in a 'living apart together' (LAT) relationship are lumped together (although those two categories may be treated separately in some analyses, if the content warrants it). The uniformly coded background variables for the family are the population of the settlement where the mother lives at the time of the survey (eight categories, coded from the settlement statistics associated with the postcode) and the mother's subjective assessment of the family's financial situation when the child is aged 6 months (six categories).

We present our findings concerning the lives of families with a 6-month-old child according to four main topics, arranged as chapters. First of all, a retrospective analysis of the event and process of childbirth is undertaken. We then provide a comprehensive picture of the family structure and living conditions, including changes that have occurred since the pregnancy wave. The main characteristics of the mother and of the 6-month-old child are also discussed in separate chapters.





2. Childbirth

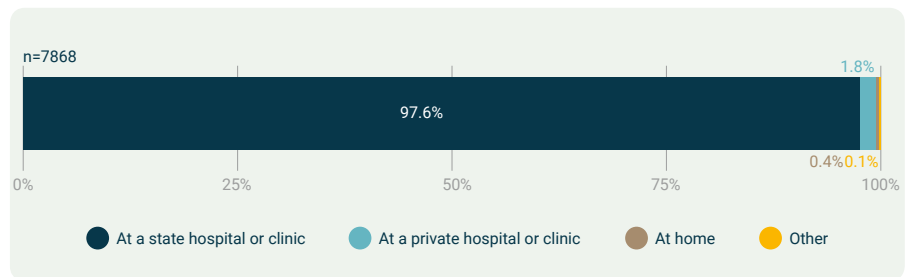
2.1. Circumstances of childbirth

Mothers were surveyed when their child was 6 months old, at which point they looked back on the circumstances of the delivery and reported accordingly. Completing the self-administered questionnaire, mothers provided information about where they gave birth, who was present at the birth and how many nights they had had to spend in hospital before and after the birth.

97.6 per cent of the mothers surveyed gave birth in a state-run institution.

The vast majority of mothers who participated in the data collection when their child was 6 months old had given birth in a state-run hospital or clinic (97.6 per cent). Just 1.8 per cent gave a private hospital as the place of delivery. A total of 35 mothers (0.4 per cent) said they had had their child at home, and 12 (0.1 per cent) said they had given birth elsewhere – in an ambulance or a car en route to the hospital.²

FIGURE 2.1.1. PLACE OF DELIVERY



Weighted database (maternal weight)

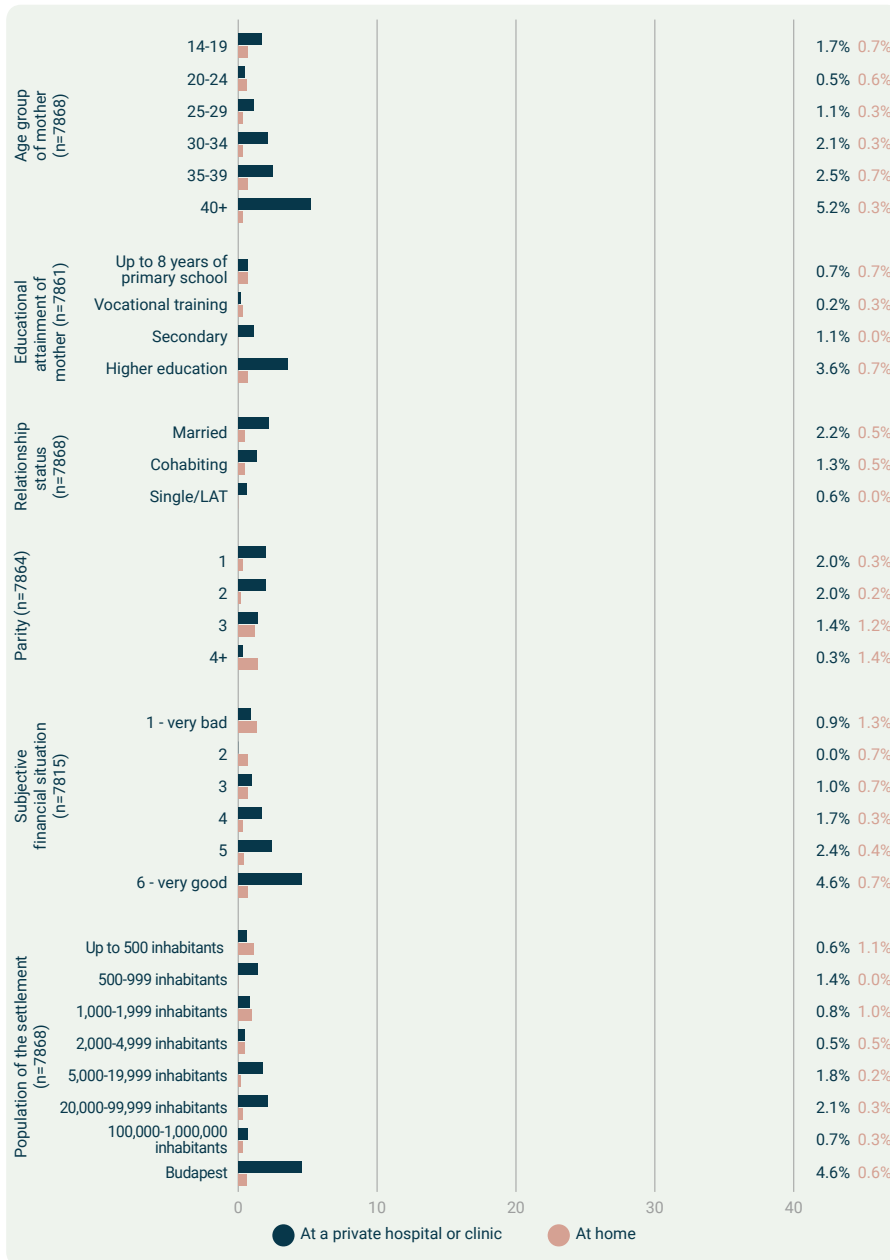
Mothers with a more advantaged socio-economic background often gave birth in a private hospital or clinic.

Unsurprisingly, women with more advantaged social backgrounds gave birth in private hospitals or clinics. Those mothers who gave birth there were more likely to be over the age of 35, to have had at least secondary education, to be living with a spouse, in Budapest, and to fall into one of the top two categories in terms of their subjective financial situation (on a six-point scale, where 6 means very good and 1 means very bad).

Women who gave birth at home in Hungary in 2018–2019 form a fairly small, select group. A significantly higher proportion of them had tertiary education, already had at least three children and lived in a settlement with a population of between 1,000 and 2,000.

² These figures are very similar to the Hungarian vital statistics: according to statistical data, in both 2018 and 2019, 99.4 per cent of births occurred in a medical institution. (Source: Hungarian Central Statistical Office (HCSO) Vital statistics, 2019, own calculation.)

FIGURE 2.1.2. THE PROPORTION OF BIRTHS IN PRIVATE HOSPITAL AND AT HOME, ACCORDING TO THE DEMOGRAPHIC CHARACTERISTICS OF THE MOTHER WEIGHTED DATABASE (MATERNAL WEIGHT)



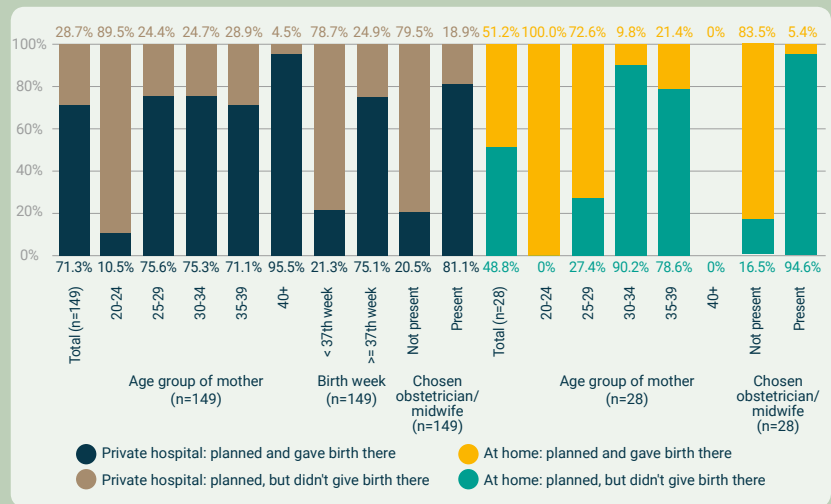
Weighted database (maternal weight)

Planned and actual place of childbirth

Naturally, the place of delivery depends both on planning and on circumstances. Some 71 per cent of all the women who had planned to give birth in a private hospital actually ended up doing so (while 27 per cent gave birth in a state-run hospital and 2 per cent at home or somewhere else).

Only half of all the women who planned to give birth at home (28) reported having done so. In the case of those who had been planning to have their baby in a private hospital, it was not necessarily their subjective financial position or the size of the settlement where they lived that was the decisive factor in whether or not their plans came to fruition: among women aged below 24 and among those whose baby was born before week 37 of the pregnancy, the proportion who planned to give birth in a private hospital but did not do so was significantly higher than the proportion who planned to give birth in a private hospital and succeeded in doing so. It is also the case that of those women aged 20–24 who wanted to give birth at home, virtually none actually did so.

FIGURE 2.1.3. PLANS AND REALIZATION: WOMEN GIVING BIRTH IN A PRIVATE HOSPITAL OR AT HOME, ACCORDING TO THE DEMOGRAPHIC CHARACTERISTICS OF THE MOTHER

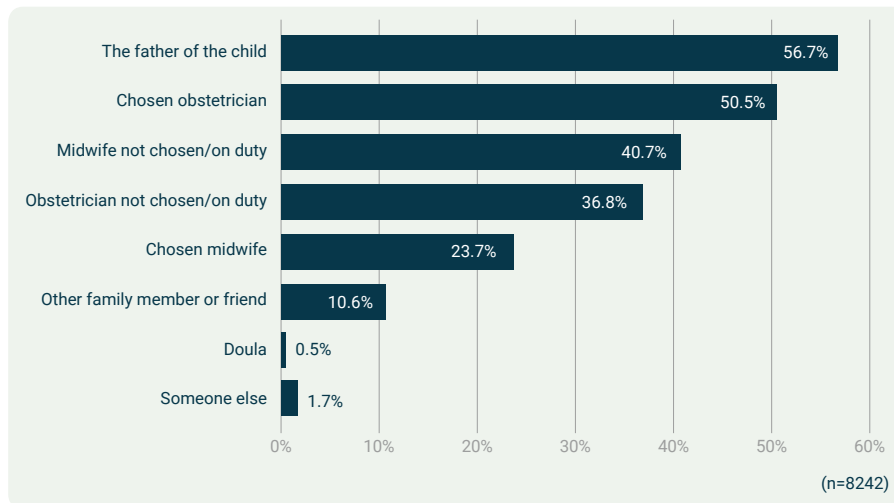


Weighted database (maternal weight)

Half of women had a chosen obstetrician and a quarter also had a chosen midwife present at the birth.

In the course of the 6-month survey, 56.7 per cent of mothers surveyed reported that their child's father had been present at the birth. Half of the mothers mentioned as well that their chosen obstetrician had also been present (50.5 per cent). A lower proportion (though still relatively high) reported that the birth had been overseen by the duty midwife (40.7 per cent), the duty physician (36.8 per cent) or their chosen midwife (23.7 per cent). Other family members or friends present at the birth made up 10.6 per cent of cases, while other individuals were present at 1.7 per cent of births ('other people' were generally medical or hospital staff: anaesthetists, paediatricians, paramedics, hospital porters, midwives and nurses).

FIGURE 2.1.4. PEOPLE PRESENT AT CHILDBIRTH



Weighted database (maternal weight)

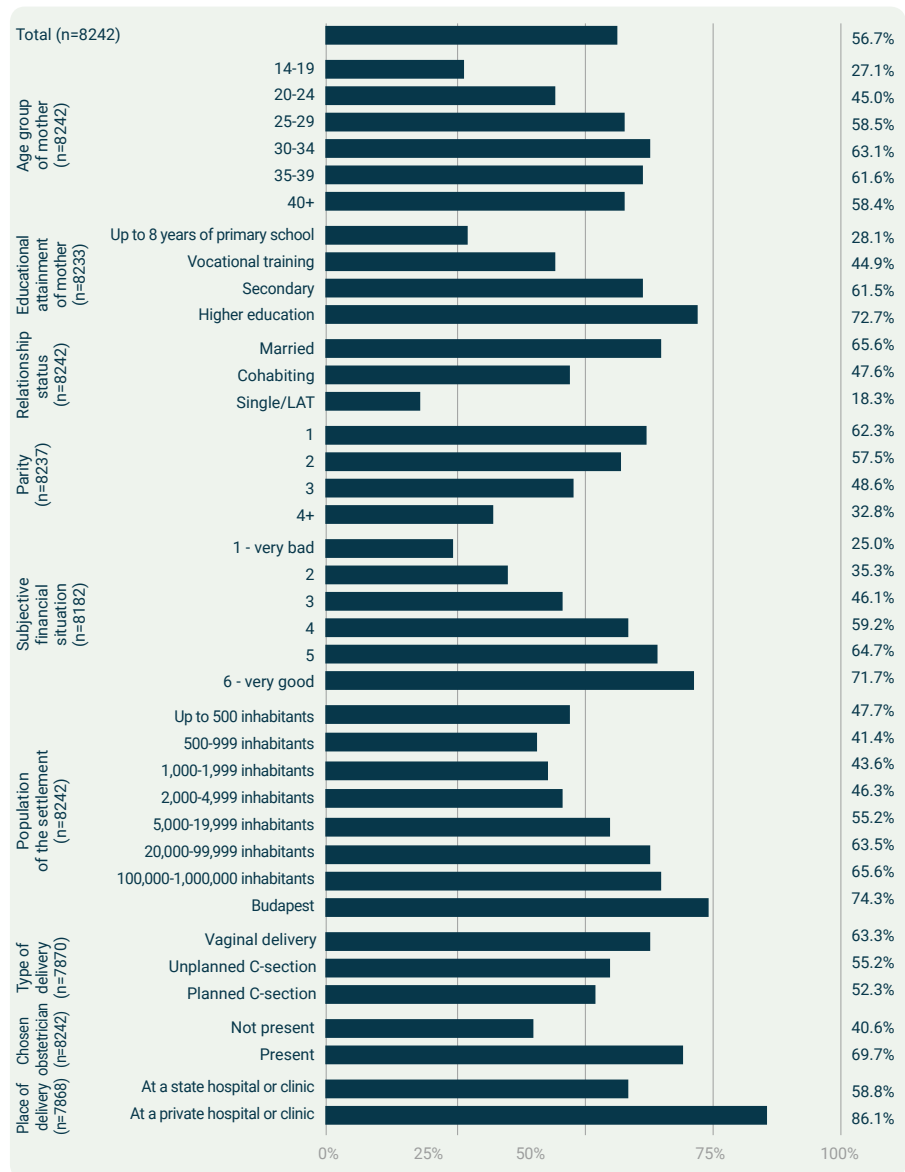
We know from previous research how important the presence of the father at the birth is to many women from a psychological,³ physical or hormonal⁴ support perspective. However, the rate of 'father-attended births' differs significantly across the socio-demographic spectrum. The more advantaged the social background of the woman (the better educated she is, the better her subjective financial position is), the more likely she was to have the father present at the birth. The father's presence was also more common among families with fewer children, among married couples and among those living in larger settlements. Furthermore, the likelihood that the partner was present was greater if the respondent gave birth by vaginal delivery, as opposed to a planned or unplanned caesarean section. Paternal presence was even more common in private hospitals or in the case of births at which the mother's choice of doctor attended. However, the sex of the child, the day of the week and the month of the year in which the birth occurred did not influence the presence of the father.

More than half of the women said the child's father had been present at the birth.

³ Németh, T. (2020). Családtervezés, várandósság, szülés, korai gyermekágy a gyakorlati tapasztalatok alapján – Fókuszban a pszichoprolifaxis egy modellje, a „Szülői hivatásra felkészítő kurzus [Family planning, pregnancy, childbirth, early childbirth based on practical experience – Focus on a model of psychoprophylaxis, the 'Parenting Course']”. In: Danis, I. et al. (eds), A kora gyermekkori lelki egészség támogatásának elmélete és gyakorlata [Theory and practice of supporting early childhood mental health], vol. I. Budapest: Semmelweis Egyetem Egészségügyi Köszolgálatai Kar Mentálhigiéné Intézet, 138–164.

⁴ Varga, K. (2009). Szexualitás, szülés, kötődés: az oxitocin pszichoemotív hatásai [Sexuality, childbirth, attachment: Psychoemotional effects of oxytocin]. In: Bagdy, E., Demetrovics, Zs. and Pilling, J. (eds), Polihistória –köszöntők és tanulmányok Buda Béla 70. születésnapja alkalmából [Polyhistory – greetings and studies on the occasion of Béla Buda's 70th birthday]. Budapest: Akadémiai Kiadó, 449–476.

FIGURE 2.1.5. PRESENCE OF THE CHILD'S FATHER AT BIRTH ACCORDING TO THE DEMOGRAPHIC CHARACTERISTICS OF THE MOTHER



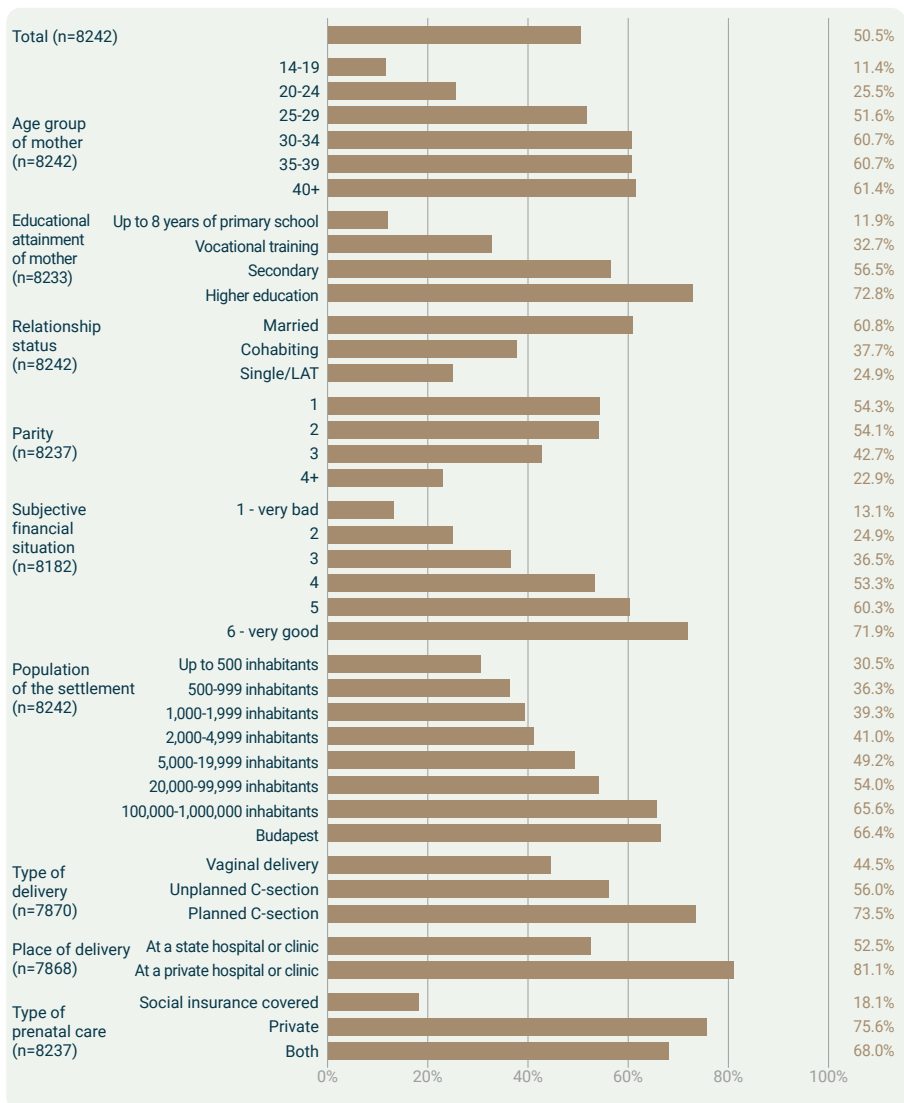
Weighted database (maternal weight)

We know from qualitative research into childbirth experience that the presence of the chosen obstetrician is of significant importance to a woman's feeling of security. That said, the 'appointment' of an obstetrician cost a not inconsiderable amount – at any rate, while the practice was still legal.⁵ For the women taking part in the Cohort '18 Study, it was still legal when they gave birth. It is not surprising, then, that the presence of the chosen obstetrician at the birth was more common among women from more favourable financial backgrounds. Women who were older, had a higher education level, had one or two children, were better off financially and lived in a larg-

⁵ Act No. T/13174 of the Government of Hungary on the legal status of the health service, Budapest, October 2020.

er settlement were significantly more likely to have given birth with their chosen obstetrician in attendance. So were those who had a planned or unplanned caesarean section or who gave birth in a private hospital. While 18.1 per cent of women whose maternity care was covered totally by social insurance had their chosen doctor in attendance, the figure was 75.6 per cent of women in private care and 68 per cent of women in mixed care (dual public-private financing). If we look at the day of the week on which the birth occurred, we find that on Saturdays and Sundays the likelihood of the chosen obstetrician being present at the birth was significantly lower.

FIGURE 2.1.6. PRESENCE OF THE CHOSEN OBSTETRICIAN AT THE BIRTH, ACCORDING TO THE DEMOGRAPHIC CHARACTERISTICS OF THE MOTHER



Weighted database (maternal weight)

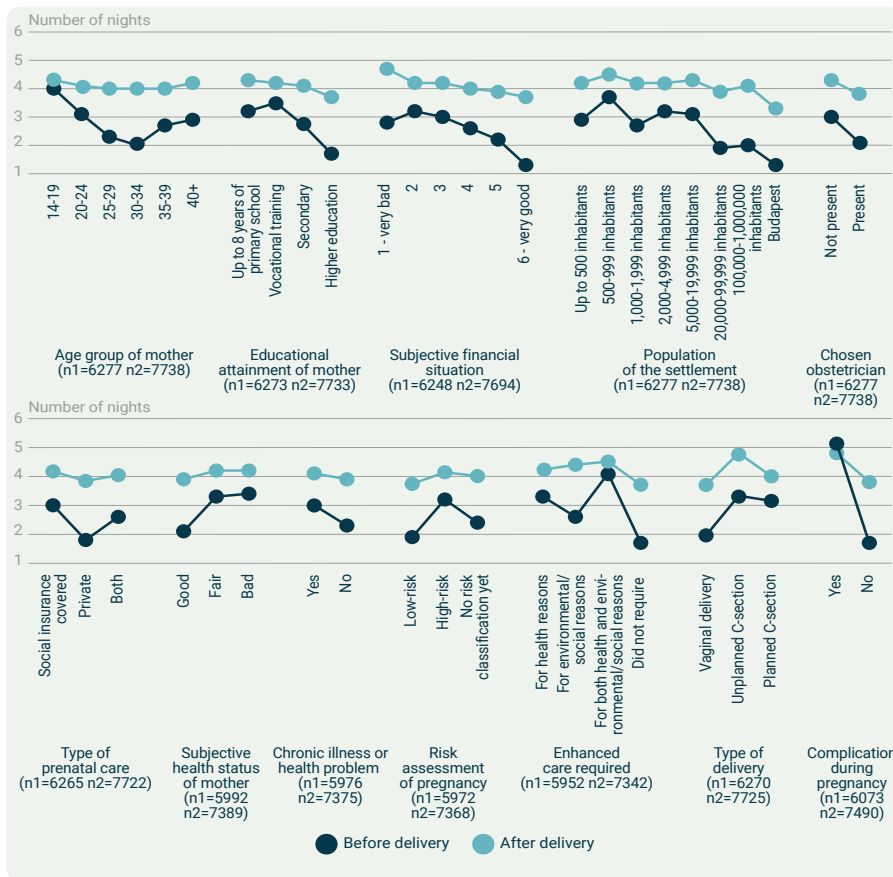
The mothers spent an average of 4 nights in hospital after delivery; most common was a 3-night stay after the birth.

Some idea of the complications that may attend pregnancy and childbirth – albeit not totally accurate – can be gleaned from information on the number of nights that the women had to spend in hospital before and after the birth. Again, the mothers answered this question when their child was 6 months of age, on the basis of their recollections: 56.7 per cent of women reported not having spent a single night in hospital before the birth; furthermore, 55 women (0.7 per cent) reported not having stayed overnight in hospital after the birth either.

The women surveyed who gave birth in 2018–2019 spent an average of 2.5 nights in hospital before delivery ($n=6277$, $SD=6.9$; median=0) and 4 nights after the delivery ($n=7738$, $SD=3.7$; median=3). Extremely high values (over 100 nights) were excluded from the analysis in four cases (prior to the delivery) and five cases (after the birth). Thus, the maximum number of nights spent in hospital was 90, on both questions that referred to the number of nights before and after childbirth.

Naturally, the number of nights spent in hospital can be related to several factors: health status, complications during the pregnancy and external factors can all either individually or in combination affect the duration of the stay. In any case, the bivariate correlations indicate that those in poorer health or those who experienced complications during pregnancy were more likely to have spent more time in hospital before the birth. The number of nights spent in hospital after the birth is related to whether someone lives in Budapest or elsewhere. In addition, mothers had to spend several nights in hospital afterwards if they gave birth by caesarean section (especially unplanned caesarean section), or if they had had any health problems or complications during the pregnancy.

FIGURE 2.1.7. AVERAGE NUMBER OF NIGHTS SPENT IN HOSPITAL BEFORE AND AFTER THE BIRTH, BASED ON SOCIODEMOGRAPHIC AND HEALTH STATUS VARIABLES



Weighted database (maternal weight)

Expenditure surrounding childbirth

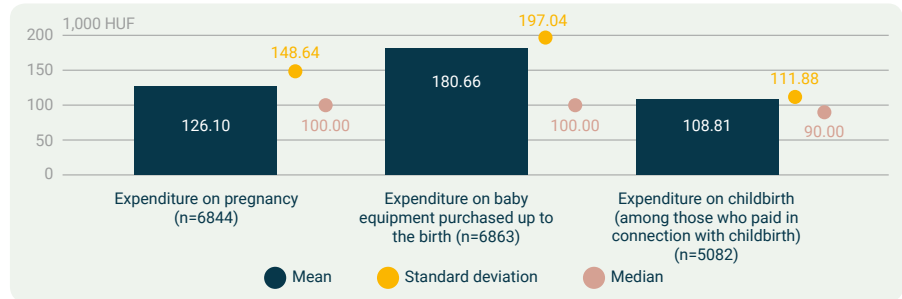
2.2.

Although maternity care and childbirth take place in a system fully funded by social security, having children represents a significant expense for Hungarian families. The expenditure is related to care during pregnancy, childbirth and the purchase of baby equipment.

During the survey conducted when the children were 6 months old, their mothers had an opportunity to complete a self-report questionnaire, detailing the costs they had incurred from the time they became pregnant to the arrival of their baby. Expenditure is divided into three main categories: spending on health during pregnancy (e.g. maternity care, examinations, medications, vitamins); childbirth-related expenditure (e.g. childbirth, hospital stay, extra services); and baby equipment purchased prior to the arrival of the baby (e.g. crib, pram, baby clothes).

According to the mothers' answers, being pregnant in the Hungarian care system in 2018–2019 cost an average of HUF 126,000 per family (median: HUF 100,000), while the average cost of purchasing the necessary baby equipment was HUF 180,000 (median: HUF 100,000). Related to this are the costs associated with childbirth: among those who paid in connection with childbirth, the average amount was HUF 108,000 (median: HUF 90,000).

FIGURE 2.2.1. EXPENDITURE ASSOCIATED WITH CHILDBIRTH - AVERAGE, THOUSAND HUF



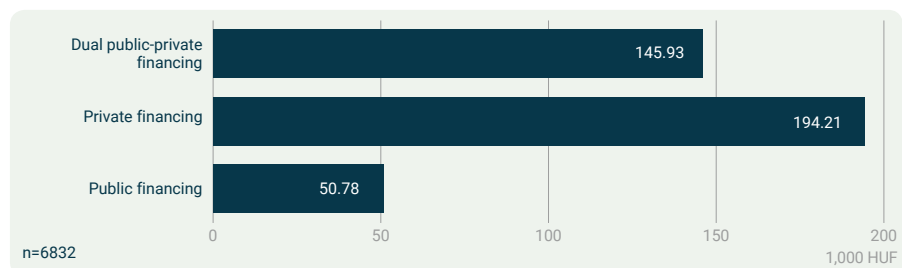
Weighted database (maternal weight)

In Hungary, the average medical expenses associated with pregnancy amounted to HUF 126,000 per family. Families also spent an average of HUF 180,000 on baby equipment.

Pregnancy care costs increased significantly if private gynaecological care was sought.

Restricting spending to the period of pregnancy care, we find that the services of private gynaecologists represent a significant cost factor. By including the data from the first wave of the Cohort '18 Study – conducted during the pregnancy – we can examine the financial burden imposed on families by the combined (or exclusive) use of private maternity care, in addition to the benefits of the comprehensive and free maternity care available to all Hungarian mothers. According to the data, 60 per cent of mother-to-be received at least some care from gynaecologists working in private practice. In those families where the only gynaecological care provided was within the framework of public social security, health costs over the duration of the pregnancy amounted to on average HUF 50,000 (including additional pregnancy tests, medications, supplements and vitamins). The cost of pregnancy care increases significantly if the services of a private gynaecologist are sought. Mothers who occasionally visited a private gynaecologist during their pregnancy reported an average cost of care of HUF 145,000 during pregnancy. Those who attended a private gynaecological clinic exclusively reported an average total cost of HUF 194,000 for their pregnancy care.

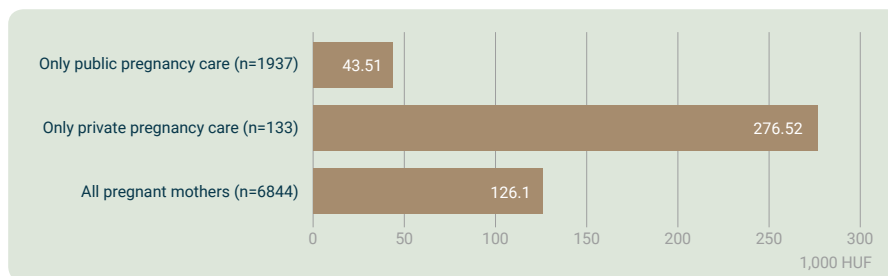
FIGURE 2.2.2. PREGNANCY HEALTH EXPENDITURE, BY TYPE OF PREGNANCY CARE - AVERAGE, THOUSAND HUF



Weighted database (maternal weight)

In addition to regular specialist examinations, some essential laboratory and ultrasound examinations were provided to mothers by the private care sector. Only 2 per cent of respondents used only private providers (i.e. for access to an obstetrician, as well as laboratory and ultrasound examinations). For this small group, the average cost of pregnancy care was HUF 276,000. Although dual public-private financing is generally a feature of maternity care in Hungary, at the other end of the scale is a large group of mothers, who used only public health-funded services during their pregnancy. They spent an average of HUF 44,000 in connection with their pregnancy, up to the point of delivery.

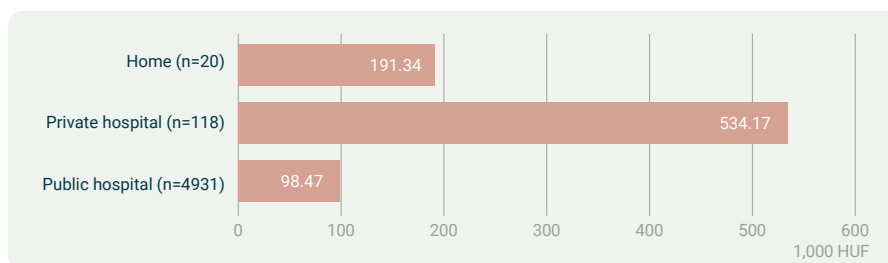
FIGURE 2.2.3. COSTS OF USING PUBLIC AND PRIVATE MATERNITY CARE - AVERAGE, THOUSAND HUF



Weighted database (maternal weight)

When asked about the total costs associated with childbirth, respondents detailed the charges, including any stay in hospital and any extra services provided. Overall, the most expensive births occurred in private hospitals, at an average cost of HUF 534,000. By contrast, the average cost of giving birth at home was HUF 191,000. But the proportion of private hospital births and of home births is very low: the vast majority of women give birth in a public hospital. Even taking account of the full support of maternity care in Hungary, that option still involves relatively high expenditure – HUF 98,000 on average among all those who paid anything at all in relation to the birth.

FIGURE 2.2.4. CHILDBIRTH COSTS, BY PLACE OF CARE - AMONG THOSE PAYING IN CONNECTION WITH CHILDBIRTH - AVERAGE, THOUSAND HUF



Weighted database (maternal weight)

The average cost of giving birth in a private hospital was HUF 534,000, while giving birth in a public hospital also involved an average cost of HUF 98,000.

Some 22 per cent of women who gave birth in a public hospital or clinic did not provide a figure for the total cost of giving birth. Of the remaining 6,000 respondents, 17 per cent indicated an amount of HUF 0 – i.e. that is the proportion of those in our sample who gave birth in a public hospital without any additional expenditure.

Giving birth free of charge

Of those women who gave birth in a public hospital, only 17 per cent indicated that the birth had incurred no additional expenditure: that is, they had relied exclusively on public services for their pregnancy care and had not sought the services of a private obstetrician. In terms of the method of delivery, they had been mostly vaginal births. It is also interesting to note that, even though this group was less likely to have been able to choose their birthing and labour positions than those women who gave birth privately, their feedback on the experience of the birth was only slightly less favourable than that of the average paying mother.

Expenditure for mothers who paid for childbirth and certain related services in public hospitals covered not only the 'gratuity' paid to the attending doctor or midwife, but also additional hospital expenses. However, this sizeable amount is closely linked to the former Hungarian practice – now officially outlawed – of having an 'appointed' obstetrician.

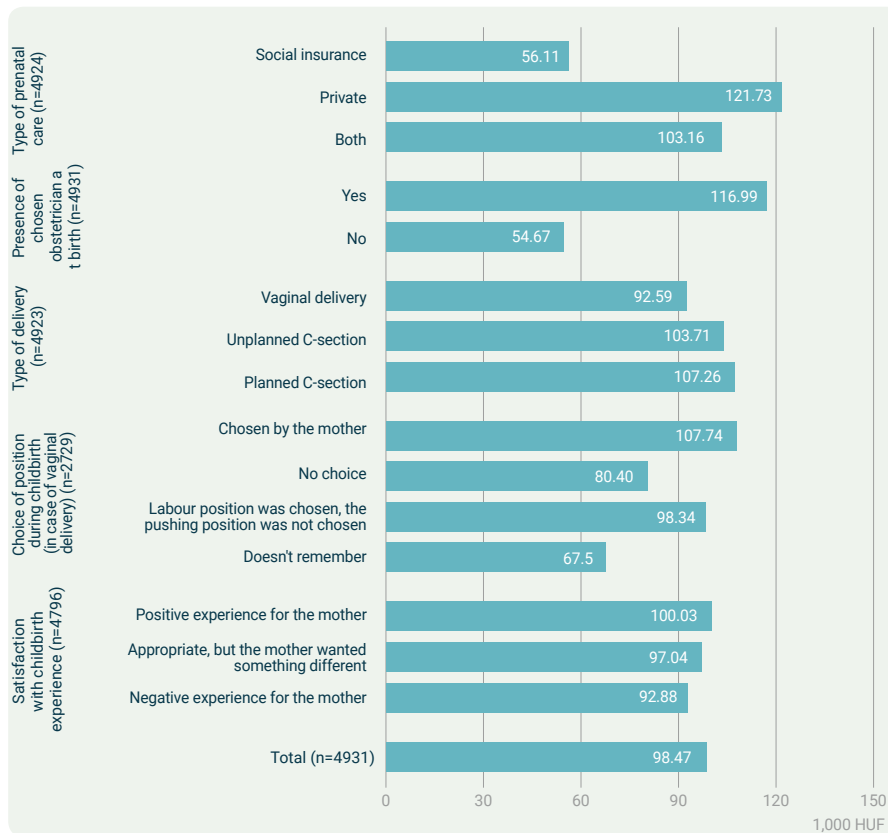
If we examine the average cost of giving birth as a function of benefits related to pregnancy and childbirth, we find that the average cost of giving birth in a public hospital was much lower for mothers who had used only social security-funded services during their pregnancy – just HUF 56,000. Clearly, it was the practice of having an 'appointed obstetrician' that significantly increased the individual costs of maternity care in Hungary: mothers who had their own doctor (also) in attendance at the birth reported an average of HUF 117,000 in childbirth-related costs; when the birth was assisted by a 'non-appointed' obstetrician – the duty doctor – the total average cost was HUF 54,000.

In terms of the method of delivery, a caesarean section cost slightly more than a vaginal delivery (average: HUF 103,000 and HUF 107,000, respectively).

There is some question about whether extra expenditure within the public care system improves the quality of care or the treatment received by mothers. In this connection, women who were free to choose their birthing position reported higher costs (HUF 107,000). The lack of choice of birthing position was associated with lower costs (HUF 80,000). While financially there is a difference, in terms of women's assessment of their experience of childbirth the effect of the extra payment is insignificant. Mothers who expressed complete satisfaction with the course of the birth reported only slightly higher costs (HUF 100,000).

The cost of childbirth was greatly increased by the presence at the birth of the mother's appointed obstetrician.

FIGURE 2.2.5. CHILDBIRTH COSTS, BY TYPE OF SERVICE - AMONG THOSE PAYING IN CONNECTION WITH CHILDBIRTH, AT A PUBLIC HOSPITAL - AVERAGE, THOUSAND HUF



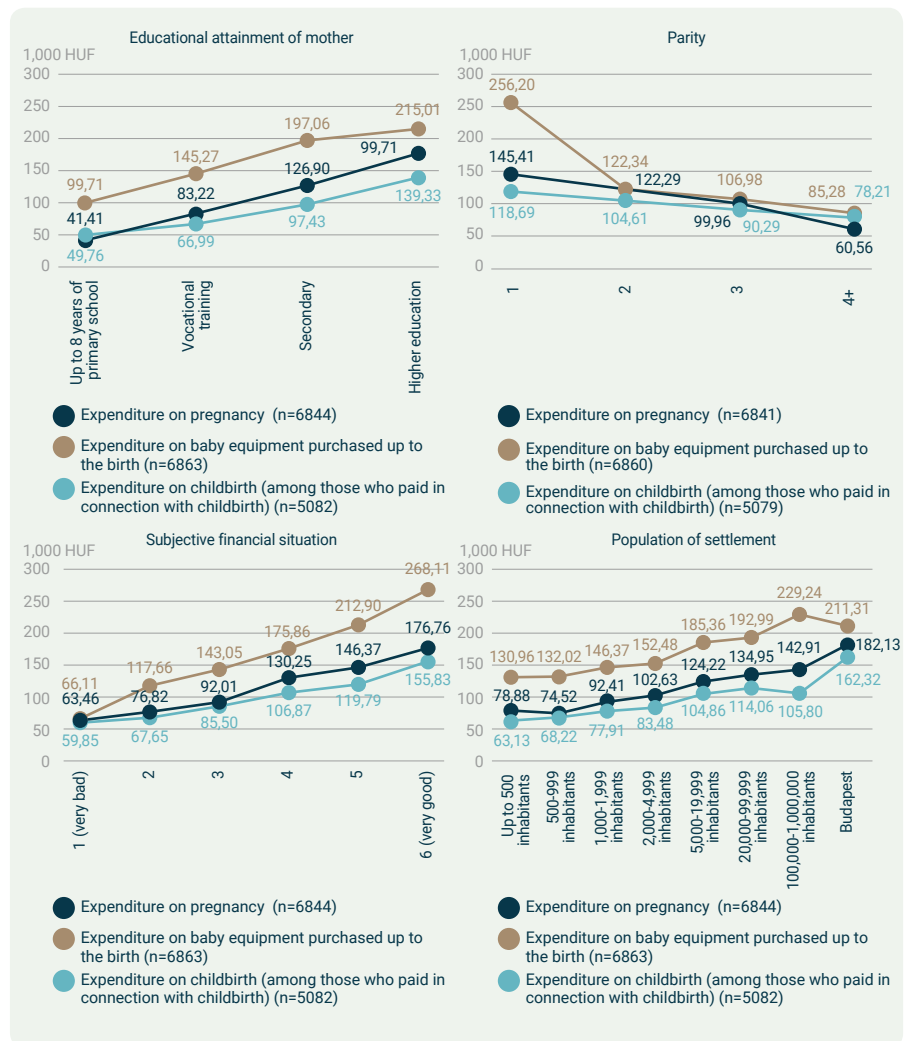
Weighted database (maternal weight)

The significant expenditure associated with pregnancy and childbirth in Hungary is distributed differently according to the socio-economic situation of families. The evolution of cost averages according to certain background variables tends to reflect those differences. The three types of costs incurred in having a child – maternity care, childbirth and baby equipment expenses – increase steadily in line with the mother's level of education. If we look at the number of existing children, we find that the more children the mother already has, the less is allocated to pregnancy and childbirth. Meanwhile the difference in the amount spent on baby equipment is clearly significant: the purchase of essential baby equipment for a first child cost families an average of HUF 265,000, whereas in those families that already had children, the amount was between HUF 85,000 and HUF 122,000. The subjective financial situation of the family, as assessed by the mother, also determined the level of expenditure: the better the family's financial position, the more it spent on all three cost categories of childbirth. The expenditure of those families in (subjectively) the most parlous financial situation was around HUF 50,000 on average; meanwhile, among families in (subjectively) the best financial position, average spending in connection with childbirth exceeded HUF 155,000, and spending on the woman's health during pregnancy topped HUF 176,000. The differences in the amount spent on baby equipment are particularly striking:

The arrival of a first child is particularly costly: families expecting their first child spent an average of HUF 265,000 on baby equipment.

those in the best financial position reported average expenditure of HUF 268,000 – some HUF 200,000 more than the average spending of those in straitened circumstances. Expenditure associated with childbirth increased in proportion to the population of the settlement, right up to city level (populations of between 100,000 and 1 million). In the capital Budapest, on the other hand, the cost of maternity care and childbirth jumps sharply, but the amount allocated for baby equipment is lower than the average in provincial cities.

FIGURE 2.2.6. AVERAGE COST OF HAVING A CHILD, BY BACKGROUND VARIABLES - AVERAGE, THOUSAND HUF

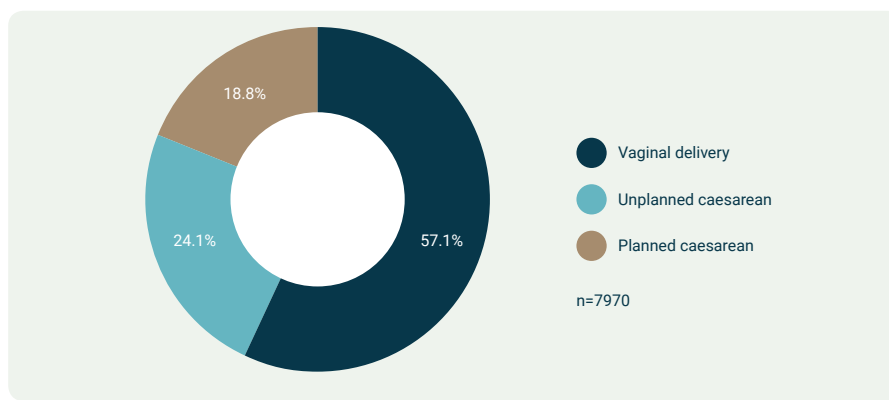


Weighted database (maternal weight)

In addition to the circumstances of the birth and the related expenses, we also examined specifically how the birth occurred: by vaginal delivery or caesarean section, and what intervention (if any) there was from a doctor or midwife. We also looked at the overall birth experience of the mother.

Nearly three fifths (57.1 per cent) of births in 2018–2019 occurred vaginally, while nearly one fifth (18.8 per cent) of mothers gave birth by unplanned caesarean section and a quarter by planned caesarean section.

FIGURE 2.3.1. TYPES OF DELIVERY



Weighted database (maternal weight)

The growing rate of caesarean sections is a global trend, but the high Hungarian rate (42.9 per cent of all births) is by no means favourable. According to recommendations from the World Health Organization (WHO), a rate of 10–15 per cent would be desirable: a lower rate could endanger the lives of the mothers (and their unborn children); a higher rate than that recommended does not reduce mortality any further, but it can lead to numerous complications.⁶ There are a number of factors behind the global rise in the number of caesarean sections. On the one hand, as the birth rate declines, so the proportion of women having their first child increases, as does the average maternal age and the rate of artificial insemination. There is also an increasing trend for mothers to be overweight. All of this contributes to an increase in the likelihood of a caesarean section. If the mother has previously had a caesarean section, if she has pre-eclampsia (pregnancy-related hypertension) or if the foetus is in a breech position, then the chances of a caesarean section are also higher. Aside from health considerations, in many cases other factors – such as a desire to avoid malpractice lawsuits or even reasons of convenience – may guide a doctor’s decision to opt for a caesarean section.

The proportion of caesarean sections among all births is 42.9 per cent.

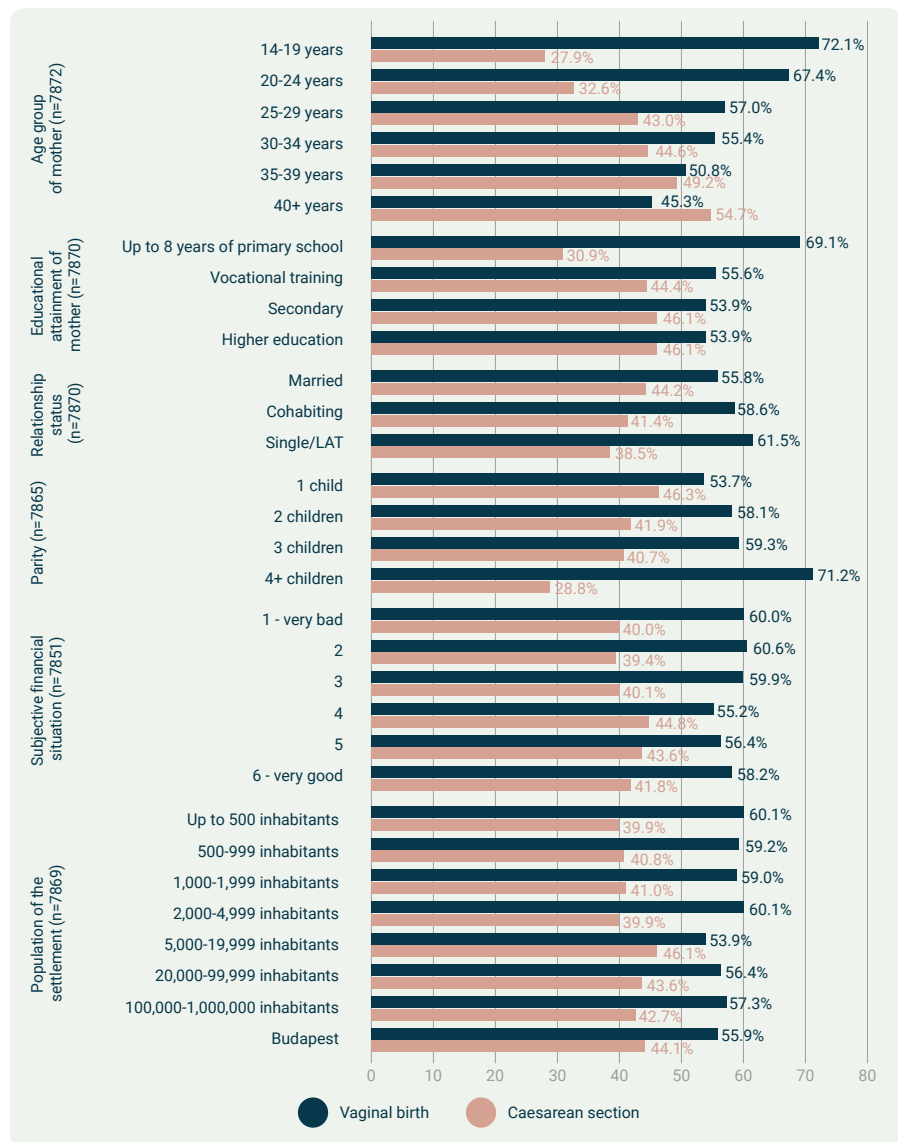
Examining the Hungarian data, we can see that maternal age clearly influences the prevalence of caesarean sections: half of women aged 35 and older (54.7 per cent of those aged over 40) gave birth via caesarean section, but less than

⁶ WHO Statement on Caesarean Section Rates. World Health Organization 2015.

a third of women under 25. Education is also an important factor: those with secondary or tertiary education had a higher rate of caesarean deliveries than did those with at most 8 years of primary schooling.

Using private gynaecological medical care also increased the chances of caesarean delivery: 35 per cent of those who used only maternity care covered by social security had a caesarean, whereas the figure for those who received partial or full private care was 48 per cent.

FIGURE 2.3.2. INCIDENCE OF CAESAREAN SECTION, BY MATERNAL CHARACTERISTICS

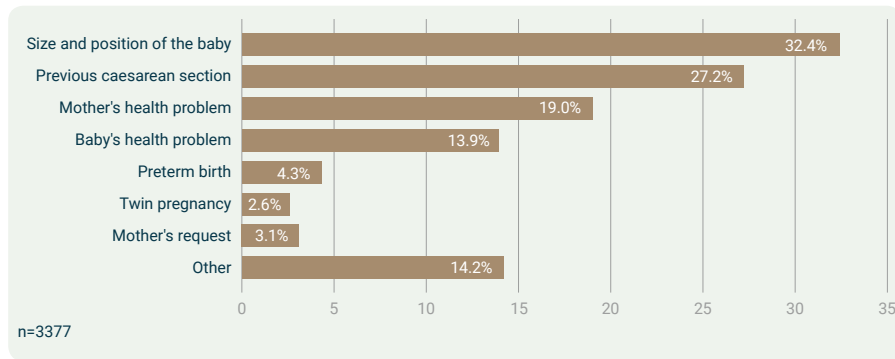


Weighted database (maternal weight)

When asked about the reasons for a caesarean delivery, the largest proportion of mothers (32.4 per cent) cited the size and position of the baby. Previous caesarean

sections were also among the most common reasons: more than a quarter (27.2 per cent) of all women who gave birth this time by caesarean delivery selected this reason. Furthermore, health issues for the mother (19 per cent) or the foetus (13.9 per cent) were another significant reason for a caesarean; considerations of comfort were reported by only a small number of mothers.

FIGURE 2.3.3. REASONS FOR CAESAREAN SECTION⁷ - AMONG MOTHERS WHO GAVE BIRTH BY CAESAREAN SECTION



Weighted database (maternal weight)

Planned or emergency caesarean delivery?

Caesarean sections fall into fundamentally two categories: emergency or planned. 'Emergency' does not always mean that immediate intervention is essential to protect the life of the mother and/or the foetus: surgery may also be justified on other medical grounds. 'Planned' caesarean sections may be carried out for health reasons, but they also include surgery undertaken purely for the comfort of the mother giving birth or for the convenience of the doctor delivering the baby.

According to Cohort '18 Study data, 43.7 per cent of all caesarean sections were planned and 56.3 per cent were unplanned.

Planned caesarean deliveries are more common among older mothers: for those aged over 35, more than half of all caesareans were planned. On the other hand, emergency caesarean sections are more common among mothers under the age of 20: more than three quarters of all caesareans in this age group fall into this category. Looking at educational attainment, planned caesareans are most common among those with secondary and higher education, and least common among those with vocational education. Mothers who are giving birth to their first child are more likely to undergo emergency intervention. The type of caesarean is also related to prosperity: planned caesarean deliveries are more common among those in a better financial position.

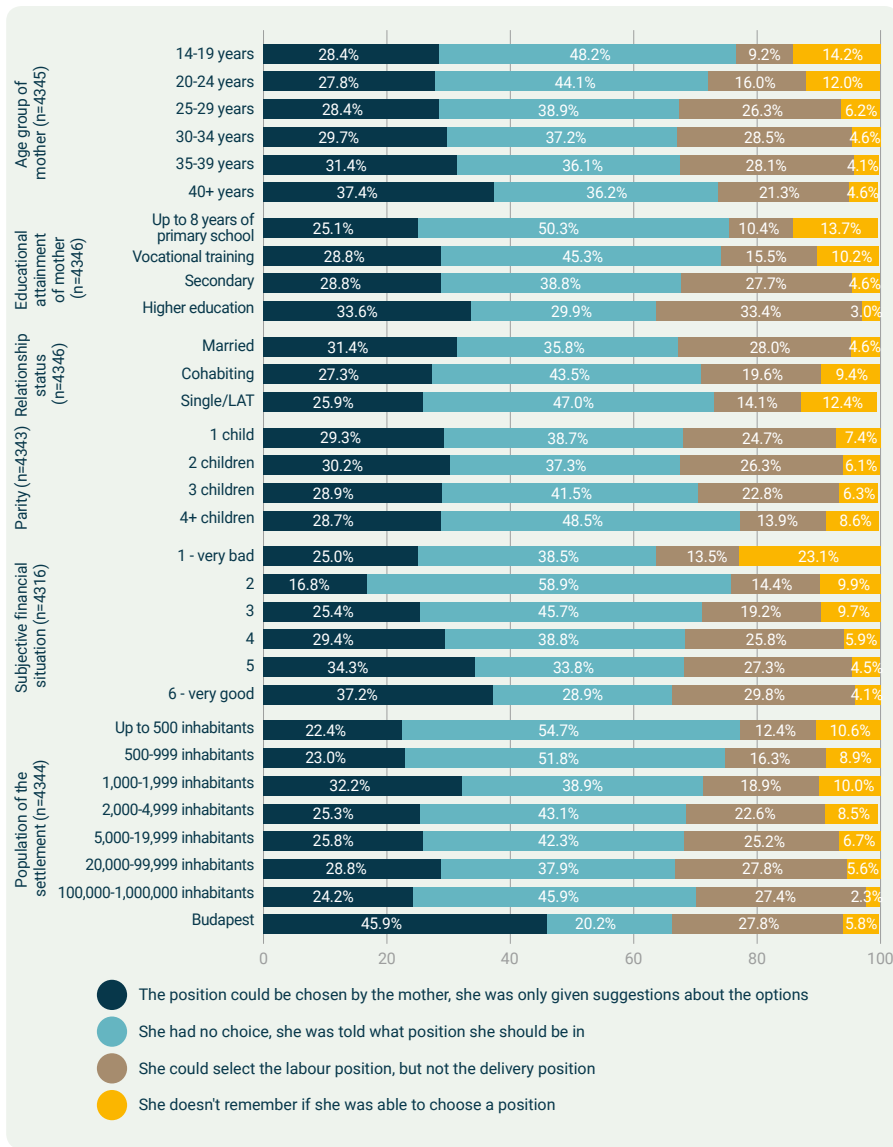
⁷ Several reasons could be marked at once, which is why the sum of the categories exceeds 100 per cent.

Two fifths of women who gave birth vaginally were not free to choose their position either during labour or during delivery.

Slightly less than a third (29.5 per cent) of women who gave birth by vaginal delivery were free to choose their positions during labour and delivery; about a quarter (24.5 per cent) could only choose their position during labour; and two fifths (39.4 per cent) could not choose at all. The proportion of women who, 6 months on, could no longer remember whether they had had the opportunity to choose their position is not negligible (6.9 per cent).

The free choice of body position was mainly characteristic of older mothers with higher education, married marital status and a more favourable financial situation. Residence in the capital is of outstanding importance in this respect: among women who had a vaginal delivery, 45.9 per cent in Budapest were free to choose their birthing position, whereas the figure fell to just over a fifth (22.4 per cent) in the smallest settlements. Mothers under the age of 20, those with no more than primary education, and those living in small settlements were the least likely to have been free to choose their position for labour or delivery, and were the most likely to have had to follow the instructions of the medical staff.

FIGURE 2.3.4. CHOICE OF POSITION DURING CHILDBIRTH - AMONG WOMEN GIVING BIRTH VAGINALLY

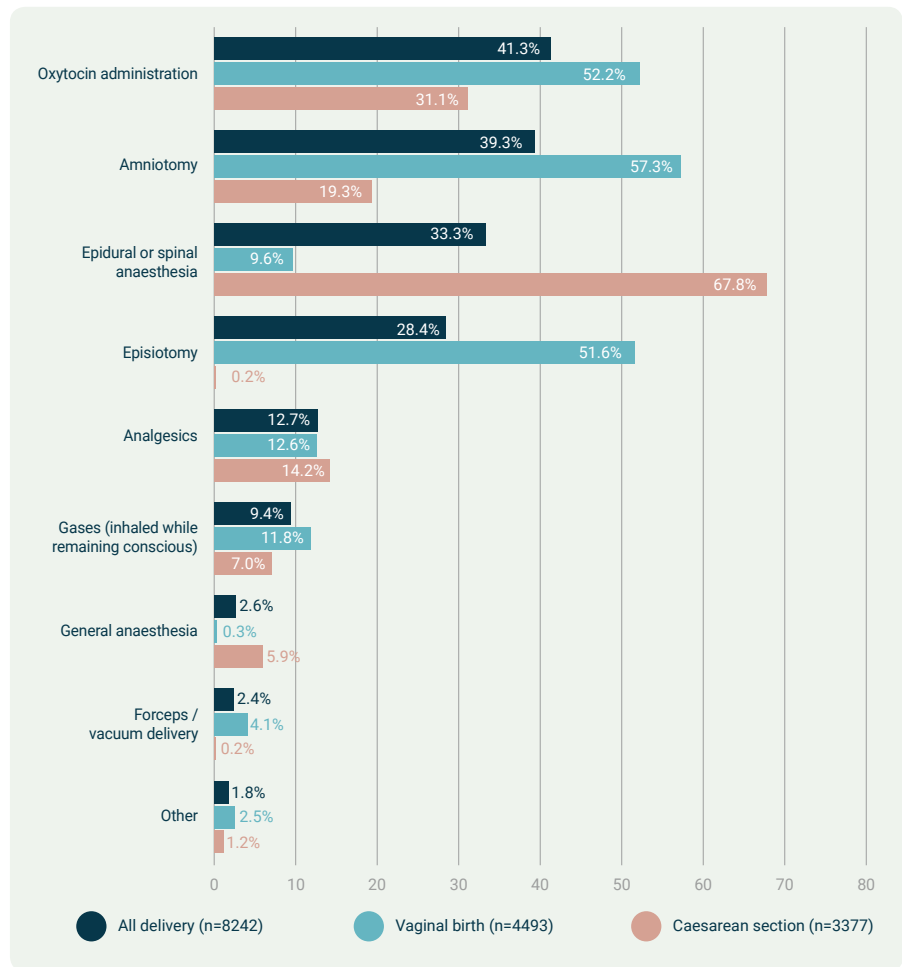


More than half of those who gave birth by vaginal delivery were given an episiotomy.

Weighted database (maternal weight)

There are a number of interventions that may take place during childbirth. Two fifths of all mothers in labour were given oxytocin (41.3 per cent) and had an amniotomy (39.3 per cent); a third of women had an epidural; and episiotomy was carried out in more than a quarter of cases. If we look at only those mothers who gave birth by vaginal delivery, we find that in more than half of all cases they had an amniotomy or episiotomy. In the case of caesarean births, the most common intervention was epidural or spinal anaesthesia: two thirds (67.8 per cent) of mothers mentioned it.

FIGURE 2.3.5. INTERVENTIONS DURING CHILDBIRTH

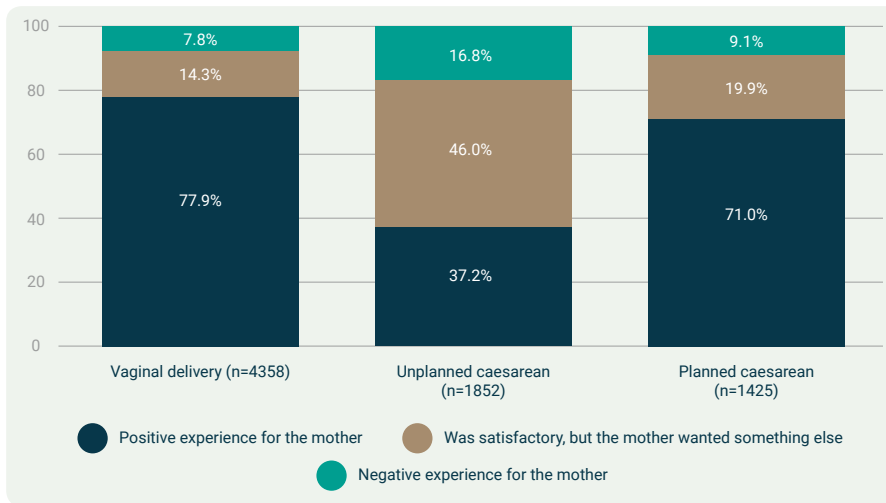


Weighted database (maternal weight)

Childbirth was clearly a positive experience for two thirds of mothers. Nearly a quarter of them thought that the experience of giving birth had been satisfactory, though they had wanted something different; and one woman in 10 described giving birth as a bad experience.

Poor birth experiences were more common among mothers under the age of 20, those with a lower level of education, those experiencing financial difficulties, those living without a partner and those who had given birth to their first child or who had given birth at least three times before. If we look at how the method of delivery affects the experience of childbirth, we see that those most satisfied had given birth by vaginal delivery: almost four fifths (77.9 per cent) said that the birth had been as satisfactory as it could be. The proportion of those who had given birth by planned caesarean section and who said they were satisfied was only slightly lower (71 per cent); meanwhile, only just over a third of women who had had an unplanned caesarean reported a positive experience (37.2 per cent).

FIGURE 2.3.6. SATISFACTION WITH CHILDBIRTH EXPERIENCE



Weighted database (maternal weight)

Arrival of the baby

2.4.

When investigating childbirth with regard to the newborn baby, we looked at which week of pregnancy the child was born, the weight and length at the time of birth, and how long the infant spent in hospital after being born.

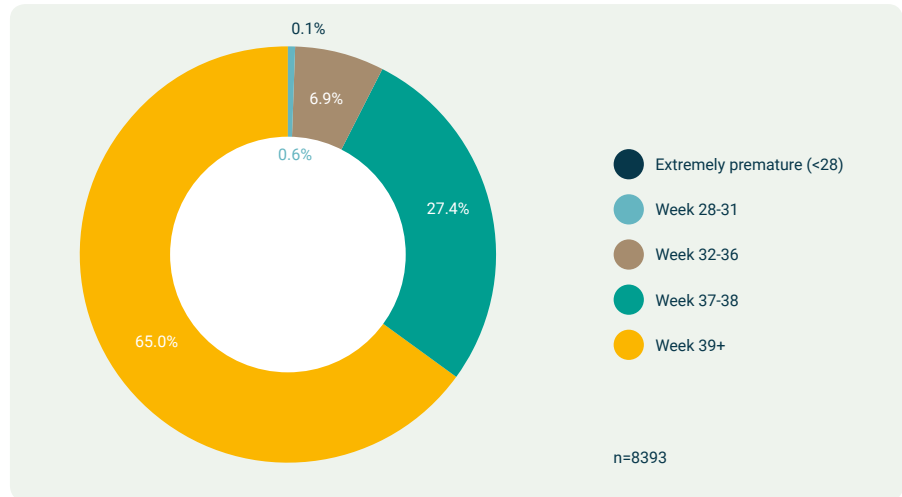
The duration of pregnancy is usually 280 days or 40 weeks from the last menstrual cycle. Most children are born between week 37 and week 42; births before week 37 are called premature, while those after week 42 are called postmature (or overdue).

According to the WHO's data from 184 countries,⁸ premature births account for 5–18 per cent of all births, with an average of 12 per cent in lower-income countries and 9 per cent in higher-income countries; thus, worldwide about 15 million children a year are born premature.

According to the Cohort '18 Study, the children in the sample were born between week 24 and week 45; the average was 38.8 weeks. Some 7.6 per cent were born premature, but the proportion of extremely premature births (i.e. before week 28) was only 0.1 per cent. When interpreting the study data, we should take into account the fact that the first wave of the survey was completed during weeks 28–31 of pregnancy (although the subsequent proxy interviews at the time of the 6-month survey allowed those who, for one reason or another – e.g. because their child arrived prematurely – could not participate in the first wave, to join the research later). That said, extreme preterm infants were still likely to be severely under-represented in our sample. The number of overdue babies is also negligible: only one child born after week 42 was included in the survey sample.

⁸ <https://www.who.int/news-room/fact-sheets/detail/preterm-birth>

FIGURE 2.4.1. CHILDBIRTH BY DURATION OF PREGNANCY



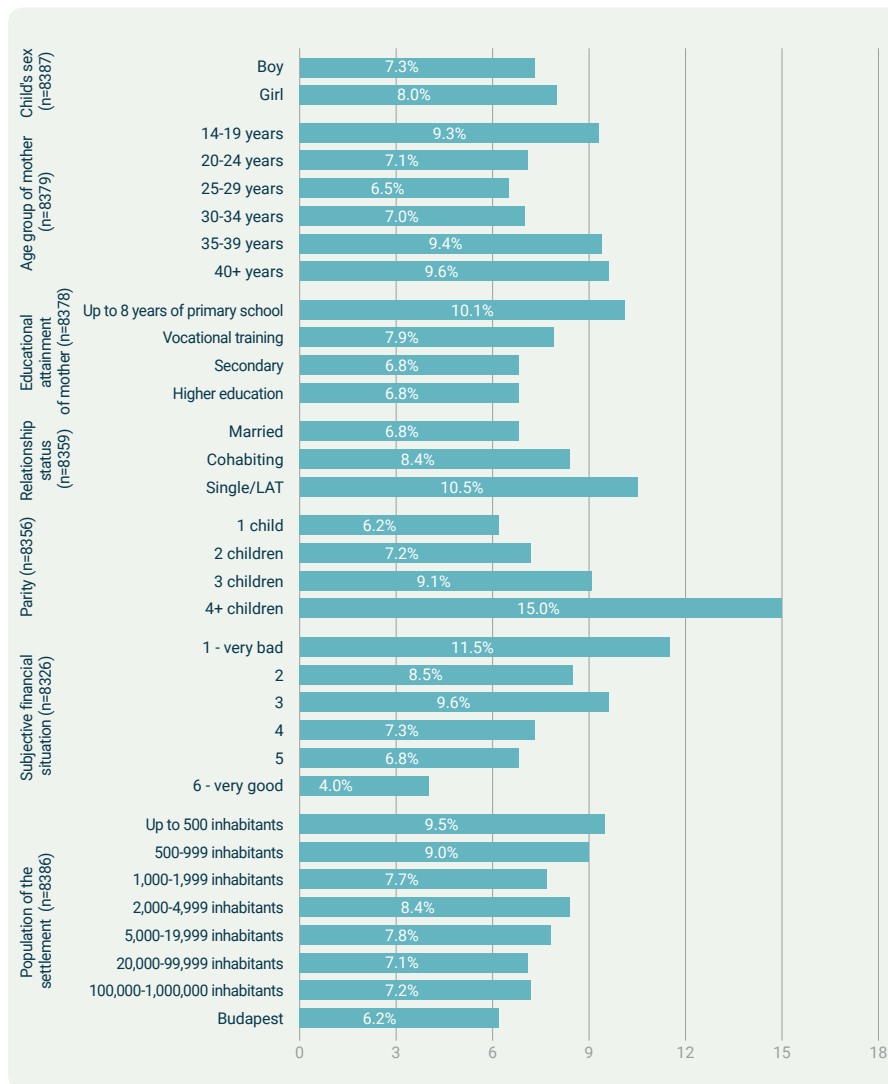
Weighted database (child weight)

Of course, twin pregnancies greatly increase the chances of preterm birth: more than half of twins (55.3 per cent) were premature, whereas the incidence of preterm births for single pregnancies was only 6.3 per cent.

The proportion of preterm infants is significantly higher among mothers in straitened financial circumstances.

Girls were slightly more likely to be born premature: 7.3 per cent of boys and 8 per cent of girls were preterm. There is a significant difference in the financial position of mothers in this respect: the proportion of preterm infants was almost three times greater among those in the worst financial position than among those in the best situation (11.5 per cent vs. 4 per cent). Babies born to a mother who already had at least three children were more than twice as likely to arrive prematurely (15 per cent) than if they were a first child (6.8 per cent). Other risk factors included a low level of maternal education and if the woman was single and having the baby on her own. Among those living in smaller settlements, it was also more common for a child to be born earlier than desirable: while for families living in the capital, only 6.2 per cent of babies were premature, in settlements with a population of less than 500, almost one child in 10 was born preterm. The relationship between premature births and maternal age is U-shaped, rather than linear: it is more common for both the youngest (under 20) and the oldest (over 35) mothers to have a preterm baby than it is for those aged somewhere in between.

FIGURE 2.4.2. PROPORTION OF PRETERM INFANTS



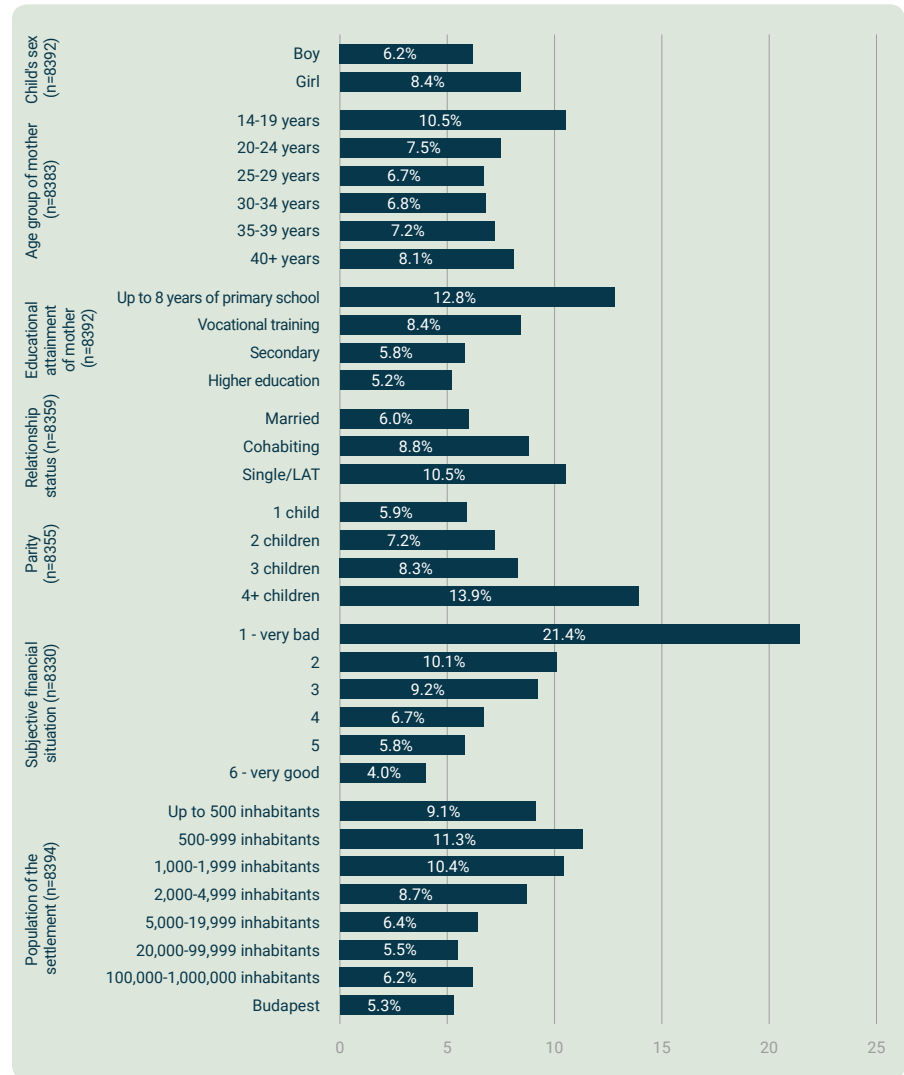
Weighted database (child weight)

The newborn babies had an average body weight of 3,270 grams. The normal range of birthweight is between 2,500 and 4,500 grams, below which we speak of low-birthweight infants. As with premature birth, low birthweight poses a greater risk to a child's health and later development. Some 7.3 per cent of the babies in the sample were born with a body weight of less than 2,500 grams. Again, as with premature birth, low birthweight was much more common among twins than among non-twins: 54.5 per cent versus 5.9 per cent. Of the preterm infants, all those born before week 31 of pregnancy were of low birthweight; on the other hand, 'only' half of those born in weeks 32–36 were of low birthweight (52.2 per cent). Of those born in weeks 37–38, 7.8 per cent had a low birthweight; and 1.2 per cent of those born between weeks 39 and 42 weighed less than 2,500 grams. Low birthweight was slightly more common among girls than among boys: 8.4 per cent for girls and 6.2 per cent for boys. The most vulnerable in terms of low birthweight are those living in the most challenging financial conditions: more

Newborns were born with an average body length of 51.5 cm and a body weight of 3,270 grams.

than a fifth of mothers in that group gave birth to a low-birthweight baby. The incidence of low birthweight shows a pattern similar to that observed in preterm infants: the children most at risk are those whose mothers have a lower level of education, are aged under 20, do not have a partner and live in smaller settlements.

FIGURE 2.4.3. PROPORTION OF LOW-BIRTHWEIGHT INFANTS



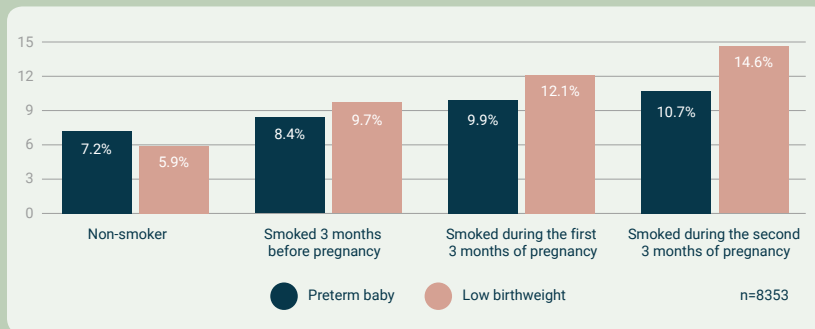
Weighted database (child weight)

Effects of maternal smoking on birthweight and premature birth

Smoking is a well-known health risk factor – not only for the mother, but also for the unborn child. From the survey data, it can be concluded that not only the fact of smoking, but also its timing is particularly significant for underweight and preterm infants. Compared to non-smokers, mothers who smoked in the 3 months before pregnancy had a higher proportion of infants born preterm or underweight. And also smoking in the first or sec-

ond trimester of pregnancy further increased the chances of giving birth to a low-birthweight or premature baby: the incidence of low birthweight was two and a half times greater for mothers who smoked in the fourth month of pregnancy than for non-smokers.

FIGURE 2.4.4. PROPORTION OF PRETERM AND LOW-BIRTHWEIGHT INFANTS, ACCORDING TO MATERNAL SMOKING HABITS



Weighted database (child weight)

Less than 1 per cent of the children in the survey had a birthweight of more than 4,500 grams.

In addition to birthweight, another important developmental indicator is length at birth. Infants in the Cohort '18 Study were born with an average body length of 51.5 cm. Boys were slightly longer than girls (51.9 cm vs. 51.2 cm). The normal range of length at birth is usually 46–56 cm: 3.4 per cent of the babies in the survey were shorter than 46 cm and 5.9 per cent were more than 56 cm.

After birth, infants spent an average of 4.5 days in hospital. In all, 0.6 per cent of newborns were not born in a hospital, and so they spent no time at all in hospital (in relation to the birth); meanwhile, 1 per cent of children were forced to stay in hospital for at least a month. Extremely premature infants – born before week 28 of the pregnancy – spent an average of almost 3 months (84 days) in hospital; those born in weeks 28–31 stayed for an average of 41 days.

2.5. Summary

The vast majority of children (97.6 per cent) were born in a state-run hospital or clinic. Barely 1.8 per cent of mothers gave birth in a private hospital – mainly women from well-to-do families. The father was present at 56.7 per cent of births. Half of the mothers gave birth with their chosen obstetrician in attendance, while nearly a quarter (also) had their chosen midwife present.

Pregnancy and childbirth present a significant financial burden for families. Based on the answers of the mothers, average spending on pregnancy in 2018–2019 was HUF 126,000 (though mothers who sought private maternity care spent considerably more than that). The purchase of baby equipment cost an average of HUF 180,000, and this figure increased if the baby was a first child. The average cost of a private hospital birth was HUF 534,000, while the average cost of giving birth in a public hospital was HUF 98,000. Maternity costs increased greatly if the obstetrician chosen by the mother was also in attendance at the birth.

Nearly three fifths (57.1 per cent) of births in 2018–2019 occurred vaginally; nearly a fifth (18.8 per cent) of the women gave birth by unplanned caesarean section and a quarter by planned caesarean. The chances of a woman having a caesarean increased with age, according to whether she had already had a caesarean section and also if she used private gynaecological care. Two fifths of women who gave birth vaginally were not free to choose their positions during labour or delivery, and more than half of them received an episiotomy.

Children were born on average 38.8 weeks into the pregnancy. The proportion of premature babies in the sample was 7.6 per cent, with a higher incidence in the case of twins and if the mother was in a difficult financial situation. Babies were born with an average body length of 51.5 cm and a weight of 3,270 grams.



3. Family Environment of 6-month-old Children

3. Family Environment of 6-month-old Children

3.1. Partnership status of the parents and composition of the household

In Hungary today, the vast majority of 6-month-old children (still) live with two biological parents in a household and their primary caregiver is their mother.

57 per cent of the mothers raising their 6-month-old child were married.

The absence of a cohabiting father was more common when the mother was poorly educated, young or living in difficult financial conditions.

The primary caregiver for the vast majority (99.6 per cent) of children aged 6 months in the Cohort '18 study was their mother. It is very rare for a child to be separated from the mother before this age, for example, or to be cared for by the father or grandmother because of the serious illness or death of the mother. Of course, in such circumstances, the 6-month inquiry is likely to have been unsuccessful in more cases, and so this group may be under-represented in the 6-month survey.⁹ However, the drop-out rate between the two waves of data collection was so low that it could not have led to any very serious bias in this respect.

Some 57 per cent of the mothers with a 6-month-old child were living with a spouse;¹⁰ 39 per cent were living with a partner; and the proportion of those raising their child without a cohabiting partner was 4 per cent.

The partnership status of mothers with a 6-month-old child (who were most often the child's primary caregiver) is strongly determined both socially and demographically. Though relatively rare, the absence of a cohabiting father or 'father figure' is clearly more common among children with low-educated, young and financially disadvantaged mothers.

Cohabitation is dominant among non-high-school graduate mothers under the age of 25 who have difficulty in covering their daily costs, and among families living in small settlements. Although at 6 months the majority of young children were being raised in a married-type family setting, there were groups for whom this was highly likely. For example, university graduates and mothers who rated their subjective financial status as good were typically (above 75 per cent) living and raising their 6-month-old child with a spouse.

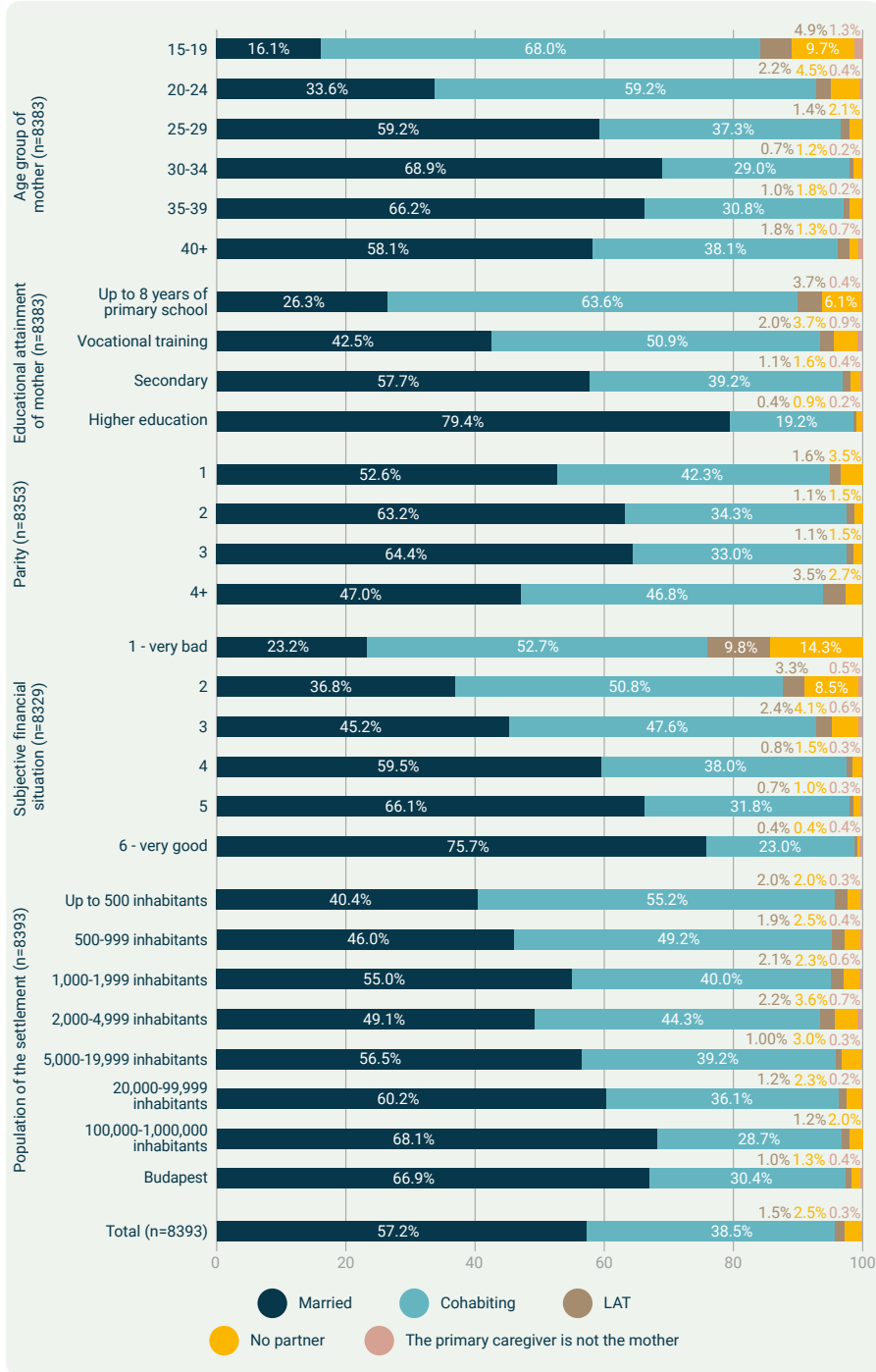
The correlation between the number of children and partnership status is interesting: second and third children have an above-average chance of being in a family where the parents are married, whereas a first or a fourth (or subsequent) child is more likely to have a mother living in a cohabiting relationship. A similar 'inverted

⁹ Naturally, these children also remain members of the cohort sample. The research will also seek to track the development and evolution of the circumstances of children not raised by their mother in subsequent waves of data collection.

¹⁰ It is necessary to emphasize here that these data reflect the conditions of 2018–2019. Since then, the desire to marry has continued to grow significantly in Hungary, especially among families planning to have children.

U-shaped' pattern can be observed with respect to the age of the mothers: a smaller proportion of the children of relatively young or relatively old mothers live in a married-type family setting than is the case with the children of mothers aged 30–34.

FIGURE 3.1.1. RELATIONSHIP STATUS OF THE PRIMARY CAREGIVER OF A 6-MONTH-OLD CHILD, ACCORDING TO KEY SOCIO-DEMOGRAPHIC CHARACTERISTICS OF THE MOTHER



Weighted database (child weight)

The vast majority of 6-month-old children live in a household with two biological parents.

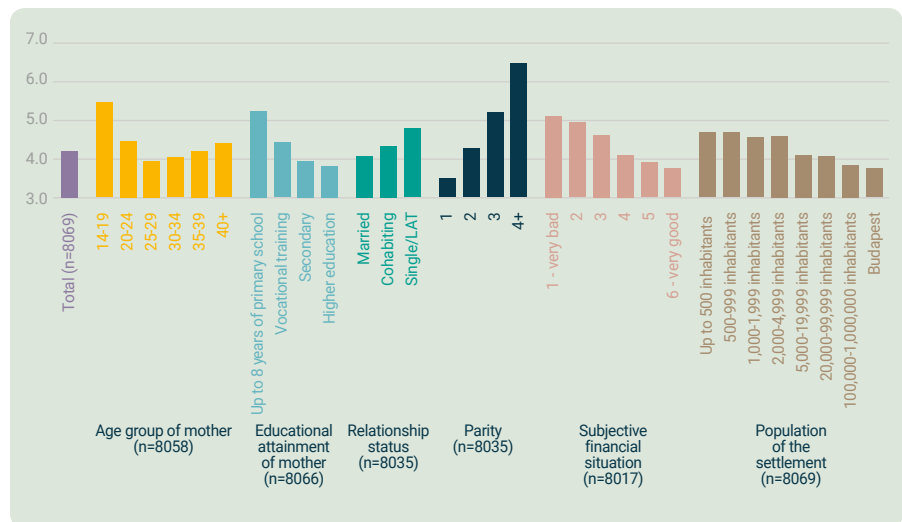
37 per cent of 6-month-olds were living in a three-person household and a third were growing up in a four-person household.

When interpreting the data, it should be remembered that the person who is the mother's current partner or spouse is not always the biological father of the 6-month-old child involved in the research. However, according to our data, this phenomenon – which can have many and varied causes – is quite rare in the first 6 months following childbirth (37 cases, 0.4 per cent). All in all, taking into account the possible uncertainties in measurement and sample distortions, it can be stated that in Hungary today, the vast majority of 6-month-old children – 90–95 per cent – are (still) being raised by two biological parents living in the same household.

In the case of the 6-month-old Cohort '18 children growing up in non-institutional households, the average size of the household was 4.2. However, in most cases (37.2 per cent) the children were living in three-person households; 32 per cent were living in four-person households; and 16.7 per cent in five-person households. Larger households accounted for 13.4 per cent. At the same time, less than 1 per cent of 6-month-old children were being raised in a two-person household: this shows that in 'single-parent families' in Hungary, it is typical for other people to live with the mother and child in a single household (usually a grandparent).

The average household size is influenced by conflicting processes. For example, the youngest mothers live in the largest households on average, as they are the most likely to have other people living with them, in addition to their partners and children. This is why those children being raised by mothers without a partner live in larger households on average than those who have married or cohabiting parents. It is not surprising that the size of the settlement and the average size of households should be inversely proportional: households with infants are smallest in Budapest, and largest in small villages. Nor is it surprising that a low level of maternal education and a poor subjective financial situation should typically be associated with a larger household.

FIGURE 3.1.2. AVERAGE HOUSEHOLD SIZE BY SOCIO-DEMOGRAPHIC CHARACTERISTICS OF MOTHER - (AVERAGE, CAPITA)

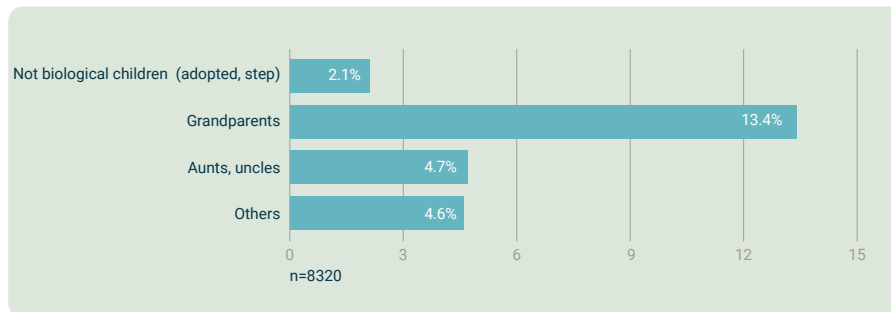


Weighted database (child weight)

If we look at the structure of the households, rather than their size, we find that 13 per cent of the 6-month-olds were living in a household with at least one grandparent; 5 per cent with the mother's siblings (usually aunts); 2 per cent with a child other than a child born to the 6-month-old child's mother (foster child, adopted child, other related child); and 4 per cent with some other person (typically a great-grandparent or a paternal aunt or uncle). These data are very similar to those recorded in the survey undertaken at the time of the seventh month of pregnancy and suggest that the vast majority of children are born into a two-generation, nuclear family. Naturally, this does not mean that the grandparents do not play a very important role in the lives of the children.

13 per cent of 6-month-olds have at least one grandparent living with them.

FIGURE 3.1.3. MEMBERS OF THE HOUSEHOLD OF 6-MONTH-OLD CHILDREN (IN ADDITION TO THE MOTHER, FATHER AND SIBLINGS) - (PERCENTAGE OF MENTIONS)



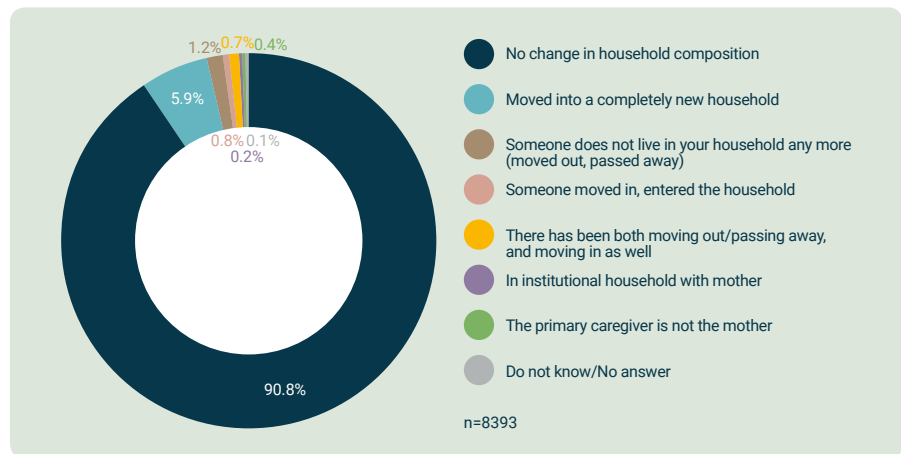
Weighted database (child weight)

So far in this chapter, we have focused on a fixed moment in time: how and under what family conditions 6-month-old children are living in Hungary. But at the same time, the family and the household structure can alter dynamically. It is well known that often changes to the family structure intensify around the time people get together and start having children. For example, around this time some people move out of the parental home, while others move in with their child's grandmother, who can help raise and care for the newborn child.

Children who are not being raised by their biological mother at the age of 6 months, or who have entered an institutional household, are rightly regarded as having undergone a change in family structure. However, these are rare cases, with a probability of less than 1 per cent. In the case of those living in private households, slightly under 9 per cent of respondents (717 mothers) stated that since they were surveyed in the seventh month of pregnancy, there had been some change in the household structure, other than the birth of their child.

The majority of these changes (5.9 per cent of all cases) involved the formation of a completely new household or, less frequently, someone moving out of the household (1.2%).

FIGURE 3.1.4. CHANGES IN THE STRUCTURE OF THE HOUSEHOLD BETWEEN THE SURVEY IN THE SEVENTH MONTH OF PREGNANCY AND WHEN THE CHILD IS 6-MONTH-OLD



Weighted database (child weight)

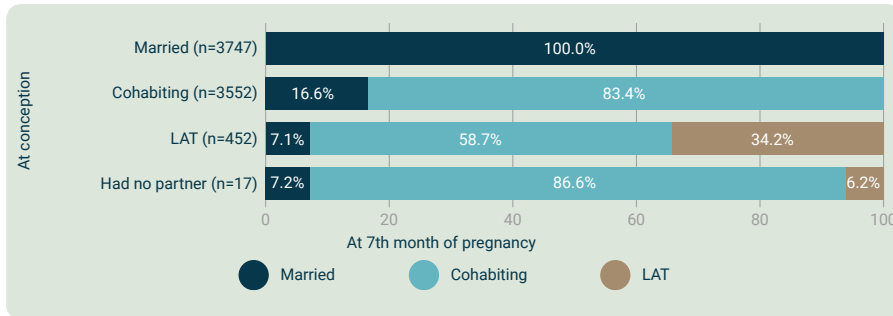
The data show that the change in the family and household environment of a 6-month-old child is related to change in the partnership situation of the parents, although this is not always the primary reason for the change. The 6-month wave of Cohort '18 Study allows us to examine retrospectively how the parents' lives changed between the child's conception and when it turned 6 months.¹¹ At the time of conception, the parents of 44.9 per cent of the (now) 6-month-old children were married, while the parents of 42.5 per cent were living in a cohabiting partnership; 5.6 per cent of children were conceived while their mother was living alone, but most of those had a LAT partner. These figures differ somewhat from those recorded in the 6-month survey. When looking at changes in the family composition of the unborn child or of the 6-month-old baby, it is worth breaking the life-cycle into discrete time periods and looking separately at the period between conception and the seventh month of pregnancy, and then at the time since then. And it is worth examining the group that had witnessed no change in the 15 months of data collection, where the parents remained in the same partnership status.

For 88.4 per cent of the children now aged 6 months, the partnership status of their parents had not changed between conception and the seventh month of pregnancy.

Parents who were married when the child was conceived were still married in the seventh month of pregnancy. Of those women who were cohabiting at the time of conception, 16.6 per cent were married by the seventh month of pregnancy. Meanwhile, 7.1 per cent of women had had a LAT partner at the time of conception, but were married by the seventh month of pregnancy; and a further 58.7 per cent of them had moved in with their partner. Of those who did not have a partner at the time of conception (based on the data gleaned from the partnership history), by the seventh month of pregnancy one woman was married; the mothers of 15 were cohabiting; and one woman had established a relationship with a partner living apart.

¹¹ When analysing changes over time – between conception and childbirth and between conception and 6 months – we only take account of children if we were able to estimate what the mother's real partnership status was at the time of conception (n=7768).

FIGURE 3.1.5. CHANGE IN THE WOMEN'S RELATIONSHIP STATUS BETWEEN CONCEPTION AND THE SEVENTH MONTH OF PREGNANCY

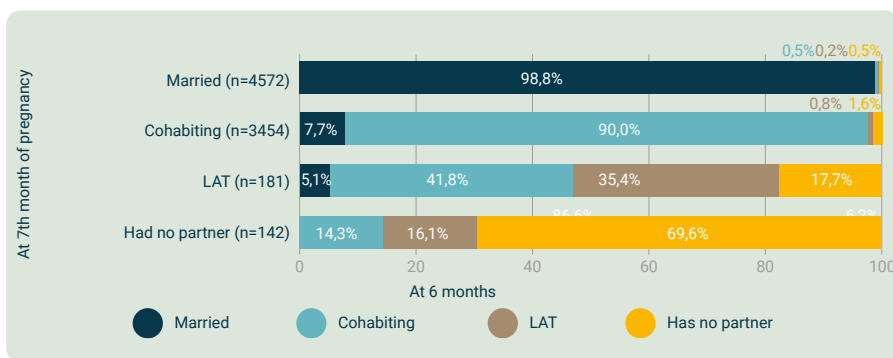


Weighted database (child weight)

Thus, the relationship status of married parents did not change between conception and the seventh month of pregnancy. However, in some cases the relationship status of parents who were in a marital partnership in the seventh month of pregnancy (not entirely the same group as those married when the child was conceived) did change by the time the child was aged 6 months. But this affected only a few children: just 1.2 per cent of children whose parents were in a marital relationship during pregnancy saw them separate by the time they were 6 months old. Parents in a cohabiting relationship during pregnancy were more likely to marry (7.7 per cent) than to separate (2.4 per cent); and parents who were living apart during the later stages of pregnancy were more likely to marry or move in together (46.9 per cent) than to break up (17.7 per cent). Moreover, some women who did not have a partner in the seventh month of pregnancy found one: 14.3 per cent of such women had a cohabiting partner by the time their child was 6 months old, and 16.1 per cent had a LAT partner.

For 93.3 per cent of the children aged 6 months, the partnership status of their parents was the same in the seventh month of pregnancy as when the child was 6 months.

FIGURE 3.1.6. CHANGE IN THE WOMEN'S RELATIONSHIP STATUS BETWEEN THE SEVENTH MONTH OF PREGNANCY AND THE 6-MONTH SURVEY

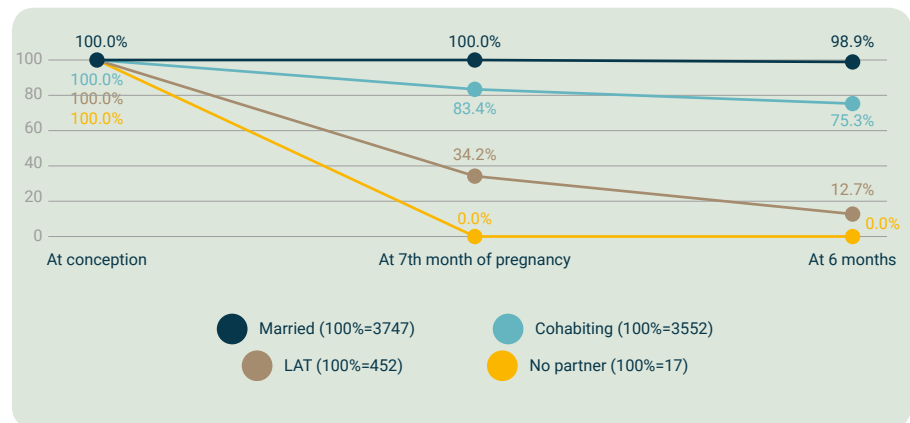


Weighted database (child weight)

For the most part, those parents who were initially married at the time of conception remained married for the 15 months that elapsed until the child was aged 6 months: for 98.9 per cent of the children, their parents were married throughout.

As for parents who were cohabiting at the time of conception, their relationship was more affected by the passage of time: after 7 months, only 83.4 per cent were still cohabiting – a figure that fell further, to only 75.3 per cent, after 15 months. It is very important, however, that the path from cohabitation typically led to marriage, rather than separation. The vast majority of LAT partnerships also ceased to exist in that form: here the most common outcome was transformation into a cohabiting partnership, as we see in the previous graphs.

FIGURE 3.1.7. MAINTENANCE OF THE MOTHER'S RELATIONSHIP STATUS BETWEEN CONCEPTION AND THE TIME THE CHILD TURNED 6 MONTHS



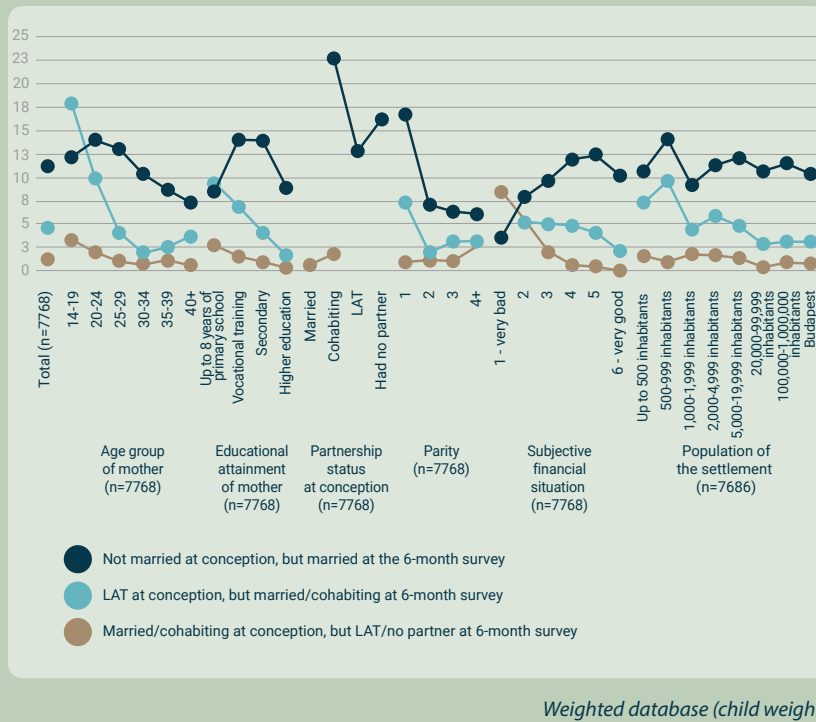
Weighted database (child weight)

Changing relationship status

In some sociodemographic groups, there was a higher rate of relationship-status change between conception and when the child was 6 months old.

For 11.2 per cent of children, the mother was not married at the time of conception, but was married by the time the child turned 6 months. Women (unmarried at conception) were more likely to have married by the time their child was 6 months if they were aged 20–29; if they had vocational or secondary education; and if this was their first child. Among mothers who had a LAT partner at conception, those who were aged 14–24 at the time of the birth, who had primary or vocational education, and for whom this was their first child were more likely to have married or moved in with their partner by the time the child was 6 months old. And finally, those women who were married or cohabiting at the time of conception were more likely to have broken up with their partner by the time their child was 6 months old if they were aged 14–24 at the time of the birth, had at most 8 years of primary education, had four or more children and lived in straitened financial circumstances (although this only affected a few children overall).

FIGURE 3.1.8. CHANGES IN THE RELATIONSHIP STATUS OF THE WOMAN BETWEEN CONCEPTION AND WHEN THEIR CHILD TURNED 6 MONTHS, ACCORDING TO THE DEMOGRAPHIC CHARACTERISTICS OF THE MOTHER - ONLY THOSE WOMEN WHOSE PARTNERSHIP STATUS AT CONCEPTION IS KNOWN



In the 6 months following the birth of a child, there should be no significant change in the number of siblings that child has (since the mother cannot have had another child in such a short time). However, changes in the parental relationship status may alter the type and 'composition' of siblings: thus, as well as biological siblings (with both the mother and the father in common), a child can also have maternal and paternal half-siblings (with whom they have only their mother or only their father in common) or step-siblings (neither their mother nor their father in common). However, in the case of the 6-month-old children, the incidence of this was negligible. Cross-sectional data gathered in the seventh month of pregnancy and when the child was 6 months old indicate no significant change in the number or the type of siblings. A relative majority of 6-month-old children were born without a sibling (40.1 per cent) and were still without a sibling when they were 6 months old (39.7 per cent); 37.7 per cent and 37.6 per cent had only biological siblings when they were born and when they were 6 months old, respectively; and 8.6 per cent and 8.7 per cent had a mixture of biological and other siblings when they were born and when they were 6 months old, respectively. Other infants had only half-siblings or a mixture of half-siblings and step-siblings (13.6 per cent at birth and 14.0 per cent at 6 months).

Among children whose parents were married at the time of conception, in 98.9 per cent of cases the parents were still married when the child turned 6 months.

60.3 per cent of 6-month-olds had siblings, most of whom were biological siblings.

3.2. Grandparents in the family

Grandparents have an undoubted role to play in the lives of children. At the time of the 6-month wave, we explored the topic of grandparents and family in more detail, using several questions.

During the collection of data during pregnancy, women participating in the research were asked whether the grandparents of the (as yet unborn) child were living in the same household as they were.¹² At that time, 85.9 per cent of expectant mothers responded that they were not living in the same household as a grandparent of the unborn child; however, 8 per cent were living with both a grandmother and a grandfather, while a further 5 per cent were living with a grandmother and 1 per cent with a grandfather.¹³

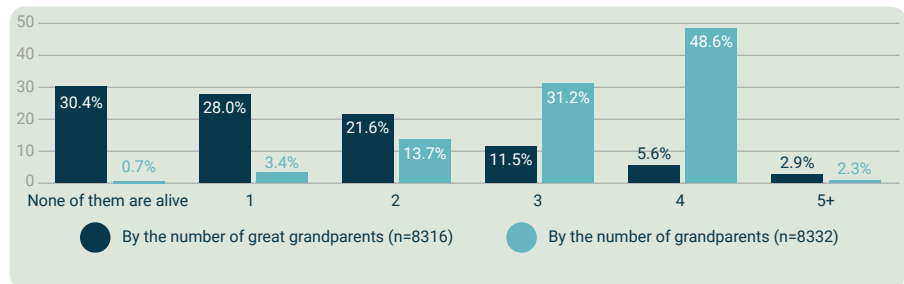
99 per cent of 6-month-olds had at least one living grandparent.

For half of the 6-month-olds, four of their grandparents were alive.

During the 6-month survey, we asked how many living grandparents and great-grandparents the 6-month-old child had, and we also examined the frequency of encounters between grandparents and grandchildren. We also examined how many grandparents and great-grandparents were sharing a household with the mother. In this wave, we defined a grandparent as anyone whom the respondent mother regarded as the child's grandparent, regardless of blood relationship.

Half of all the 6-month-olds (50.9 per cent) had at least four living grandparents. The vast majority (99.3 per cent) had at least one living grandparent, and 69.6 per cent also had a living great-grandparent. By contrast, 30.4 per cent of the children had no living great-grandparents and 0.7 per cent (61 children) had no grandparents alive at the time of the survey.

FIGURE 3.2.1. DISTRIBUTION OF 6-MONTH-OLD CHILDREN BY THE NUMBER OF GRANDPARENTS AND GREAT-GRANDPARENTS



Weighted database (child weight)

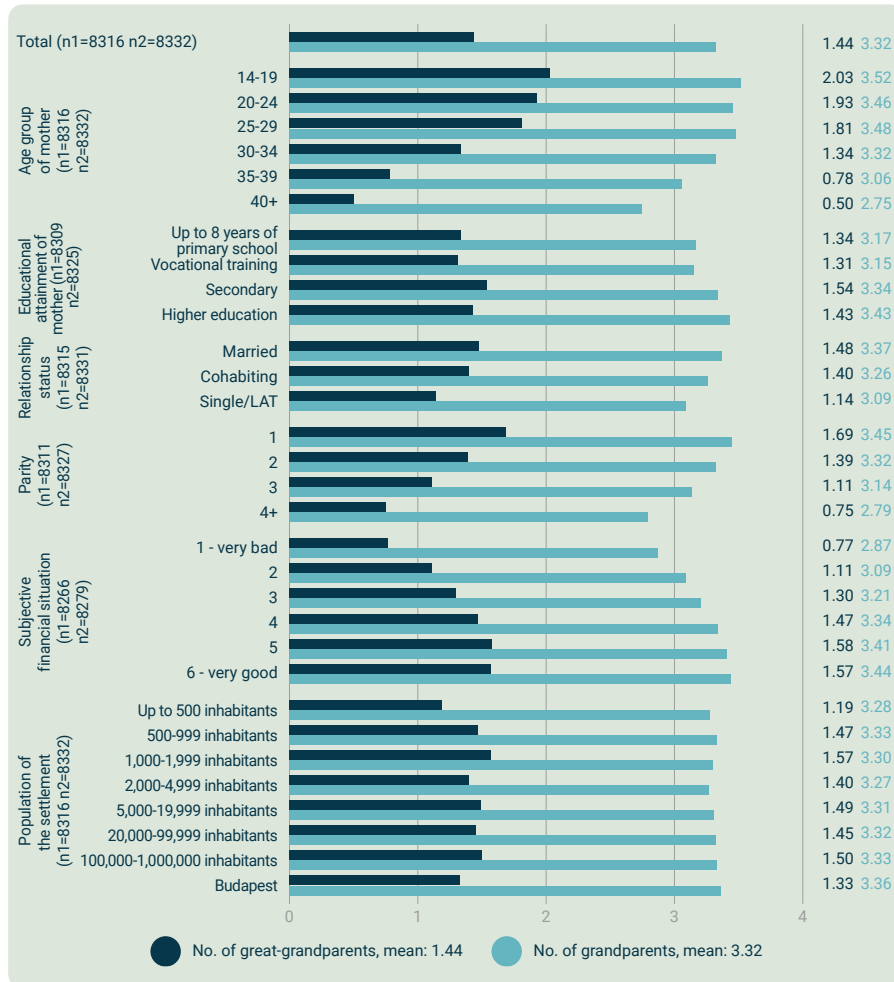
The existence and the number of grandparents and great-grandparents depend largely on where the parents are in their course of life. For example, children whose parents are younger, and who thus have fewer siblings, have more living grand-

¹² The family of the expectant mother and the grandparents form a household if they have a common financial account and manage their daily expenses together.

¹³ We considered a 'grandparent' to be anyone who was the biological parent or the step-parent of either the expectant mother or her partner. See also: <https://kohorsz18.hu/en/findings/initial-findings/53-grandparents-i.html>

parents and great-grandparents. However, the children of parents with a more favourable socio-economic background are also better placed than others in this respect: children aged 6 months whose mothers had secondary education, were living with a spouse or partner, and whose household was in a better subjective financial situation had more living grandparents.

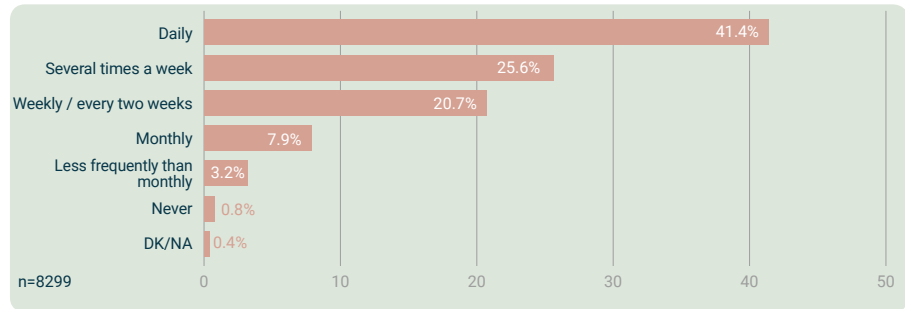
FIGURE 3.2.2. AVERAGE NUMBER OF GRANDPARENTS AND GREAT-GRANDPARENTS OF A 6-MONTH-OLD CHILD, ACCORDING TO THE DEMOGRAPHIC CHARACTERISTICS OF THE MOTHER - AVERAGE, PERSON



Weighted database (child weight)

The vast majority of 6-month-olds (95.6 per cent) whose grandparents are alive met up with a grandparent at least monthly. Based on mothers' responses, 41.4 per cent of the children met the most frequently seen grandparent daily, and 25.6 per cent of the children met that grandparent several times a week. There were relatively few children – barely 65 in total – who never met their grandparents.

FIGURE 3.2.3. THE FREQUENCY OF THE CHILD'S ENCOUNTERS WITH THE GRANDPARENT SEEN MOST OFTEN - PERCENTAGE, AMONG CHILDREN WHO HAVE LIVING GRANDPARENT(S)

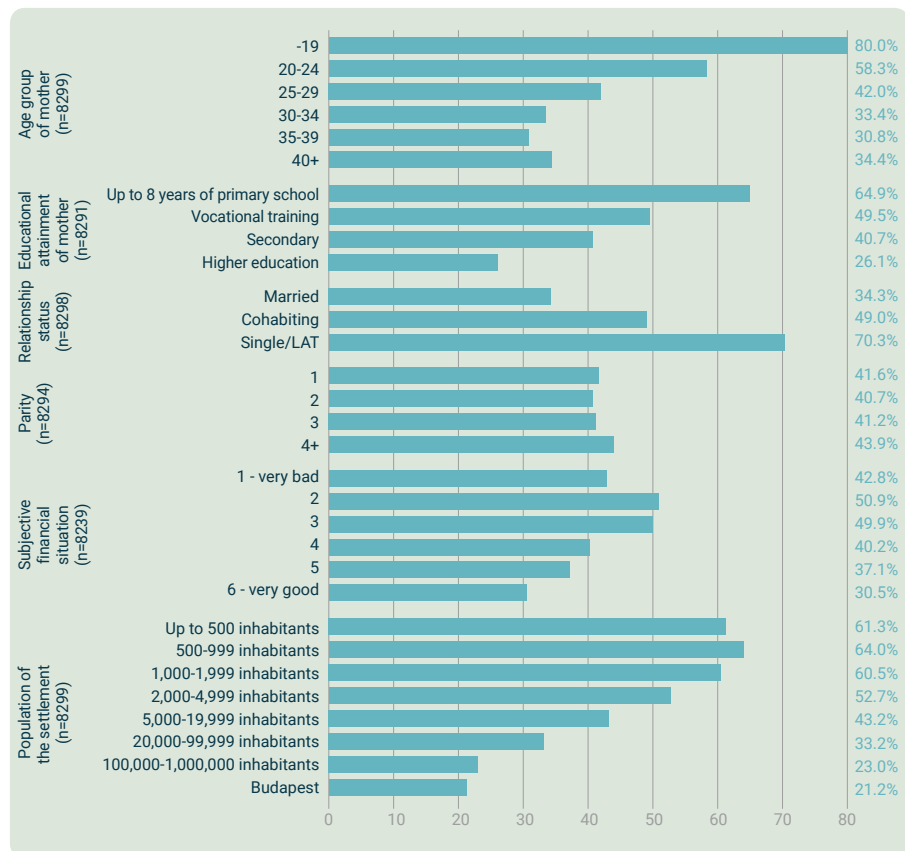


Weighted database (child weight)

41.4 per cent of the children met one of their grandparents every day.

Those children who met their (most often seen) grandparent daily were mainly children whose mothers were aged 24 or under at the time of the birth; who had vocational education or lower; were cohabiting or had no living-together partner; were worse-off financially; and were living in smaller settlements.

FIGURE 3.2.4. PROPORTION OF CHILDREN WHO MET THEIR GRANDPARENTS DAILY

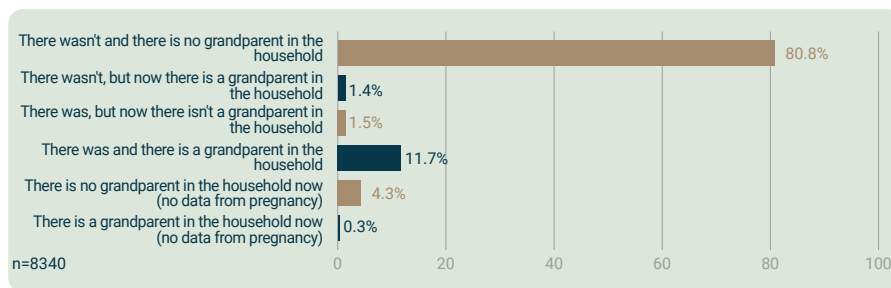


Weighted database (child weight)

The vast majority of the families of 6-month-olds did not have any of the child's grandparents in the household either during pregnancy or when the child was aged 6 months (80.8 per cent); however, 11.7 per cent did at both stages. A very small proportion of the grandparents of 6-month-olds moved into the household (1.4 per cent) or moved out/away (1.5 per cent). A grandparent was more likely to move into the household if the mother had a LAT partner, and was more likely to move out/away if the mother was cohabiting; had just the one child; and lived in a settlement of fewer than 5,000 inhabitants.

13.4 per cent of 6-month-olds were living in a household with a grandparent.

FIGURE 3.2.5. GRANDPARENTS LIVING IN A HOUSEHOLD WITH A 6-MONTH-OLD CHILD, BY THEIR PRESENCE IN THE HOUSEHOLD AT THE SEVENTH MONTH OF PREGNANCY - PERCENTAGE, AMONG THOSE LIVING IN PRIVATE HOUSEHOLDS



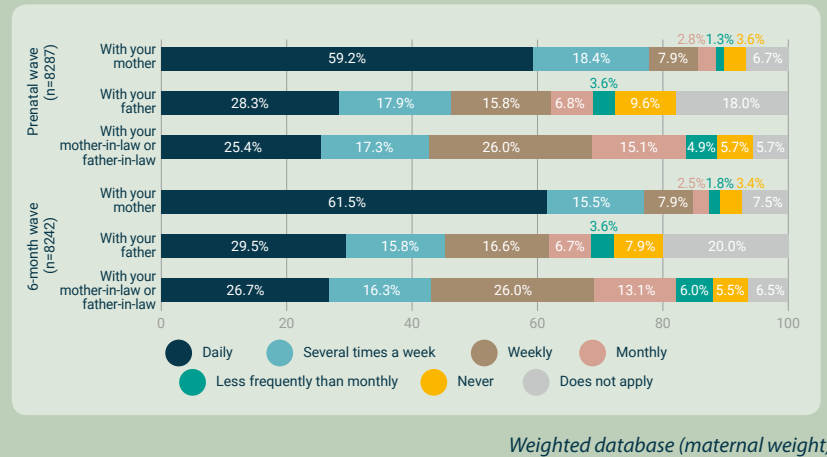
Weighted database (child weight)

Support from grandparents

Grandparents who live with families raising young children can be a great boon; however, grandparents who do not live in the same household as the family can also provide support. The emotional support of the grandparents became apparent when we asked the mother how often she talked to her parents or her mother-in-law/father-in-law – that is, the child's grandparents – via any channel of communication. Both during pregnancy and when the child was 6 months old, it was with the maternal grandmother (i.e. her own mother) that a woman tended to have the most frequent contact: 63.5 per cent of expectant women spoke to their mothers several times a day, and 83.3 per cent spoke at least several times a week. Among mothers with 6-month-old children, the figure was similar: 66.5 per cent of women spoke to their own mothers on a daily basis, and 83.3 per cent spoke at least weekly.

Five 6-month-old children from the Cohort '18 Study had a grandparent as their primary caregiver.

FIGURE 3.2.6. HOW OFTEN DOES THE MOTHER TALK TO HER PARENTS AND PARENTS-IN-LAW (IN PERSON, ON THE PHONE, OR VIA THE INTERNET) - PERCENTAGE



3.3. Denominational affiliation, religiosity, ethnicity

In the self-administered questionnaire completed when the child was 6 months old, we included a few simple questions to explore the religiosity, denomination and ethnicity of the mothers of the children included in the Cohort '18 Study.

Three short questions on religiosity (denominational affiliation; religiosity; participation in religious ceremonies) are not sufficient to undertake a detailed sociological analysis of religion. Nevertheless, we consider it important to briefly present the child's family environment in this respect, too, since the mother's denomination, religiosity and ethnicity may play a role in the child's later development and life course.

The question on denominational affiliation in the self-administered questionnaire was: 'Which religious denomination do you feel you belong to?' A list of the 12 main denominations and faiths in Hungary was supplied, along with the opportunity to specify another religion and an answer category stating 'I do not belong to a denomination'. In our analysis, we combined this latter group (26 per cent) with the group that failed to provide an answer/left the question blank (9 per cent). Because of the low numbers involved, the smaller denominations were merged into two groups. One included the small (neo-)Protestant churches: Adventist, Baptist, the Faith Church, Charismatic, Methodist, Nazarene, Pentecostal and Unitarian. The very low number of instances meant that we had to group various other churches and faiths (Buddhist, Orthodox Christian, Jewish, etc.) together into the category of 'other faiths'.

The results obtained are first reported by comparing them to the data on female respondents from the 2011 census. About 44 per cent of mothers stated that they belonged to the Roman Catholic denomination – a rate somewhat higher than among women generally in the census. The proportion of those who either did not respond or claimed no affiliation to any denomination was 34.3 per cent, which is lower than in the census.¹⁴ The proportion of those who belonged to the Calvinist (Reformed) denomination was 13 per cent; while the Lutheran Church and the Greek Catholic Church accounted for 3 per cent each. Some 2 per cent of the mothers belonged to the small neo-Protestant churches.

44 per cent of mothers declared themselves Roman Catholic. A third of mothers had no religious affiliation.

TABLE 3.3.1. DENOMINATIONAL DISTRIBUTION OF MOTHERS, COMPARED TO CENSUS RESULTS

Denomination	Number	%	2011 census, women (%)
Roman Catholic	3638	44.1	38.7
Calvinist	1049	12.7	12.1
Lutheran	281	3.4	2.3
Greek Catholic	213	2.6	1.9
Other Christian, neo-Protestant	167	2	1.3
Other faiths	63	0.8	0.7
No denominational affiliation, no answer	2830	34.3	43
Total	8242	100	100

Weighted database (maternal weight)

Source of census data: 2011, évi népszámlálás. 10. Vallás, felekezet, KSH. Budapest, 2014, p. 17.

In Hungary today, claiming a religious affiliation does not necessarily indicate religiosity. And indeed, this long-known religio-sociological fact¹⁵ is supported by the Cohort '18 data on the mothers of 6-month-olds. According to our results, only 11–15 per cent of those who belong to the traditional historical churches of Hungary claimed to be religious, in terms of following church doctrines. Among those who belong to the traditional historical churches, agreement with the statement 'I am religious in my own way' was typical (around two thirds); but the proportion of those who did not consider themselves religious, despite claiming to have a denominational affiliation, is not negligible either (around 15 per cent). We find a totally different picture when we look at mothers who belong to the small (neo-) Protestant churches in Hungary: the members of these churches are typically not born into them, but convert to them. Thus, it is not surprising that the majority of this group (56 per cent) are religious, in the sense that they follow their church's teachings.

Only 11–15 per cent of mothers who indicated their denominational affiliation to the traditional historical churches considered themselves religious, in terms of following their church's doctrines.

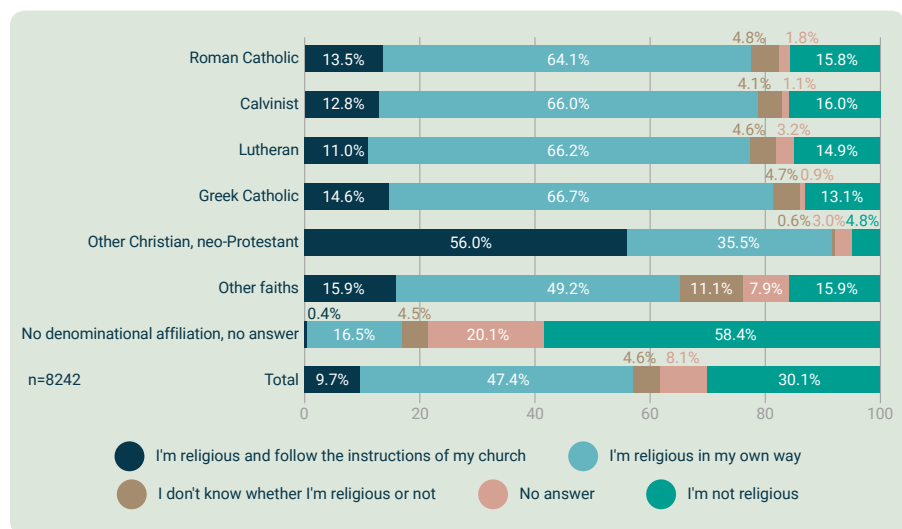
¹⁴ This discrepancy need not be because the census looked at the entire female population, whereas the survey considered only women with young children. It could also have been caused in part by the use of a different methodology: in the census, it was emphasized that it was not obligatory to answer these questions. Since it was not obligatory to answer any of the questions in the self-administered questionnaire, no special emphasis was placed on this question.

¹⁵ See, for example, Földvári, Mónika (2003). A vallásosság típusai a mai magyar társadalom generációiban [Types of religiosity in the generations of today's Hungarian society]. Szociológiai Szemle, 2003/4, 20–33.

At the same time, in Hungary today non-affiliation (or refusal to answer) does not necessarily indicate irreligiosity: 16 per cent of this group declared themselves religious in their 'own way', with only a narrow majority – 58 per cent – stating they were not religious.

In summary, according to our results, a small majority of mothers with small children in Hungary today consider themselves religious, but barely a tenth can be considered religiously observant. Of this latter group – whose children are presumably brought up in the ways of the Church – about 61 per cent are Roman Catholic and 17 per cent are Calvinist. Among religiously observant mothers, the proportion who belong to the smaller (neo-) Protestant denominations is no longer negligible (12 per cent).

FIGURE 3.3.1. DISTRIBUTION OF MOTHERS RELIGIOSITY BY DENOMINATIONAL AFFILIATION



Weighted database (maternal weight)

Renaissance of religious observance among graduates

The topic of maternal religiosity is further nuanced by the consideration of educational attainment. The results confirm the existence also among mothers of a previously known Hungarian phenomenon, according to which in recent decades religious observance within the traditional historical churches has become more and more an intellectual, 'high-class' societal phenomenon, while non-believers are concentrated in groups with lower levels of education.

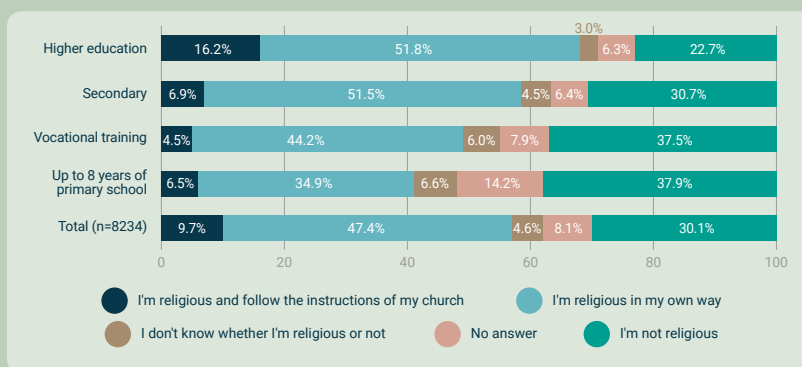
On the one hand, the way in which the chances of religiosity grow with the level of educational attainment is quite spectacular: whereas a minority of mothers who have completed eight grades are religious (41 per cent), the figure is over two thirds (68 per cent) among graduates of

higher education.

On the other hand, the relationship between religious observance and education in a narrower sense shows a kind of U-shaped pattern: religious observance is least common among people with vocational education, and even those with only eight grades of schooling are more religiously observant. At the same time, religious observance is most common among graduates, although even among them only 16 per cent are religiously observant.

If we change the perspective and examine the distribution of the various education groups in terms of their religiosity, we find stronger correspondences. While 35 per cent of the total sample has tertiary education, among religiously observant mothers the figure is far higher: 57 per cent of mothers who are religiously observant are higher-education graduates. By contrast, only a quarter (26 per cent) of non-religious mothers have a higher educational degree. This provides further nuance to the suggestion that the predominance of graduates among religiously observant mothers is mainly due to the religiously observant members of the traditional churches, especially the Calvinist Church, while those mothers with secondary education are over-represented among the religiously observant members of the (neo-) Protestant churches. These results suggest that the traditional historical churches in Hungary today primarily reach, attract and retain families with higher education.

FIGURE 3.3.2. THE RELIGIOSITY OF MOTHERS, BY EDUCATIONAL ATTAINMENT GROUPS



Weighted database (maternal weight)

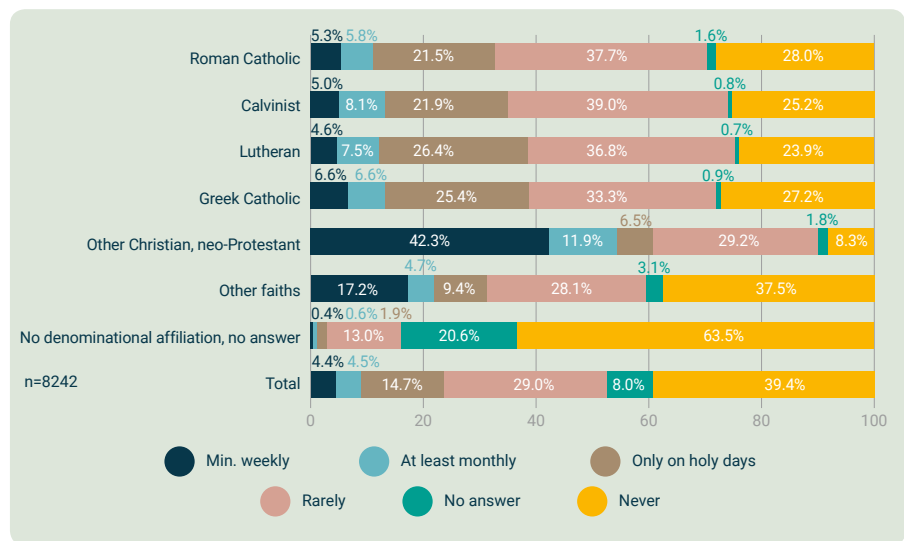
There was a separate question about attendance at religious services (apart from weddings, funerals, etc.). Although raising a 6-month-old presumably makes it difficult in many cases for women to attend masses and church services, the results also appear to support the contention that traditional believers are typically poorly attached to their denomination: about 5 per cent of mothers attend mass or a church service on a weekly basis. The proportion is no higher among the members of the great historical churches either, even though, for instance, the Catho-

lic Church expects its members to attend mass weekly. The national average is bolstered by the adherents to a small number of neo-Protestant churches: among this group, more than two fifths of the mothers of 6-month-olds attend church every week. And nearly a fifth of those mothers who attended a church service at least weekly belonged to a (neo-) Protestant church.

Some 11 per cent of Roman Catholic mothers-to-be went to mass at least once a month, while the same was true of 13 per cent of Greek Catholics. In the case of members of the Reformed and Lutheran churches, the proportion of those who attended a church service at least once a month was about the same (13 per cent and 12 per cent, respectively). At the other extreme are those who never go to church. Nationwide, about two fifths of mothers belong to this group, but 28 per cent of those who professed to belong to the Roman Catholic Church also claimed never to go to church.

FIGURE 3.3.3. DISTRIBUTION OF MOTHERS, BY DENOMINATION AND FREQUENCY OF CHURCH ATTENDANCE

5 per cent of mothers attended church weekly and 10 per cent at least once a month; 40 per cent of mothers did not attend church at all.



Weighted database (maternal weight)

The differences that can be observed between the denominations may be related to the different inclinations regarding childbearing and fertility exhibited by the followers of each church. In the present study, we can only offer a cross-sectional descriptive picture; we are unable to take into account the dynamics of religiosity through the life course. Longitudinal research on the subject has shown that the form and extent of religiosity vary in many ways over a lifetime and may be related to certain family and demographic events. For instance, it is by no means certain that religious people will have more children: it is also possible that those who have more children are more likely to become believers. In any case, from the cross-sectional picture we now have, it can be stated that there are differences between denominations and religions in terms of both the number of children born so far and the number of children planned.

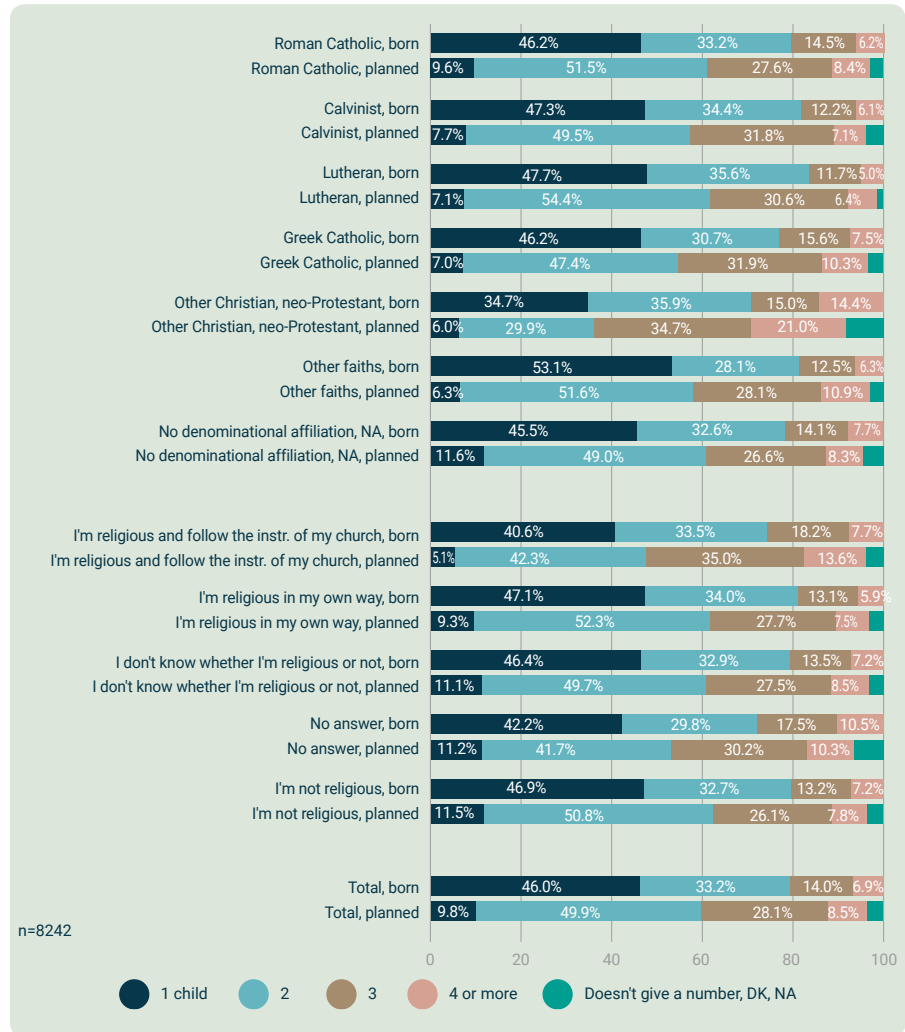
Considering only the children born so far, it can be stated that while the proportion of women who have three or more children is 21 per cent in the total sample, it is 17 per cent among Lutherans, 18 per cent among the Reformed congregation and 21 per cent among Roman Catholics. By contrast, the figure is 23 per cent among Greek Catholics and 29 per cent among the followers of other Christian (neo-) Protestant churches. Regardless of denomination, among women who are religiously observant, 26 per cent have three or more children, compared to only 20 per cent among women who are not religious.

If we examine not only the children already born, but also childbearing plans for the future, we find that 37 per cent of all responding mothers planned (albeit rather optimistically, according to research experience) to have three or more children. Half of the women planned to have two children, while about one in 10 planned to have fewer. An above-average proportion of followers of the Greek Catholic Church and (especially) of the neo-Protestant churches planned to have a large family, consisting of three or more children (42 and 56 per cent, respectively). Neo-Protestants also displayed the highest rates of non-quantifiable responses (e.g. 'as many as God gives'), which typically also predicts a large number of children.

Some 49 per cent of those who are religiously observant planned to have three or more children, and only one such mother in 20 wanted to stop after the first child. Among non-believers, however, only 35 per cent wished to have a large family and 12 per cent planned to stop after one child. All this indicates that, as a maternal attitude or model, religiosity and religious observance are of above-average significance in the lives of children.

Among religious mothers who follow the teachings of a church, both the number of children they already have and the number they plan to have are higher than average.

FIGURE 3.3.4. TOTAL NUMBER OF CHILDREN BORN AND PLANNED, BY DENOMINATION AND RELIGION



Weighted database (maternal weight)

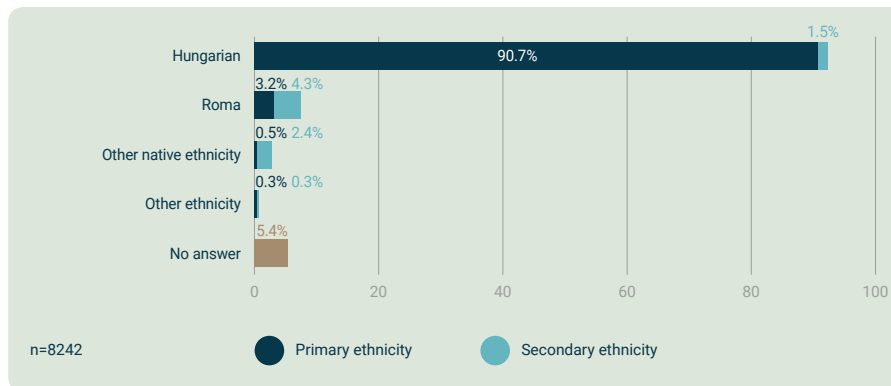
93 per cent of the mothers declared themselves to be Hungarian. The proportion of mothers who considered themselves to be Roma (either exclusively or as well as Hungarian) was 7 per cent.

In the self-administered questionnaire, completed when the child was 6 months old, we also asked about ethnicity. It is known that in the case of questions about ethnicity, answers are greatly influenced by the wording of the question and the possible categories of answers. In the case of Cohort '18, we decided to adopt the methodology of the most recent (2011) Hungarian census. Thus, we first asked everyone: 'Which nationality do you feel you belong to?', and then 'Do you belong to another nationality other than the one indicated in the previous question?' The response options matched the census categories. Naturally, as these questions were included in the self-administered questionnaire, it was not mandatory to answer.

According to the results, 93 per cent of the mothers declared themselves to be Hungarian, with 91 per cent stating 'Hungarian' as their primary nationality. In all, 7 per cent of the mothers declared themselves to be Roma: 3 per cent marked Roma as their primary ethnicity and 4 per cent as their secondary ethnicity. Some

3 per cent of the respondents classified themselves as members of another historical national minority that is recognized in Hungary (e.g. Romanian, German); this was typically their secondary nationality. And 1 per cent mentioned another ethnic group (e.g. Arabic, Chinese). It can be observed that the sum of these values exceeds 100 per cent, despite the fact that 5 per cent of the respondents did not answer even the first question about nationality: this is possible as people can hold multiple national identities.

FIGURE 3.3.5. PRIMARY AND SECONDARY ETHNICITY OF MOTHERS



Weighted database (maternal weight)

Despite the relatively large research sample, the number of responding mothers with other ethnicities (aside from Roma) is not large enough to allow any distinct analysis of these groups. Accordingly, in what follows we present the characteristics of mothers who considered themselves to be Roma.

In order to describe the social and demographic characteristics of Roma mothers, we divided the respondents into three groups. Those respondents who indicated that their primary or secondary ethnicity was Roma were classed as Roma, regardless of whether they also described themselves to be Hungarian or some other ethnicity (7.4 per cent). Those mothers who nominated either one or two nationalities, neither of which was Roma, were classed as non-Roma (87.3 per cent). Those women who did not answer the questions (5.3 per cent) formed the group of 'non-answering, non-declaring'.

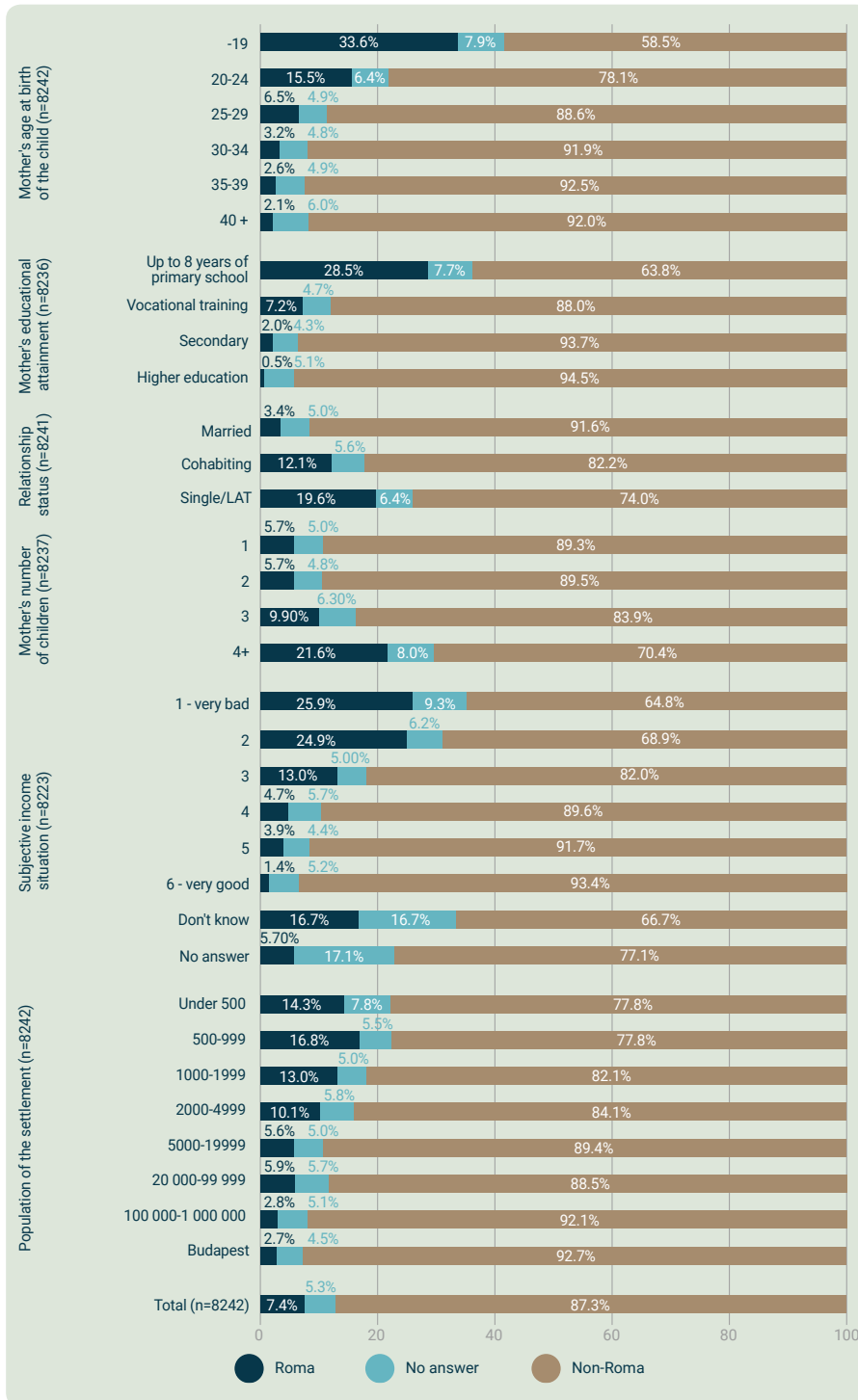
Without wishing to go into the social-scientific question of 'who is Roma' in detail, it should be emphasized that, as stated above, in this analysis we consider to be Roma someone who has defined herself as being either wholly or partly of Roma ethnicity. In all likelihood, this results in a smaller group than those who consider themselves to be of Roma origin ('Hungarian, of Roma origin') and in a significantly smaller group than those who are considered Roma by their non-Roma neighbours. For example, it is known from the summary of the local datasheets of the National Competence Survey that school principals estimate that about 13–14 per cent of primary school pupils are Roma – significantly higher than the 7.4 per cent nationality rate we obtain for mothers. Furthermore, we also know that the

sample of settlements in the Cohort '18 Study includes several settlements that are often referred to – even in some official development documents – as villages with an ‘almost exclusively Roma population’. However, the data show that even in those settlements, the majority of mothers do not consider themselves to be Roma – or at least do not declare themselves as such in a data-collection situation. However, the 7.4 per cent measured in this study is significantly higher than the rate measured in the census using the same methodology. According to the results of the 2011 census, about 3.9 per cent of women aged 15–39 (i.e. not just those raising young children) declared themselves to be Roma.

If we review the three groups detailed above (Roma, non-Roma and non-answering) according to certain essential socio-demographic criteria, we find some fundamental differences. It is immediately striking that Roma mothers are generally much younger than their non-Roma counterparts; and we can also see that one third of all the teenage mothers are Roma. This figure is also interesting in light of the fact that Roma women, despite their youth, typically had more children than non-Roma women. Some 22 per cent of mothers who had four or more children were Roma – about three times more than their representation in the country's population. It is also a demographic feature that cohabitation is much more common among Roma, as is single parenthood: about a fifth of all mothers who do not live with a partner are Roma.

It is widely known that Roma generally have a lower level of education than the average in society and are in a worse-than-average financial position. This is apparently also true of Roma women with small children. Among mothers with tertiary and secondary education, scarcely any declared themselves to be Roma (1 and 2 per cent, respectively). The proportion of Roma with vocational education is in line with their share of the population; however, Roma are very heavily over-represented among those who have at most 8 years of primary schooling: 29 per cent of those mothers who had completed at most 8 years of schooling declared themselves to be Roma – almost four times their representation in our sample.

FIGURE 3.3.6. ROMA AND NON-ROMA MOTHERS, ACCORDING TO THE MOST RELEVANT SOCIAL CRITERIA



Weighted database (maternal weight)

We did not ask about income during the 6-month survey, and so we can only conclude from their subjective income situation that Roma mothers are typically among those with poor income positions. About a quarter of mothers who were able to live on their income only 'with great difficulty' or 'with difficulty' declared

Roma mothers are more likely to be young, to have multiple children, to live in a cohabiting relationship and to be single parents.

themselves to be Roma. From the data, it is also clear that the majority of Roma women with young children can only make ends meet with difficulty, although the majority of those mothers in financial difficulty are not Roma.

Our report cannot describe in detail the social and demographic situation of Roma families with small children, since our additional data on the Roma as an ethnic group only apply to the mothers. For example, we do not know the ethnicity of the husband or partner; and nor do we know what identity and ethnic awareness the parents wish their Cohort '18 child to grow up with. Furthermore, we do not know whether the mother and/or the child is considered to be Roma (or of Roma origin) in their immediate environment. Thus, we have no opportunity to generate a general 'Roma' background variable that could be used in all analyses. At the same time, the number of items for those who consider themselves to be Roma (611 mothers) may already be sufficient to allow for a separate analysis of Roma mothers in the future.

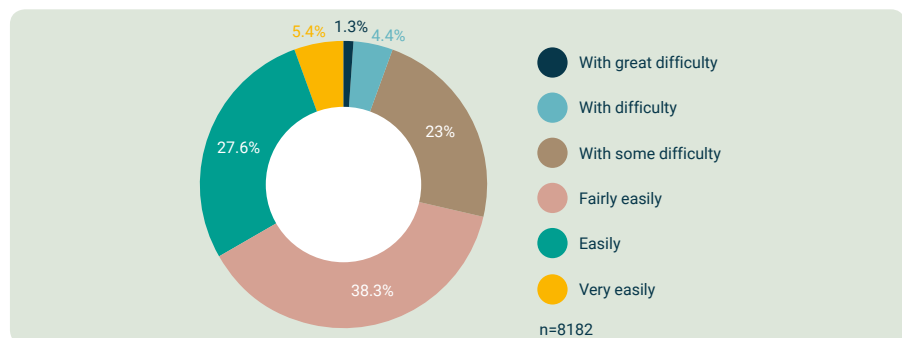
3.4. Financial situation of families

Having children can mean significant financial burdens. During this period, several types of state subsidies and benefits help families; however their use is not evenly distributed across groups with small children.

The educational level of Roma mothers is lower than average.

When measuring their financial position, instead of specific income, we asked the mothers with 6-month-old children for a subjective assessment of their family's financial position. We asked them how easily they were able to cover their usual household expenses, with response options ranging from 'with great difficulty' to 'very easily'. Those in a very favourable income situation made up only 5.4 per cent of families raising young children. The proportion of those that could 'easily' cover their usual expenses was much higher (27.6 per cent), while 38 per cent could cover their expenses 'relatively easily'. Nearly a quarter (23 per cent) of families could support themselves 'with some difficulty'; while the remaining 5.7 per cent of respondents claimed that it was 'difficult' – or in some cases 'very difficult' – to make ends meet.

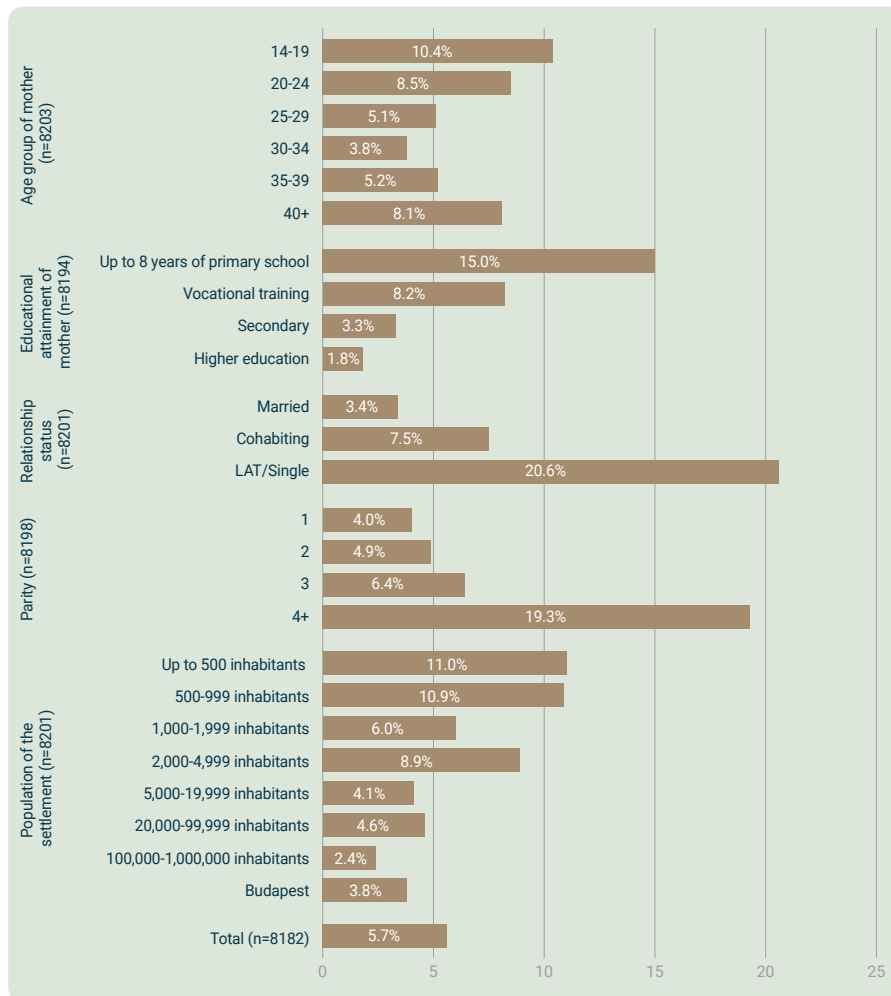
FIGURE 3.4.1. THE FAMILY'S SUBJECTIVE FINANCIAL STATUS - IN YOUR OPINION, HOW DOES YOUR HOUSEHOLD MANAGE ITS USUAL EXPENSES?



Weighted database (maternal weight)

If we examine the prevalence of families in difficult financial circumstances according to socio-demographic background characteristics, we find that serious financial difficulties are much more common among the youngest mothers, those with the lowest education, and those raising several children. Single mothers – a fifth of whom reported having difficulty in covering household expenses – were particularly at risk. In terms of settlement size, the subjective income situation of those in settlements with fewer than 1,000 inhabitants was significantly more likely to be unfavourable (10 per cent) than was the case among those living in large cities (2.4 per cent) or in Budapest (3.8 per cent).

FIGURE 3.4.2. PROPORTION OF FAMILIES IN GREAT FINANCIAL DIFFICULTY



Weighted database (maternal weight)

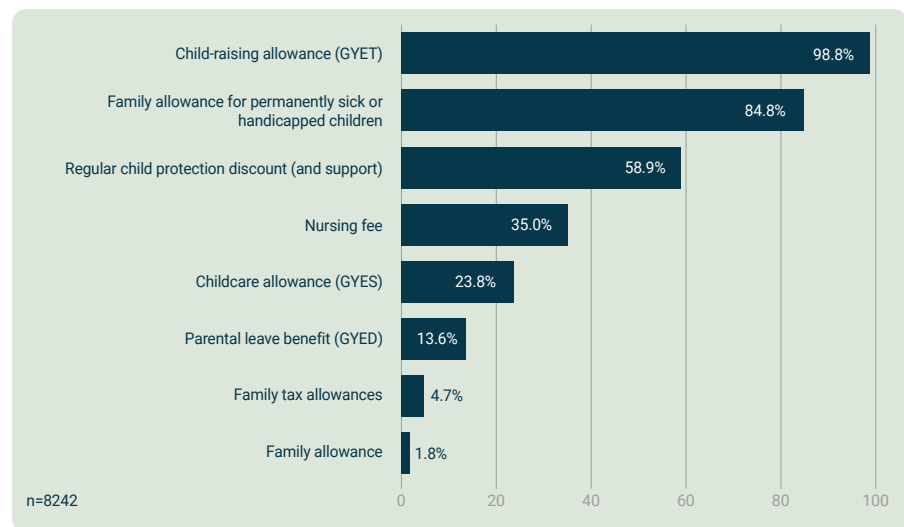
Families with young children may be entitled to a range of services, allowances and benefits. Some of these are subject to individual rights, while others depend on the age of the child, the specific situation of the family or the prior payment of national insurance contributions. Family allowance is an individual right, to which virtually all the families surveyed were entitled. Its amount depends on the number of children. The family tax allowance was claimed by 85 per cent of the families surveyed:

According to mothers' responses, 5.7 per cent of the families with young children were in difficult financial circumstances.

Single mothers and mothers with four children or more are significantly more likely to suffer financial difficulties than the average.

it reduces the total tax base, and the amount can vary according to the number of dependants. Some 59 per cent of the families surveyed received parental leave benefit (GYED): it is linked to national insurance contributions, and is payable from when the nursing fee (see below) expires until the child is 2 years old. Childcare allowance (GYES) was claimed by 35 per cent of the families surveyed: it basically lasts until the child turns 3 and is not conditional on insurance contributions; 23.8 per cent of families were in receipt of the nursing fee (CSED), which is a maternity insurance benefit and is payable for 168 days after the birth of the child. Regular child protection discount was claimed by 13.6 per cent of families and is dependent on the family's financial situation; 4.7 per cent of families received a higher family allowance for a chronically ill or severely disabled child (person). Child-raising allowance (GYET) was claimed by 1.8 per cent: it is payable to parents with three or more (minor) children.

FIGURE 3.4.3. USE OF FAMILY SUPPORT BENEFITS AND ALLOWANCES - FREQUENCY OF REFERENCE



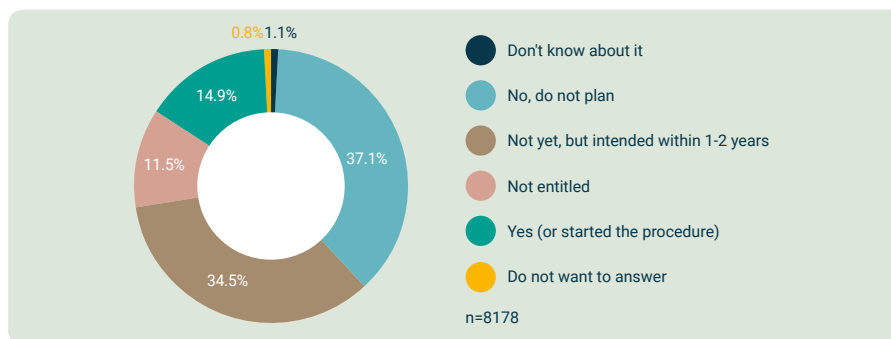
Weighted database (maternal weight)

Among the family policy benefits provided for families with children, we asked mothers in more detail about their use of the Housing Subsidy for Families (CSOK). CSOK, which has been available since 1 July 2015, helps families acquire their own home. It consists of a non-repayable government grant and a loan with a favourable rate of interest. The conditions for application are constantly changing (from 2019 the scheme has also allowed the purchase of used apartments; and if the family has at least two children, there is no upper limit on the price of the property). The non-repayable grant ranges from HUF 600,000 to HUF 1 million, depending on the size of the property, the number of children, and whether the property concerned is used or a new-build. In addition to the grant, a housing loan of up to HUF 15 million can be applied for, with subsidized rates of interest.

Data collection for the 6-month wave of the Cohort '18 Study took place between June 2018 and November 2019. Thus, the 2019 changes to the scheme could already have affected the families surveyed, either in their planning or their actual application.

Some 15 per cent of the families with a 6-month-old child that were surveyed in 2018–2019 had already taken advantage of CSOK or were intending to start the application process; 37 per cent had no plans to apply; and 12 per cent would have liked to take advantage of the scheme, but were not eligible. We expect higher rates of take-up in later stages of the research, as more than a third of families were planning to apply for CSOK within the next 1–2 years (when the children taking part in the research will be aged 1.5 to 2.5 years). Only 1 per cent of respondents did not know about the scheme.

FIGURE 3.4.4. UTILIZING CSOK



Weighted database (maternal weight)

Nearly half of the families in receipt of CSOK had received the allowance in after their existing and future child/children. Half of the families in receipt of CSOK had two children and 42 per cent had (or were planning to have) three or more children. Only 8.8 per cent of the families had received CSOK after their Cohort '18 child.

Examining developments in the uptake of CSOK, we focus in particular on how the proportion of beneficiaries varies across certain socio-demographic groups, and on the size of the group that is prevented from taking advantage of the scheme by the conditions laid down, even though its members would like to apply.

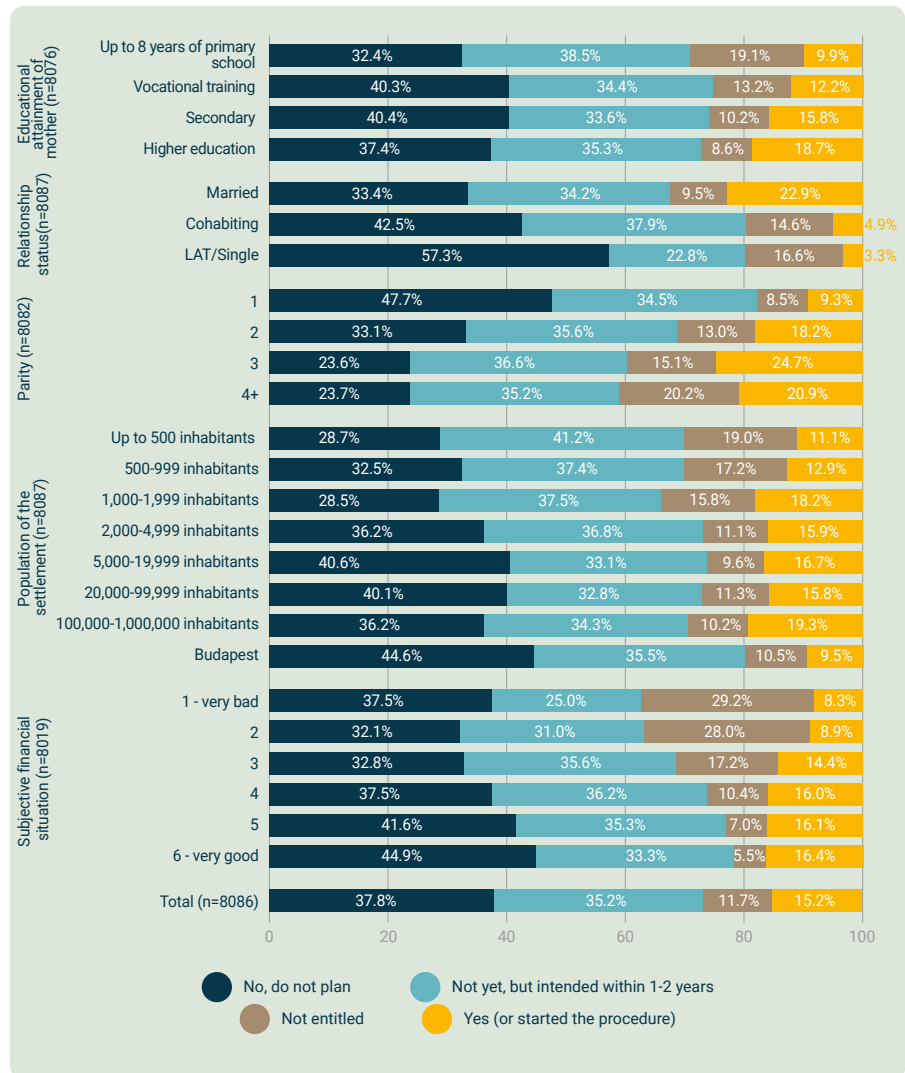
The overall 15 per cent rate of CSOK uptake (see above) increases in line with the mother's education: a greater proportion of women with higher education receive the allowance. In terms of their subjective financial position, the trend is similar: those with a favourable financial position benefit more from CSOK than do those living in straitened circumstances. Among mothers who are not married, but who instead either cohabit or are single, the take-up of CSOK is negligible (5 per cent and 3.3 per cent, respectively). The CSOK take-up rate broadly increases in line with the number of children, and is below average for those with just one child. However, at almost 25 per cent, the rate is highest among families with three children (not those with four). According to population size, the highest take-up rates are found in settlements with a population of between 1,000 and 2,000 or over 100,000 (18–19 per cent). As an exception to this, Budapest shows the lowest CSOK rates (9.5 per cent).

In 2018–2019, 15 per cent of the families with a 6-month-old child had received CSOK (or had begun the procedure) and another 35 per cent were planning to apply.

The beneficiaries of CSOK are mostly better-educated families in a better financial situation. The majority of people living in difficult circumstances are excluded from the allowance.

The proportion of families who – although they would like to – cannot receive CSOK was 12 per cent of the total sample. In many respects, the distribution shows an inverse trend compared to the distribution of families that benefit from CSOK: the proportion of those excluded from applying for the allowance is high among families with lower education, and is especially high among those in a particularly disadvantaged financial position: 30 per cent of families in the worst (subjective) financial position would like to benefit from CSOK, but are ineligible. The proportion of such families also increases in line with the number of children, and is above average among families with three or more children. More of those families that live in smaller settlements (with a population of under 2,000) are excluded from the scheme than average, especially if the family lives in the smallest settlements, with fewer than 500 inhabitants. The below-average take-up of CSOK in Budapest goes hand in hand with a below-average exclusion rate: among families in Budapest (just as in the case of families in the best financial position) a large proportion do not even plan to apply for CSOK.

FIGURE 3.4.5. DISTRIBUTION OF THE UTILIZATION OF CSOK



Weighted database (maternal weight)

Sharing housework within the family

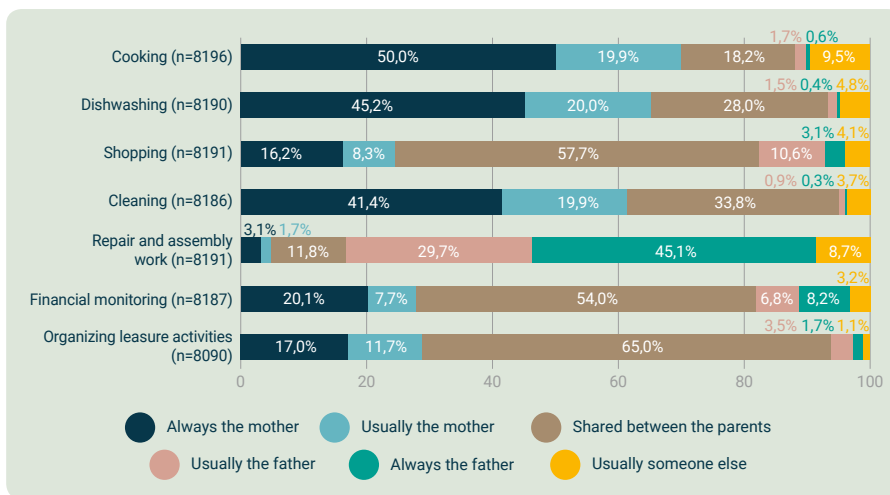
The major portion of household chores usually falls on the women within a family. After the gestation period, mothers with young children report a high domestic workload, while childcare is also largely the responsibility of the mothers. The amount of work done together with the father or shared by the couple is influenced by a number of social and lifestyle factors.

When their babies were aged 6 months, we asked those mothers who lived in the same household as their husband or partner and who were raising their children together about the division of housework in the family. Mothers were asked to evaluate who typically took care of seven listed household chores: cooking, washing the dishes, shopping, cleaning, minor repairs (in the house/apartment), monitoring income and expenditure, and organizing leisure activities.

The role of women varied from one task to another. Cooking and washing up, for example, were chores predominantly done by females: approximately two thirds of the mothers performed these tasks either entirely or generally alone. Cleaning was also largely the preserve of mothers (60 per cent). In over half of the households with young children, shopping, organizing leisure activities and monitoring the financial affairs of the family were tasks that the parents either did together or shared. Among the household chores, repairs and assembly work were generally undertaken by men: 45 per cent of such work was done entirely by the fathers, while another 30 per cent was done mostly by them.

Of the common household chores, cooking, washing up and cleaning are mainly the responsibility of mothers; repair and assembly work is essentially done by men.

FIGURE 3.5.1. SHARING HOUSEHOLD CHORES IN THE FAMILY - AMONG MOTHERS LIVING WITH A PARTNER



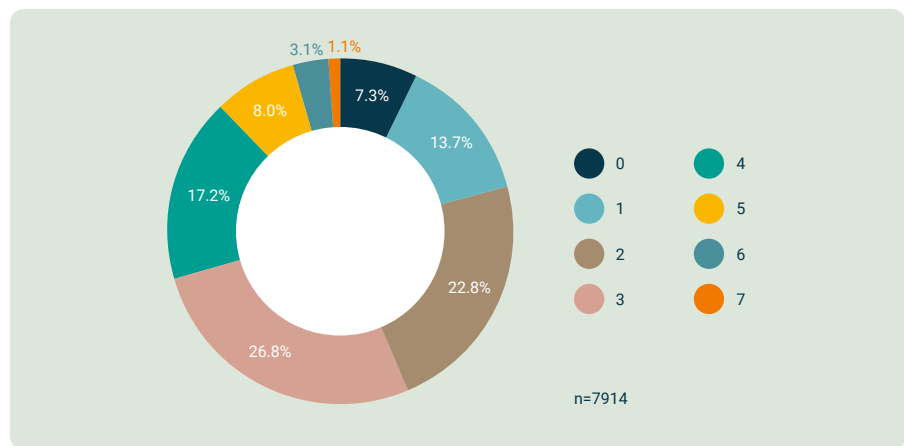
Weighted database (maternal weight)

The average household workload of family members can be calculated from the above seven tasks. Based on mothers' responses, the average number of household tasks that fell entirely or mainly on them was 2.75. The average number of household chores performed jointly by the parents was about the same – 2.76.

However, the average number of tasks performed mainly or entirely by the fathers was only 1.17 (out of the seven tasks).

Almost 27 per cent of the mothers carried out three of the seven household chores completely or largely on their own; 22.8 per cent performed two tasks on their own. The proportion of mothers (with a 6-month-old and living with their partner) who essentially undertook four (17 per cent) or five (8 per cent) of the seven household chores listed on their own is by no means insignificant. Meanwhile, a fifth of mothers were expected to complete at most one household task by themselves.

FIGURE 3.5.2. NUMBER OF HOUSEHOLD CHORES PREDOMINANTLY PERFORMED BY MOTHERS - AMONG MOTHERS LIVING WITH A PARTNER

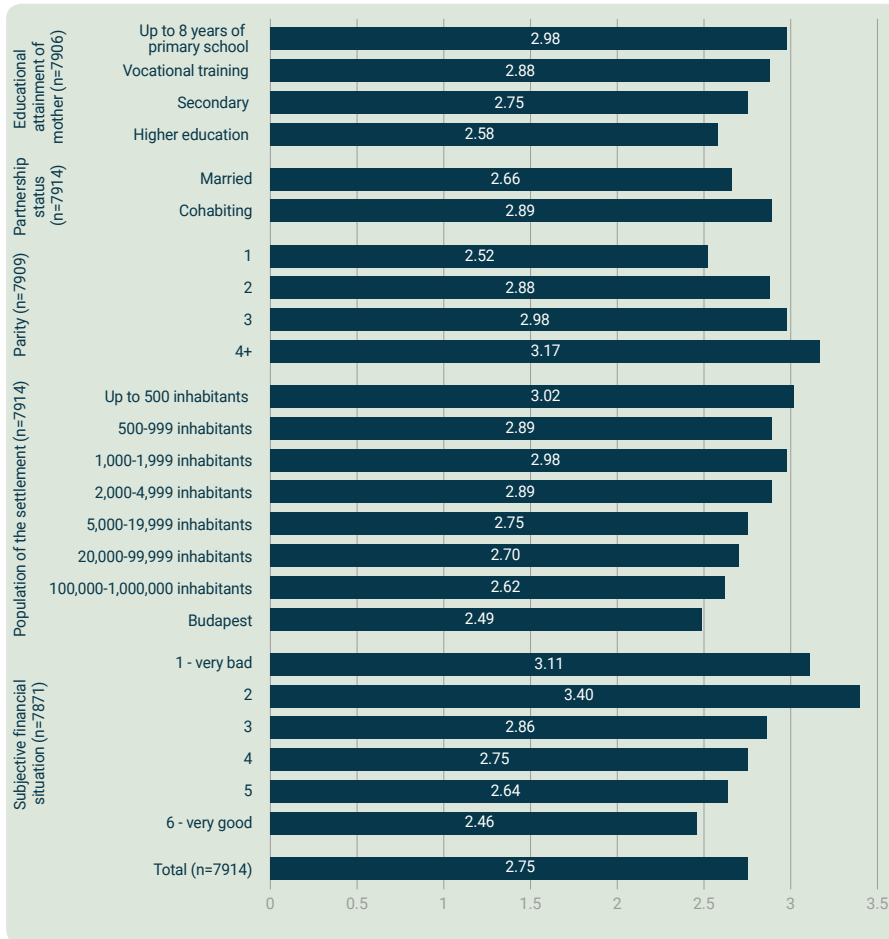


Weighted database (maternal weight)

As the number of children increases, so does the domestic workload of mothers. Women who live in the capital, have a higher level of education and are in a better financial position take on fewer household chores alone.

The average number of tasks performed entirely or mainly by mothers – essentially the workload of mothers – varies according to socio-demographic background characteristics. The average number (2.75) of the seven household tasks undertaken by mothers falls as the mother's educational attainment rises: whereas women with a maximum of 8 years of primary schooling performed an average of 2.98 tasks at home alone, among women with tertiary education the figure was 2.58. Also, the worse the family's financial situation, the greater the household burden of mothers. Mothers living in less-populous settlements had to undertake more domestic work (an average of around three tasks), whereas in Budapest the average was only 2.48. The number of children in the family also steadily increases the household workload that mothers face. On average, mothers with one child had 2.52 domestic chores, whereas those with at least four children had to complete 3.17 household tasks. The workload of married women seems to be slightly lighter than that of mothers in a cohabiting relationship.

FIGURE 3.5.3. CHANGES IN THE NUMBER OF HOUSEHOLD CHORES PERFORMED BY MOTHERS - AMONG MOTHERS LIVING WITH A PARTNER - MEAN (OUT OF SEVEN TASKS)

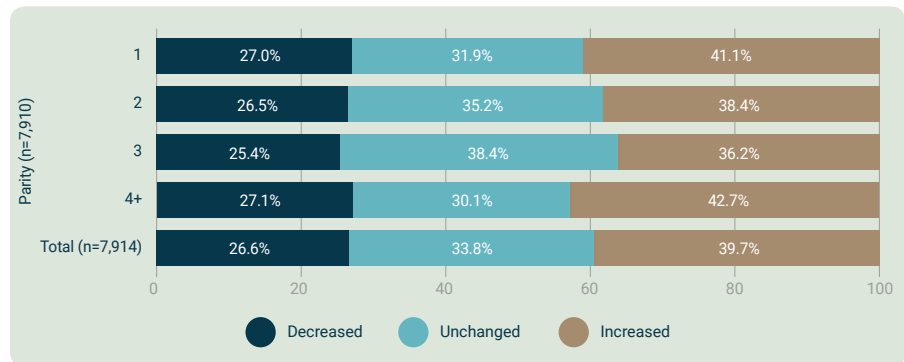


Weighted database (maternal weight)

In the phase of the research that focused on the pregnancy period, the division of household work was also measured, using the same list of tasks. At that time, too, the mothers-to-be reported which household tasks were basically performed by them or their partners, and which were shared or done by the couple together. Thus, we can examine differences in the workload of women when they were pregnant and when their children were 6 months old. Accordingly, 33.8 per cent of respondents reported the same volume of household chores when their child was 6 months old as during pregnancy; 26.6 per cent reported a reduction in the number of tasks they had to do alone; but 40 per cent reported having more housework to do when their child was 6 months old than during pregnancy. The increase in the workload also depends on the number of children: while the workload of mothers who had been expecting their third child had increased by less than the average when their child was 6 months old, mothers with at least four children found that the increase in the burden was above the average: over 43 per cent more tasks following the birth than before their most recent child was born.

Almost 40 per cent of mothers experienced an increase in the household workload following the birth.

FIGURE 3.5.4. CHANGES IN HOUSEHOLD WORKLOAD AFTER CHILDBIRTH, BY NUMBER OF CHILDREN - AMONG MOTHERS LIVING WITH A PARTNER

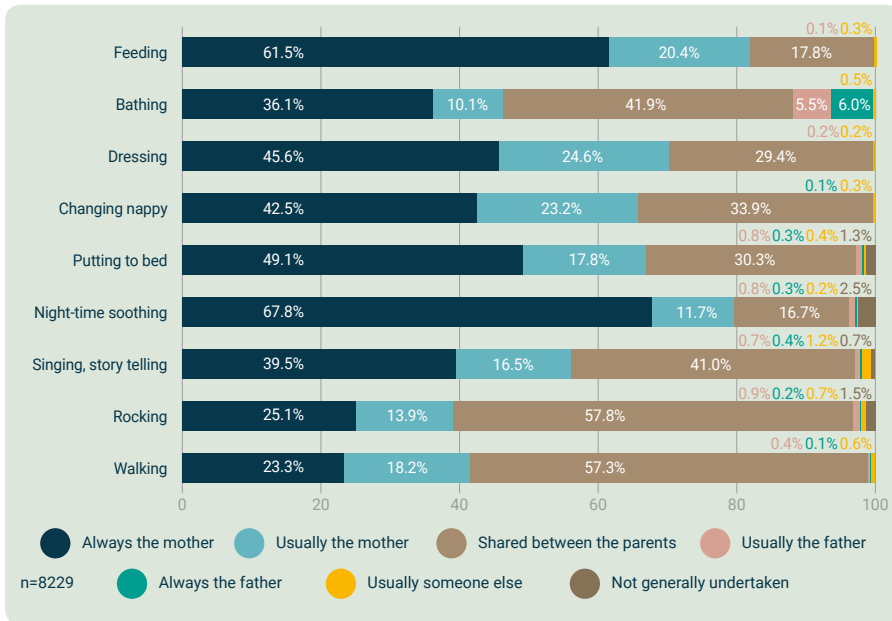


Weighted database (maternal weight)

Caring for the child is largely undertaken by the mothers, though in 11.5 per cent of families, bathing the 6-month-old child is the responsibility of the father.

As well as household tasks, we also asked mothers living with their partner about the division of childcare responsibilities. We examined the division of responsibility between the parents across nine different aspects of caring for the 6-month-old child. The mothers' responses indicate that feeding and comforting their 6-month-olds at night were activities that essentially devolved to the mother: 67.8 per cent of babies were always comforted by their mothers if they woke up at night; and an additional 11.7 per cent were usually attended to by their mothers. Feeding was the sole responsibility of the mother in 61.5 per cent of families; in another 20.4 per cent it was mainly the mother's responsibility – of course, at 6 months, breastfeeding is likely to be a determining factor in this. Putting the child to bed (49.11 per cent always; 17.8 per cent usually), dressing him/her (45.6 per cent always; 24.6 per cent usually) and changing his/her nappy (42.5 per cent always; 23.2 per cent usually) were tasks mostly undertaken by the mother. These tasks have to be done several times a day, and so naturally they mostly fall to the mothers who are at home with their 6-month-old children. Many childcare responsibilities are undertaken together or are shared by the parents. Such shared tasks include rocking or walking the child (58 per cent) or telling the child a story (41 per cent). It is at bath-time that fathers sometimes take sole responsibility: in many families (42 per cent) responsibility for bathing the 6-month-old is shared by the parents, but in over 10 per cent of families it is essentially the father's task.

FIGURE 3.5.5. DIVISION OF CHILDCARE DUTIES - AMONG MOTHERS LIVING WITH A PARTNER

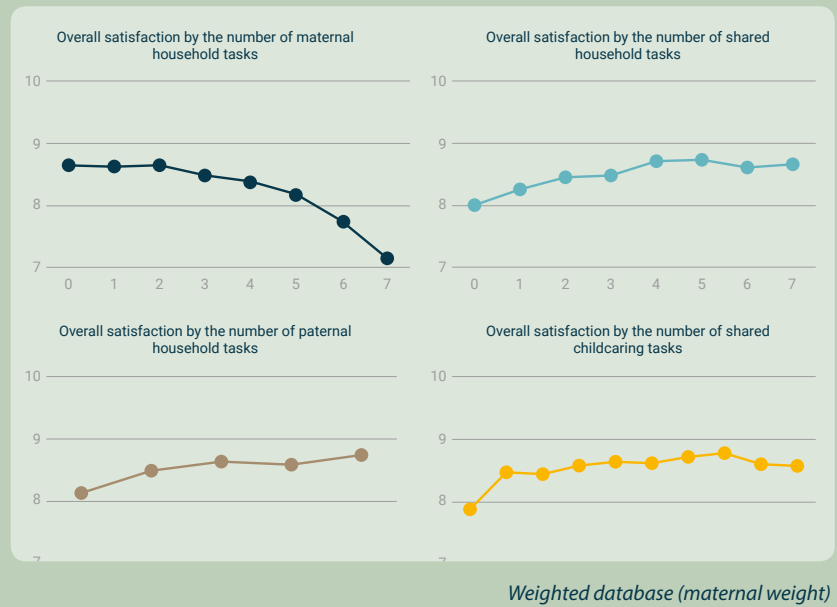


Weighted database (maternal weight)

Are mothers who do less housework more satisfied?

Inequalities in the division of housework within the family are related to the overall satisfaction of mothers with young children. Mothers were able to rate their overall life satisfaction on a scale of 0 to 10. The average results are related to the size of the domestic workload that the mother bears, the amount of work that the father does, and the workload that the couple shares or performs together. It is especially striking that as the number of household tasks assigned to mothers increases, so their satisfaction declines noticeably. However, mothers' satisfaction is positively correlated with the amount of housework done together. Maternal satisfaction also rises as the father undertakes more household responsibilities. The data also clearly show how joint or shared childcare duties increase the overall level of maternal satisfaction.

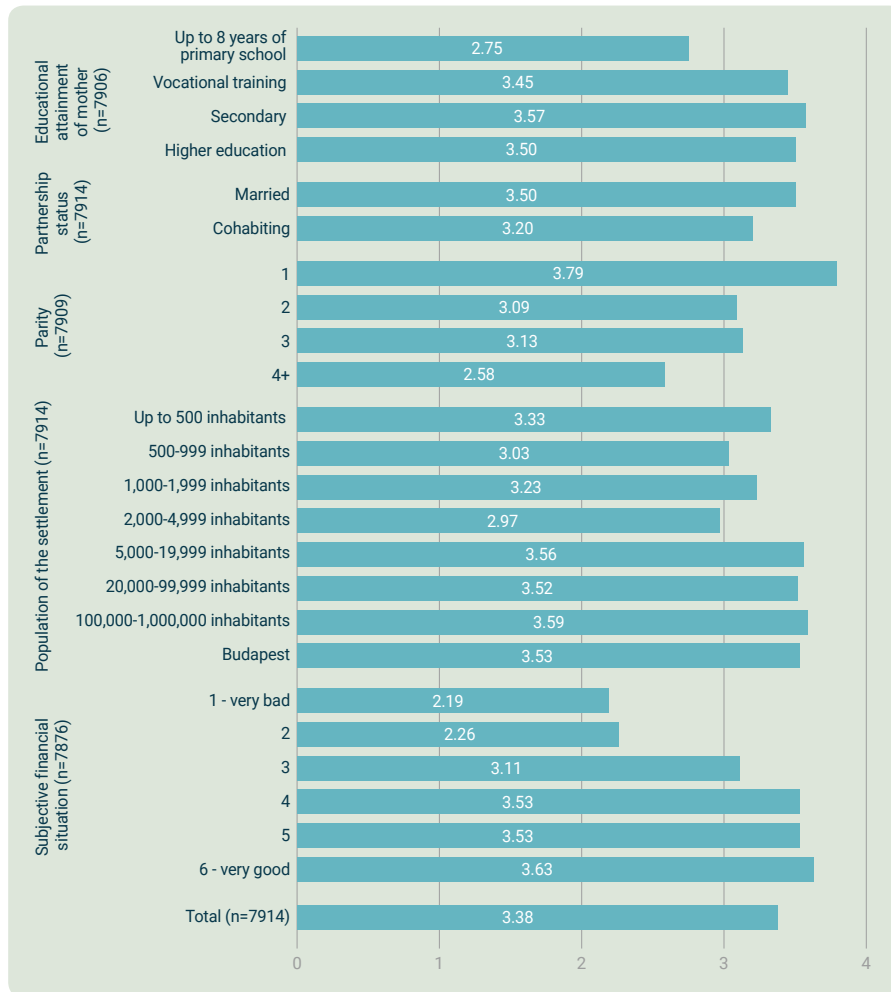
FIGURE 3.5.6. CHANGES IN HOUSEHOLD WORKLOAD AND SATISFACTION



With a first child, it is more common for childcare tasks to be performed jointly by the parents.

Regarding care for the 6-month-old child, the average number of tasks performed jointly by the parents is 3.38 (out of nine). Compared to this average, the number of tasks performed together is lower among mothers with lower education, those living in settlements with fewer than 5,000 inhabitants, and those living in a cohabiting relationship. A better financial situation seems to lead to a greater division of childcare duties. The most important factor in this respect is the number of children: among couples raising their first child, the number of childcare tasks performed together is significantly higher (an average of 3.79). In families with several children, the figure is below the average value. In families with at least four children, caring for the 6-month-old is no longer an activity undertaken by the two parents jointly.

FIGURE 3.5.7. CHANGES IN THE NUMBER OF CHILDCARE TASKS PERFORMED JOINTLY OR SHARED BY PARENTS - AMONG MOTHERS LIVING WITH A PARTNER - MEAN (OUT OF NINE TASKS)



Weighted database (maternal weight)

Summary

3.6.

At 6 months, the vast majority of children live in a household with two biological parents, and their primary caregiver is their mother. Some 57 per cent of mothers lived with a married partner; 39 per cent lived with a cohabiting partner; and only 4 per cent were raising their child on their own. With the child still aged just 6 months, it is quite rare for the mother's spouse or partner not to be the biological father.

The vast majority of 6-month-olds are living in a two-generation nuclear family. Some 37 per cent are living in a household with three people; a third are in a household with four people; and 30 per cent are in a household with five people

or more. Some 60.3 per cent of children have siblings, and most of them have blood siblings. For half of the 6-month-old children, four of their grandparents are alive, and 41.2 per cent of them meet a grandparent daily. Indeed, 13 per cent of 6-month-olds share the household with a grandparent.

Of those mothers living in a private household, 9 per cent stated that – in addition to the birth of their child – there had been some other change to the structure of the household: in most cases, this meant that they had moved to a completely new household. Changes in the family and household environment can, of course, be related to changes in the parents' relationship. If we observe only those children whose parents were already married at the time of conception, we find that at 6 months the vast majority (99 per cent) have witnessed no change in their parents' relationship status. However, that is not the case if the child has cohabiting parents: 15 months on from the child's conception, only 75 per cent were still cohabiting: most of the remainder had married.

In Hungary, barely a tenth of mothers with small children can be considered religiously observant. About 61 per cent of the children being brought up in a religious household are Roman Catholic. A third of mothers have no church affiliation and 40 per cent do not attend church.

Some 93 per cent of the mothers described themselves as Hungarian (as either their primary or secondary ethnicity) and 7 per cent declared themselves to be Roma (again as either their primary or secondary ethnicity). With regard to Roma women with small children, it is true that the majority of Roma experience financial difficulties; nevertheless, the majority of those who suffer financial hardship are not Roma.

According to the responses of the mothers in the study, 6 per cent of families with young children are living in difficult financial circumstances. In all, 59 per cent of families receive parental leave benefit, 35 per cent receive childcare support and nearly 24 per cent receive a nursing fee; almost 14 per cent of families claim the regular child protection discount, while 5 per cent get higher family allowance for permanently sick or handicapped children. Our data also indicate that 15 per cent of families with a 6-month-old child in 2018–2019 had taken advantage of the CSOK scheme, and a further 35 per cent were planning to do so.

Among the household chores, cooking, washing up and cleaning were mainly the responsibility of the mother by the time their child was aged 6 months; a third of the respondents reported that they had the same number of household tasks when their child was aged 6 months as during pregnancy. While 27 per cent of mothers had experienced a decrease since giving birth in the number of tasks they were expected to undertake on their own, 40 per cent reported an increase. When it comes to caring for the 6-month-old child, the average number of activities performed jointly by the parents was 3.4 (out of nine tasks listed). Feeding and comforting the child at night are fundamentally the mother's responsibility; however, in more than a tenth of the families, bathing the child is essentially the father's job.





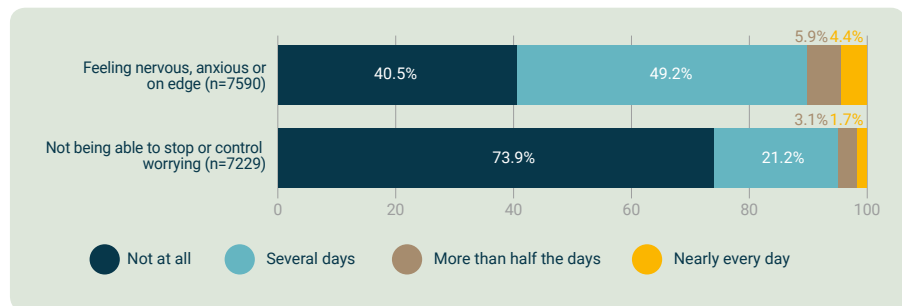
4. Mothers Raising a 6-month-old Child

4.1. Psychological characteristics

The mental state of mothers can be examined along a variety of dimensions. Our research focuses on the moods and emotional state of the mothers, including general anxiety and depressive symptoms; any negative life events they have experienced; and their satisfaction with life both during pregnancy and since giving birth. During the 6-month survey, we also examined the relationship the mothers had with their children.

Maternal generalized anxiety was measured using two questions about how frequently symptoms of anxiety had been experienced in the two weeks prior to data collection.¹⁶ The vast majority experienced such symptoms either rarely or not at all; however, 10.3 per cent reported feeling nervous, anxious or tense most of the time, and 4.8 per cent reported constantly worrying most of the time.

FIGURE 4.1.1. FREQUENCY WITH WHICH SYMPTOMS OF GENERALIZED ANXIETY WERE EXPERIENCED- IN THE TWO WEEKS BEFORE THE SURVEY



Weighted database (maternal weight)

9.6 per cent of mothers with a 6-month-old child reported having had significant anxiety symptoms.

It may be an indication of an anxiety disorder if someone experiences at least one of the symptoms most of the time (and the other symptom for at least a few days), or if they experience one of the symptoms almost every day. Based on this, overall 9.6 per cent of mothers had significant symptoms of anxiety. That is considerably lower than the 15.1 per cent incidence observed during pregnancy among the same group of mothers.

The incidence of anxiety symptoms was significantly higher than 9.6 per cent among women who either had no partner or did not live with him (17.6 per cent); who had four or more children (17.6 per cent); whose household income was in

¹⁶ The questions come from the Hungarian version of the GAD-2 questionnaire (<http://www.phqscreeners.com>). See: Kroenke, K., Spitzer, R.L., Williams, J.B.W., Monahan, P.O. and Löwe, B. (2007). Anxiety disorders in primary care: Prevalence, impairment, comorbidity, and detection. *Annals of Internal Medicine*, 146(5), 317–325.

the lowest quintile during pregnancy (16.6 per cent); who were under 20 at the time of the birth (16.6 per cent); and who had completed at most 8 years of primary schooling (17 per cent). This trend is in line with the findings of the survey undertaken in the seventh month of pregnancy. There was also a higher incidence of maternal anxiety if the pregnancy had been unplanned (14.3 per cent), although this association was weaker than during pregnancy. Otherwise, the incidence of anxiety symptoms was rather high: 26.7 per cent of those who had suffered from anxiety symptoms during pregnancy.

The incidence of depressive symptoms was assessed using an eight-item questionnaire.¹⁷ Based on the statements in the questionnaire, mothers could indicate on a four-point scale how often they had experienced certain feelings or behaviours in the week before completion of the questionnaire (0 = none or almost none of the time – i.e. for less than one day; 3 = all or almost all of the time – i.e. from five to seven days). By adding up the scores for the answers, we get a total of between 0 and 24, where a higher value indicates more frequent occurrence of depressive symptoms. The mean total score was 3.86, indicating that on average the mothers experienced symptoms of depression very infrequently.

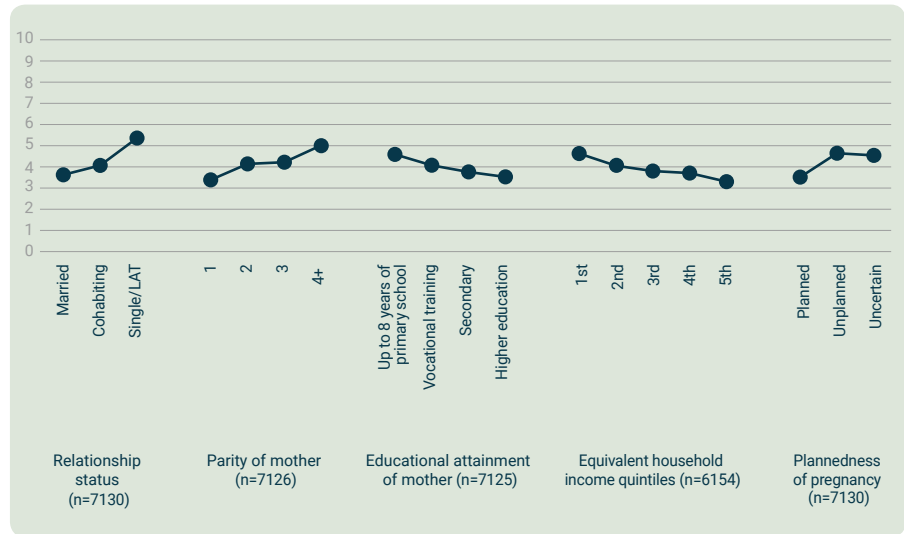
Those women who answered the questions both during pregnancy and when their child was 6 months old (n=6455) displayed a higher mean score (4.51) during pregnancy than at the 6-month stage (3.84). Thus, maternal depressive symptoms were lower by the time the child was 6 months old. In addition, a moderate positive correlation was found between the two values ($r=0.472$). Accordingly, the more frequently a mother had experienced symptoms of depression during her pregnancy, the more frequently she also experienced them when her child was 6 months old.

If we look at certain socio-demographic groups, we find that depressive symptoms – in line with the associations found during pregnancy – were less common among married mothers and mothers for whom this was their first child, as well as among mothers with a higher level of education and higher income, and who had planned the pregnancy. Depressive symptoms, however, were more common if the mother did not live with a partner, had at least four children, or if the pregnancy was not planned.

In line with the findings from the pregnancy wave, the incidence of depressive symptoms was related to the socio-demographic background of mothers.

¹⁷ The items are from the Hungarian translation of the Center for Epidemiologic Studies – Depression questionnaire. See: Radloff, L.S. (1977). The CES-D Scale: A self-report depression scale for research in the general population. *Applied Psychological Measurement*, 1(3), 385–401; Szeifert, L. (2010). Depression and quality of life in patients with chronic kidney disease. Budapest, doctoral dissertation.

FIGURE 4.1.2. INCIDENCE OF DEPRESSIVE SYMPTOMS BY SOCIO-DEMOGRAPHIC GROUP - MEAN TOTAL SCORES OF THE SCALE (0-24 POINTS)

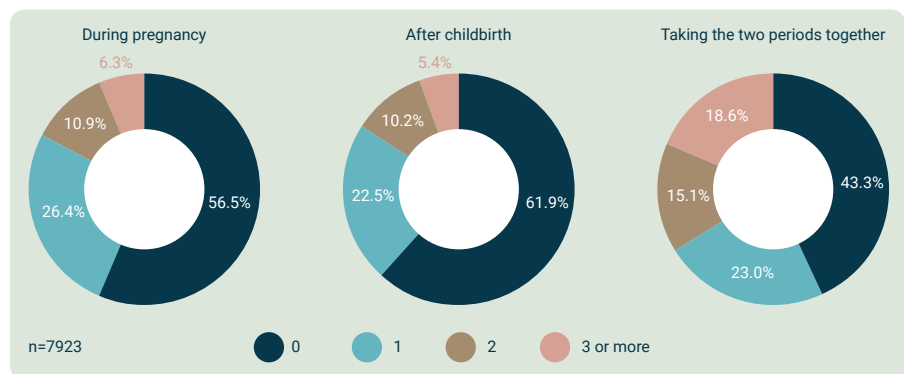


Weighted database (maternal weight)

56.7 per cent of mothers reported that at least one of the negative events listed had occurred in their lives during the perinatal period.

In order to assess negative life events, when their child was 6 months old we asked mothers to indicate whether any of a specified list of life events had occurred either while they were pregnant (from a list of 12 events) or in the postpartum period (from a list of 11 events). In addition, they had the opportunity to record a further two negative life events that they may have experienced. Taking the pregnancy period and the subsequent months together, the mothers reported an average of 1.3 negative life events; however, their responses varied (SD=1.7, n=7923).¹⁸ Looking at the two periods separately, less than half of the mothers indicated that they had experienced any of the life events. Examining the two time periods together, the rate was 56.7 per cent.

FIGURE 4.1.3. NUMBER OF NEGATIVE LIFE EVENTS REPORTED FOR PREGNANCY AND FOR THE PERIOD BETWEEN CHILDBIRTH AND DATA COLLECTION - AMONG MOTHERS WHO RESPONDED AT LEAST IN PART TO THE SELF-REPORT QUESTIONNAIRE



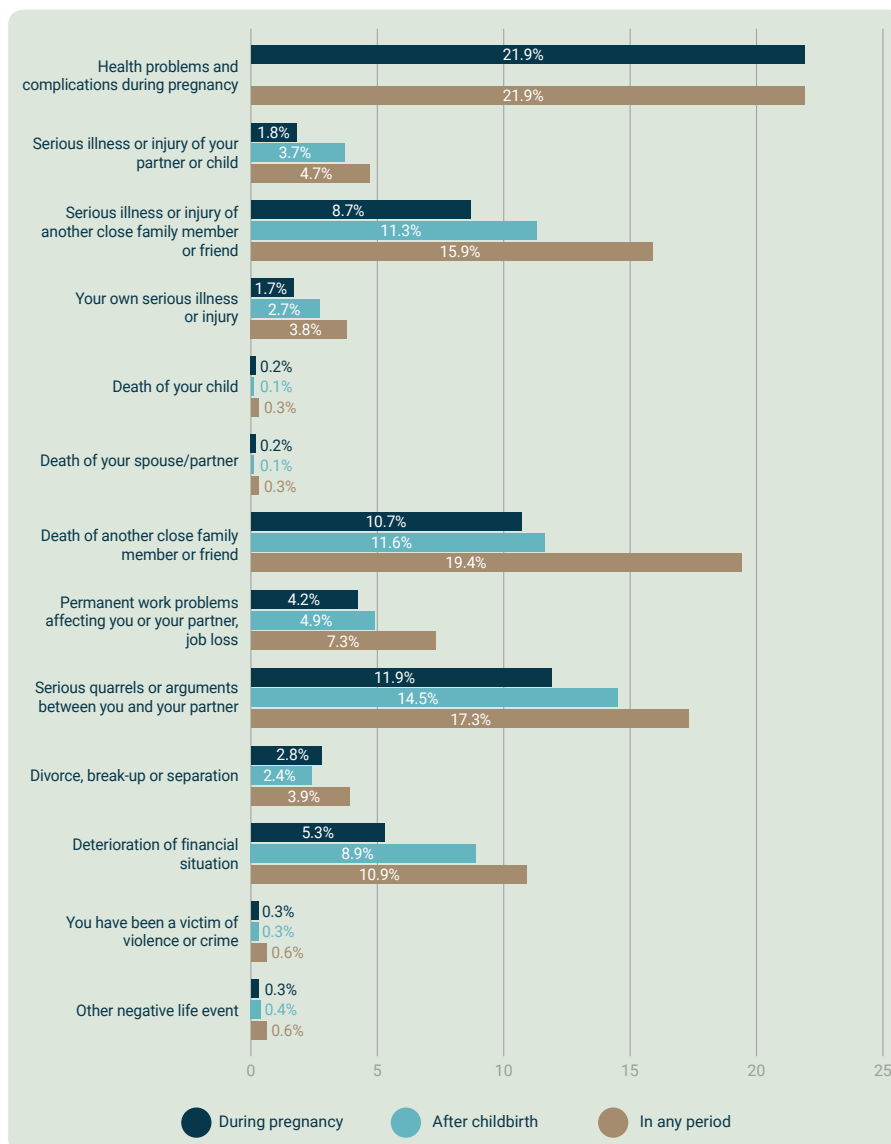
Weighted database (maternal weight)

The most common negative life events during pregnancy were health problems

¹⁸ The incidence of negative life events was analysed among 7,923 mothers who completed at least part of the self-report questionnaire booklet, and the incidence rate was calculated from 'yes' responses (as opposed to 'no' responses and zero response).

and complications – reported by 21.9 per cent of the mothers. Serious quarrels and arguments between the woman and her partner were also relatively common both during pregnancy and in the 6 months following the birth (11.9 per cent and 14.5 per cent, respectively). Furthermore, the death of a close family member (excluding the partner and the child) or of a friend (10.7 per cent and 11.6 per cent, respectively) and serious illness or injury suffered by a family member (excluding the partner and the child) or a friend (8.7 per cent and 11.3 per cent, respectively) were also relatively common in the perinatal period.

FIGURE 4.1.4. INCIDENCE OF NEGATIVE LIFE EVENTS DURING PREGNANCY AND IN THE 6 MONTHS AFTER THE BIRTH - AMONG MOTHERS WHO RESPONDED AT LEAST IN PART TO THE SELF-REPORT QUESTIONNAIRE



Weighted database (maternal weight)

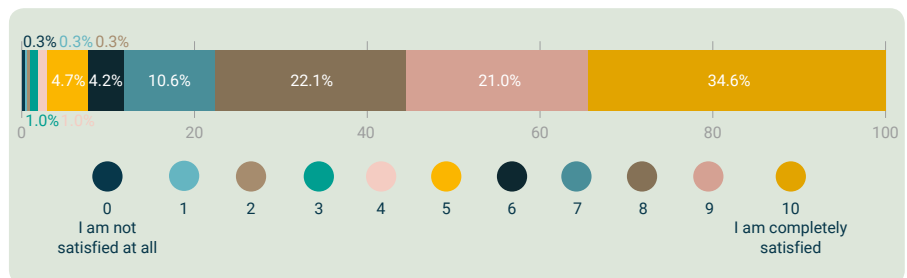
Negative life events and anxiety

Although neither the subjective significance of each negative life event nor the degree of stress associated with it was assessed, the correlation with subsequent levels of anxiety could be analysed. Regarding the correlation of the two phenomena, the more negative life events that a woman endured during and after pregnancy, the more frequently she experienced anxiety symptoms when her child was 6 months old ($r=0.295$). If we examine the significance of each life event that affected at least 1 per cent of the mothers, we find that it was financial and relationship difficulties in the perinatal period that contributed most to mothers' later anxiety levels. Comparing the incidence of anxiety problems in the total sample (9.6 per cent), significant anxiety symptoms were much higher among mothers who (or whose partner) had had lasting conflict at work in this period or had lost their job (20.2 per cent); who had had serious quarrels and arguments with their partner (25.6 per cent); who had separated from or broken up with their partner (26.3 per cent); or whose financial situation had deteriorated (20.5 per cent).

Mothers reported a high rate of life satisfaction when their child was aged 6 months, slightly higher than during their pregnancy.

To measure life satisfaction, the mothers rated how satisfied they were with their lives in general on an 11-point scale (0 = not at all satisfied; 10 = completely satisfied). The vast majority of mothers claimed to be satisfied with their lives (92.5 per cent indicated a score of above 5). More than three quarters were very satisfied with their lives (a rating of 8, 9 or 10), with 34.6 per cent completely satisfied. Only 2.9 per cent said they were dissatisfied with their lives (a value below the mean value of 5). On a scale of 0 to 10, the average overall satisfaction of mothers was 8.42 points ($SD=1.72$).

FIGURE 4.1.5. DISTRIBUTION OF LIFE SATISFACTION



Weighted database (maternal weight)

Based on the responses of the women who answered this question both during their pregnancy and when their child was 6 months old ($n=7811$), we can say that average maternal life satisfaction had increased since the gestation period: from 8.15 ($SD=1.86$) to 8.43 ($SD=1.71$).

The relationships that mothers had with their 6-month-olds were assessed using six questions with various response options.¹⁹ For each question, the mothers could choose which statement best characterized them from four or five options. The questionnaire assessed the quality of the attachment developed with the child; the degree of joy experienced in interactions with the child; and the lack of hostile feelings.

The mothers' answers were most consistent on the topic of irritability: 96.2 per cent of mothers claimed never, or only very rarely, to be annoyed or irritable while caring for their child. Also, the vast majority (95.2 per cent) said they felt competent and confident when interacting with their child (the remaining 4.8 per cent rather felt incompetent and lacking in confidence as a parent). Some 96.1 per cent of mothers regularly thought about their child when the baby was not with them; 92.8 per cent rated themselves fairly or even extremely patient when they were with their baby; and 70 per cent said they were not at all annoyed about things they had had to give up because of the baby (23.9 per cent were a little annoyed and 6.1 per cent had had a harder time dealing with these issues). Mothers' responses showed the greatest variability concerning the topic of 'having to leave' their child: 66.8 per cent said it was difficult to leave their baby, while 28.3 per cent reported having mixed feelings and 4.9 per cent reported feeling relieved when leaving the baby.

The relationship formed by mothers with their children was of a high quality and was characterized by positive feelings.

Social relationships

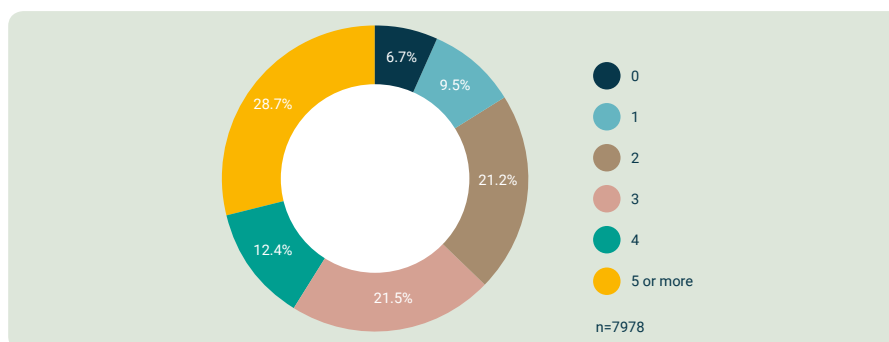
In mapping mothers' social relationships, we examined the number of close friends they had, the frequency of contact with their family members and friends, and their assessment of their relationship.

Mothers with a 6-month-old reported an average of 3.8 close friends; however, their responses included outliers of 50 or even 80. Both the most frequently mentioned figure and the median value of the responses was 3. Some 6.7 per cent of mothers had no close friends, while 28.7 per cent reported having five or more close friends.

4.2.

Mothers with a 6-month-old child typically have 3–4 close friends.

FIGURE 4.2.1. NUMBER OF CLOSE FRIENDS



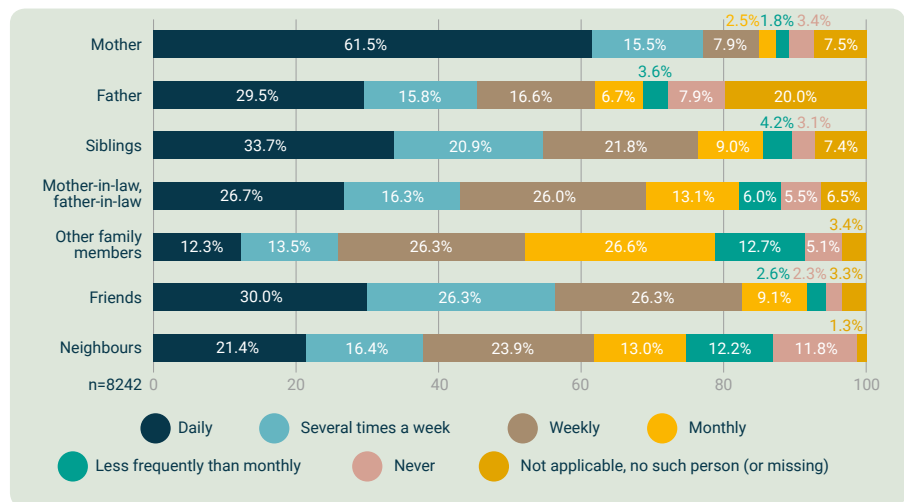
¹⁹ The items are from the Hungarian version of the Maternal Postnatal Attachment Scale. See: Condon, J.T. and Corkindale, C.J. (1998). The assessment of parent-to-infant attachment: Development of a self-report questionnaire instrument. *Journal of Reproductive and Infant Psychology*, 16(1), 57–76; Condon, J.T. (2015). Maternal Postnatal Attachment Scale [Measurement Instrument]. <https://doi.org/10.25957/5D-C0F28D14338>; Sz. Makó, H., Szentiványi-Makó, N. and Deák, A. (n.d.). Hungarian version of MPAS. Unpublished manuscript.

If we look at those women who answered this question both during pregnancy and when their child was 6 months old (n=7356), we can see that the proportion of those without close friends is essentially unchanged; the proportion of those with 1–4 friends has increased (from 56.1 per cent to 64.7 per cent); and the proportion of women with at least five friends has decreased (from 37.2 per cent to 28.5 per cent).

61.5 per cent of mothers spoke to their own mother every day, while 29.5 per cent talked to their father daily.

In order to describe the frequency of contact with other people, we asked mothers how often they talked (in person, by phone, online) to certain family members, friends and neighbours. Just as during pregnancy, the respondents reported talking most often to their mother: 84.9 per cent spoke at least weekly and 61.5 per cent daily. When it came to their fathers, the frequency of contact varied widely among mothers: 29.5 per cent had daily contact and 61.9 per cent at least weekly contact with their father; but 27.9 per cent did not have an active relationship with their father. Complete lack of contact – leaving aside the ‘Not applicable, as there is no such person’ responses – is most common in the case of neighbours: 11.8 per cent of mothers with a 6-month-old never spoke to their neighbours.

FIGURE 4.2.2. FREQUENCY OF CONTACT OF MOTHERS WITH THEIR FAMILY MEMBERS AND ACQUAINTANCES

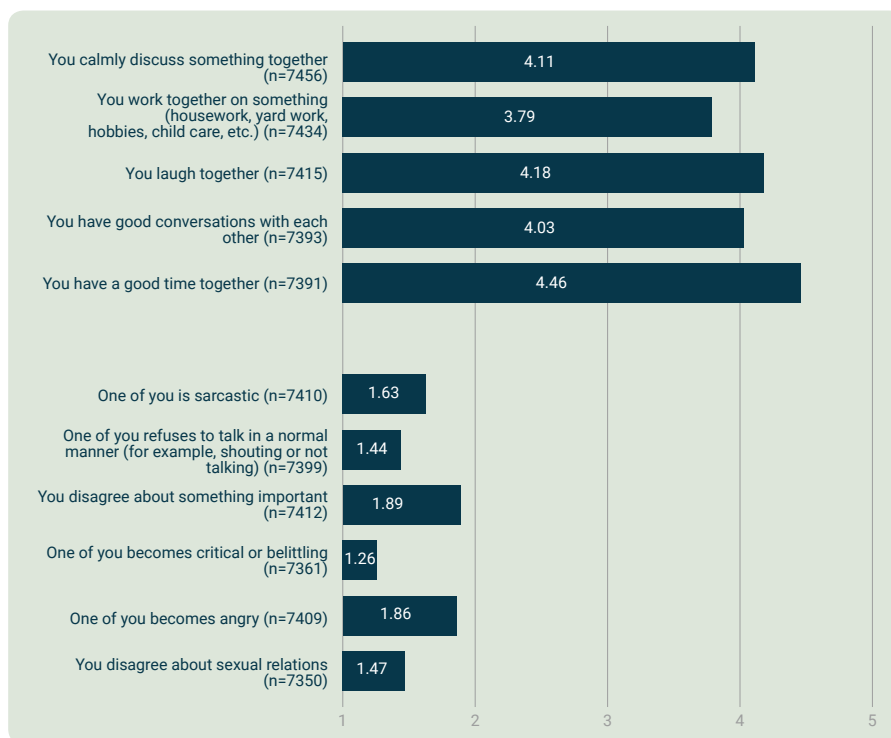


Regarding the relationship between the mothers with a 6-month-old child and their partners, we assessed the frequency of positive and negative interactions and the possible intention of breaking up or divorcing. The results are analysed only for those women who were living with their spouse or partner (7,914 mothers; 96 per cent) or who had a LAT partner (123 mothers; 1.5 per cent); that is, excluded are those who did not have a partner (205 mothers; 2.5 per cent).

Positive relationship interactions were measured using five items, and negative

interactions using six. The mothers indicated the frequency of certain experiences with their partner on a five-point scale (1 = hardly ever, 2 = sometimes, 3 = fairly often, 4 = very often, 5 = always).²⁰ The average frequency of each interaction is shown in Figure 4.2.3. The mean incidence of positive interactions was 4.11, meaning that the prevalence of a positive interaction could mostly be characterized by the ‘very often’ response. Of the items listed, the women most often reported having a good time with their partner. By contrast, the average incidence of negative interactions was 1.60; thus the average incidence of each negative interaction was mostly characterized by the ‘sometimes’ response.

FIGURE 4.2.3. MEAN SCORES OF ITEMS MEASURING THE FREQUENCY OF RELATIONSHIP INTERACTIONS WHEN THE CHILD IS 6 MONTHS OLD - AVERAGE SCORE FOR EACH ITEM (1–5), AMONG MOTHERS IN A PARTNERSHIP



Weighted database (maternal weight)

Among those women in a partnership who responded both during the pregnancy survey and again when their child was 6 months old, it was found that the average frequency of positive interactions between the mother and her partner had decreased slightly between the two waves – from 4.24 to 4.11 (n=6828). The same was true of negative interactions – from 1.63 to 1.59 (n=6811). Examined at the individual level, 34.2 per cent of mothers experienced an increase in the frequency of positive interactions; 19.3 per cent did not experience any change; and 46.5 per cent experienced

²⁰ The questions are from the Hungarian version of the Gilford-Bengtson Scale. See: Gilford, R. and Bengtson, V. (1979). Measuring marital satisfaction in three generations: Positive and negative dimensions. *Journal of Marriage and Family*, 41(2), 387–398; Silverstein, M. and Bengtson, V.L. (2008). *Longitudinal Study of Generations, 1971, 1985, 1988, 1991, 1994, 1997, 2000, 2005* [California]. (ICPSR 22100) – Interuniversity Consortium for Political and Social Research; Kopcsó, K. (2018). Scale adaptation. In: Veroszta, Zs. (ed.), *Technical report. Growing Up in Hungary – Cohort '18 Hungarian birth cohort study. Prenatal research, preparational phase. Working Papers on Population, Family and Welfare*, No. 30, Budapest: Hungarian Demographic Research Institute, 24–29.

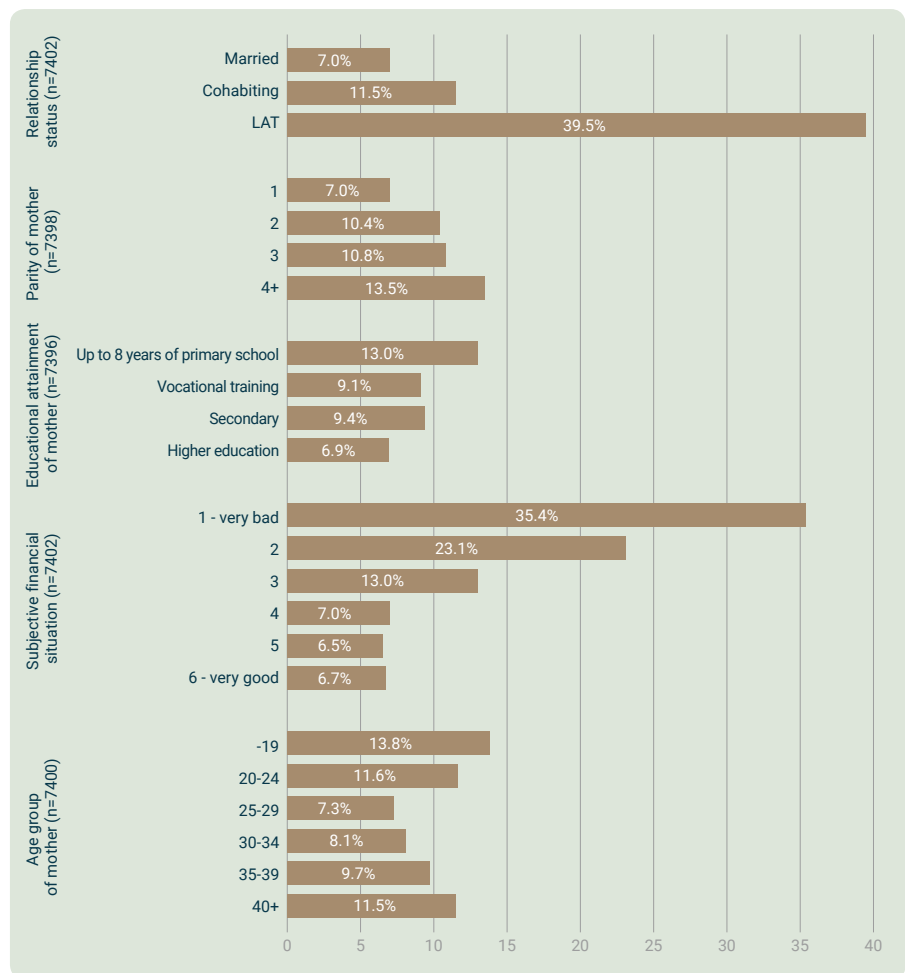
9.1 per cent of mothers in a relationship had thought about ending their partnership.

a decrease after the birth. Similarly, 34.5 per cent of mothers experienced an increase in the frequency of negative interactions; 21 per cent did not experience any change; and the remaining 44.5 per cent experienced a decrease after the birth.

Finally, we asked our participants whether they had thought of divorcing or breaking up with their partner in the past year. Some 9.1 per cent of those mothers in a relationship reported having considered breaking up: 6.6 per cent had thought about it; 1.9 per cent claimed both parties had thought about it; 0.5 per cent were seriously considering a divorce or separation; and 0.1 per cent were actually in the process of divorcing.

Thoughts of breaking up were more prevalent among mothers who were in a LAT relationship or cohabiting; those with multiple children; those with only primary schooling; those whose subjective financial status was poor; and those aged under 20.

FIGURE 4.2.4. THE PREVALENCE OF THE IDEA OR INTENTION OF BREAKING UP, BY SOCIO-DEMOGRAPHIC GROUP - AMONG MOTHERS LIVING IN A PARTNERSHIP

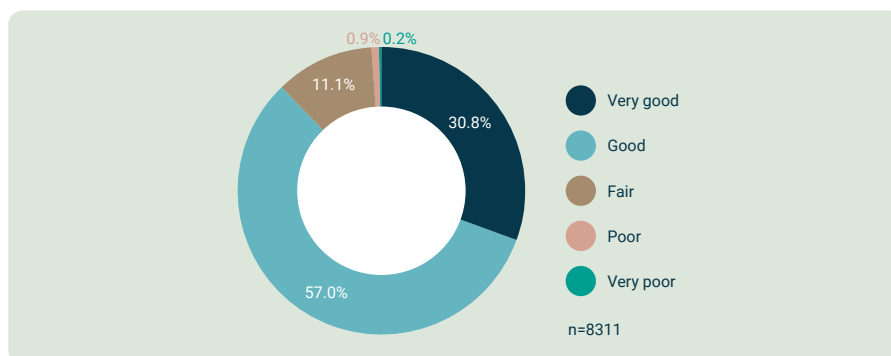


Weighted database (maternal weight)

Issues to do with the health and lifestyle of mothers with a 6-month-old child included perceived health and health problems related to childbirth. We also examined mothers' smoking, alcohol consumption and sleeping habits.

The perceived health of mothers was measured on a five-point scale, as in the survey during the seventh month of pregnancy. Mothers were able to rate their own state of health on a scale from 'very good' to 'very poor'. The results are almost identical to those measured during the pregnancy survey: a very significant proportion of mothers (87.8 per cent) claimed to be in good or very good health. Of those who responded both during the pregnancy wave and when their child was 6 months old, 84.4 per cent had considered their health to be good or very good in the seventh month of pregnancy (and 86.1 per cent had said the same about their health in the 12 months before they became pregnant). If we focus only on the best category – health that is considered very good – we can observe that the proportion of mothers in this category increased by 5.5 percentage points, compared to the seventh month of pregnancy.

FIGURE 4.3.1. MOTHERS' PERCEIVED STATE OF HEALTH WHEN THEIR CHILD WAS AGED 6 MONTHS



Weighted database (maternal weight)

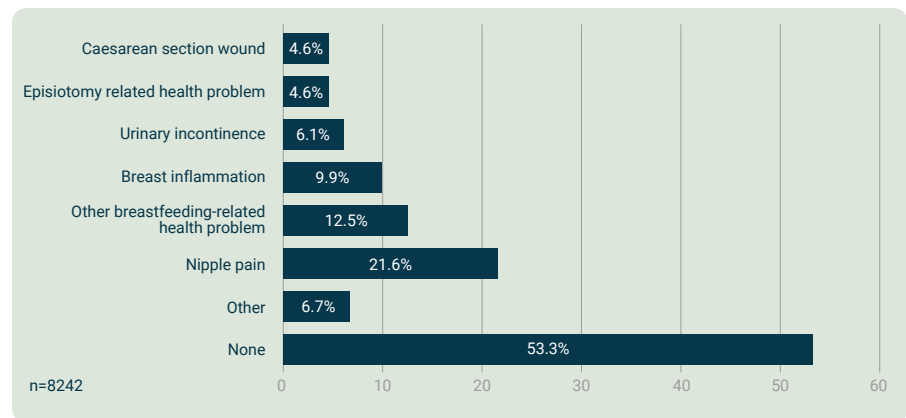
Good/very good perceived health was most prevalent among mothers who lived in the capital; had completed higher education; were in a better financial situation; were under the age of 35; were living with a spouse; and were raising their first child. The biggest difference in this respect was the financial situation: among those who considered it very easy to live on their household income, the proportion of those in good health was one and a half times greater than that of mothers who had great difficulty in making ends meet (94.4 per cent vs. 63 per cent). Among those with at least four children, 12 per cent fewer women considered their health to be good, compared to those with only one child. Educational level also showed a clear correlation with perceived health: 82 per cent of those who had completed at most 8 years of primary schooling were in good health, compared to 91.5 per cent of those with a higher education degree.

Among mothers with the highest income, the proportion of those in good health was one and a half times greater than among mothers with the lowest income.

After giving birth, more than a third of mothers struggled with health problems related to breastfeeding.

In addition to general state of health, we examined the possible negative consequences of childbirth for the health of women. Just over half (53.3 per cent) of the mothers did not complain of having had any problems after labour. The most common problems were related to breastfeeding: nipple pain (21.6 per cent), breast inflammation (9.9 per cent) and other breastfeeding problems (12.5 per cent). Overall, more than a third (35 per cent) of mothers struggled with some form of breastfeeding-related health problem. This proportion was higher among mothers who had just had their first child (42.6 per cent) than among those with at least four children (19.6 per cent). Problematic breastfeeding was also higher among those in the best financial position (41.2 per cent vs. 25 per cent among those in great financial difficulty) and among those with a higher education degree (43.3 per cent vs. 22.7 per cent of those who had completed at most 8 years of schooling). A small, but non-negligible, proportion of mothers – roughly one in 20 – had been affected by problems linked to urinary incontinence, the episiotomy or the caesarean incision. In addition to the above items, the mothers had the opportunity to mention additional negative experiences when interviewed. Many complained of postpartum haemorrhoids, lower and upper back pain, abdominal separation, bladder problems, bleeding and high blood pressure, but psychological problems were also mentioned by several women.

FIGURE 4.3.2. PREVALENCE OF POSTPARTUM HEALTH PROBLEMS AMONG MOTHERS

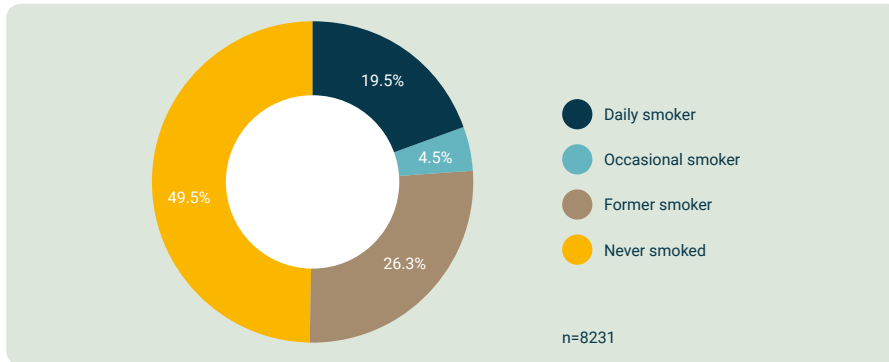


Weighted database (maternal weight)

Regarding the lifestyle of mothers, during the 6-month survey we examined two unhealthy behaviours: smoking and alcohol consumption.

Three months before pregnancy, a third (34.2 per cent) of the mothers-to-be had smoked. More than a fifth of them (22.3 per cent) were still smoking in the first month of pregnancy, and 16.3 per cent were even smoking after the fourth month of pregnancy. Nearly a quarter (24 per cent) of mothers with a 6-month-old baby reported smoking – 19.5 per cent of them daily.

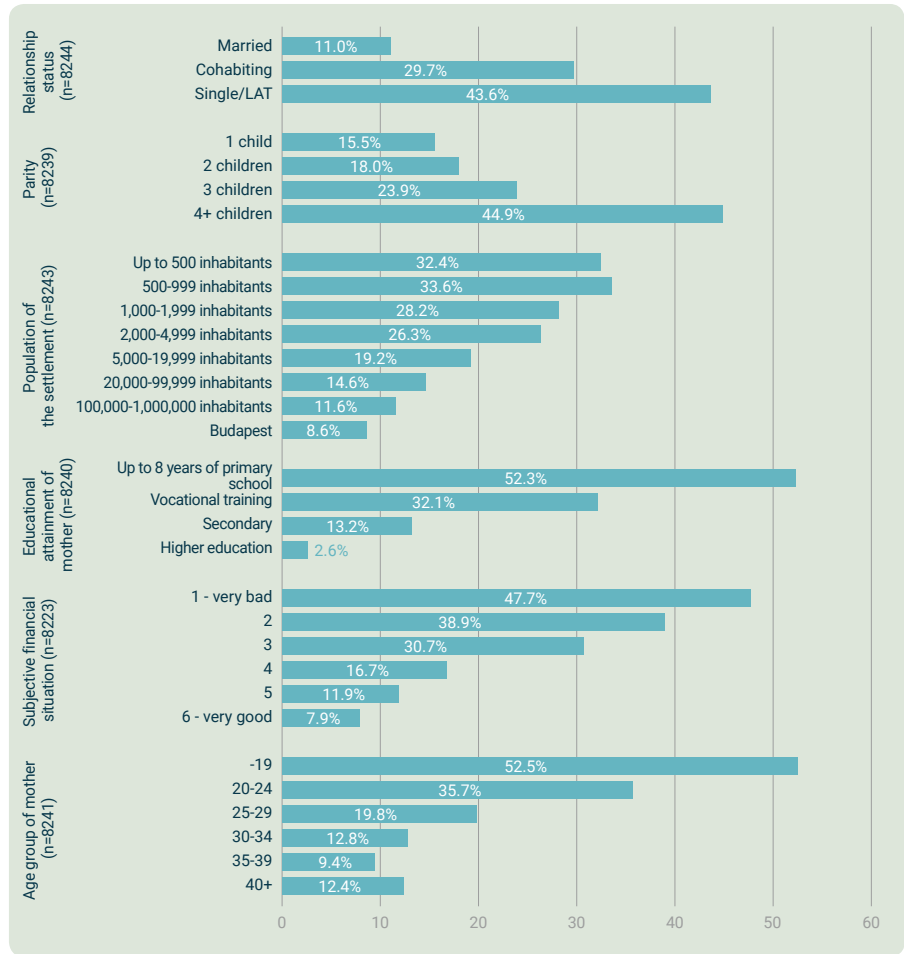
FIGURE 4.3.3. MOTHERS' SMOKING HABITS WHEN THEIR CHILD WAS 6 MONTHS OLD



Weighted database (maternal weight)

Smoking habits are strongly determined by socio-economic position. An outstandingly high proportion of daily smokers is to be found among young mothers; those who live in small settlements; those who have a low level of education; those who experience financial difficulties; those with several children; and those who are single mothers. The biggest variation is seen on the dimension of educational attainment: while only a small minority of mothers with a higher education degree (2.6 per cent) smoke every day, more than half (52.3 per cent) of mothers who have completed at most 8 years of schooling do so. A sixfold difference can be observed between those mothers in the worst financial position and those in the best (47.7 per cent and 7.9 per cent, respectively).

FIGURE 4.3.4. MOTHERS' SMOKING HABITS WHEN THEIR CHILD IS 6 MONTHS OLD



Weighted database (maternal weight)

A fifth of mothers with a 6-month-old smoke on a daily basis, including more than half of mothers with the lowest educational attainment.

Smoking in the vicinity of 6-month-olds

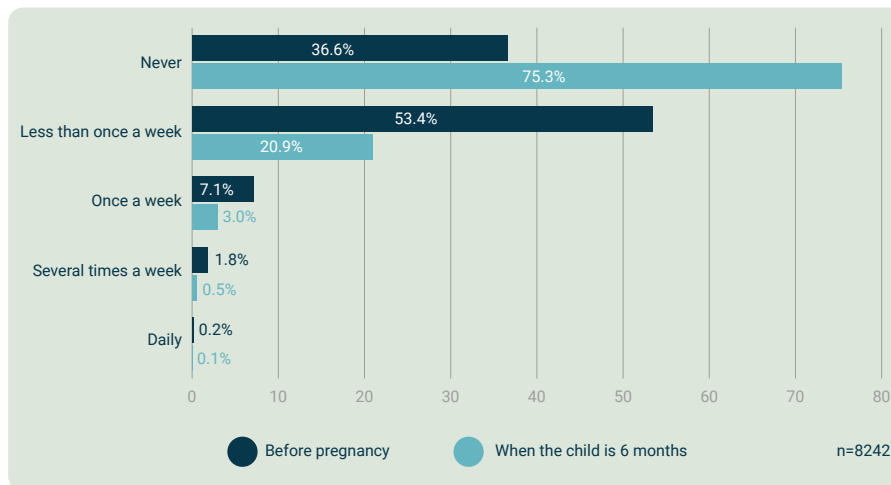
In addition to the smoking habits of mothers, we also examined the extent to which children are directly affected by harmful tobacco smoke. Fortunately, the vast majority of 6-month-olds (91.7 per cent) do not have to endure passive smoking at all; yet 8.3 per cent are sometimes in a room where someone is smoking – and that is the case for 1.5 per cent of them on a daily basis.

The social determinants of children's passive smoking are similar to those observed for maternal smoking. More than a third of the children being raised by mothers who struggle with great financial difficulties (34.6 per cent) are sometimes forced to inhale tobacco smoke; the same goes for a quarter of the children whose mothers are under the age of 20 and who have completed at most 8 years of schooling (24.7 per cent and 24.3 per cent, respectively); more than a fifth (23 per cent) of those whose mothers

have four or more children; and a sixth of those who live in settlements with fewer than 500 inhabitants (17.4 per cent). Maternal smoking is, of course, the most likely way in which a child is exposed to passive smoking; however, it can also occur even if the mother does not smoke: 17 per cent of smoking mothers and 5.6 per cent of non-smoking mothers said that someone smoked regularly in the presence of their child.

Regarding maternal drinking habits, we can see that the proportion of regular drinkers is very low: three quarters of the mothers (75.3 per cent) claimed to be completely teetotal. This figure is more than double what we found for alcohol consumption patterns in the year before pregnancy. Having a child appears to have significantly reduced the frequency of alcohol consumption: while we see some reduction in smoking, the change is far more apparent in alcohol consumption. Only 0.1 per cent of mothers with a 6-month-old child said they consumed alcohol every day, while a further 3.5 per cent said they drank on a weekly basis.

FIGURE 4.3.5. MATERNAL ALCOHOL CONSUMPTION HABITS 12 MONTHS BEFORE PREGNANCY AND WHEN THE CHILD WAS 6 MONTHS OLD



Weighted database (maternal weight)

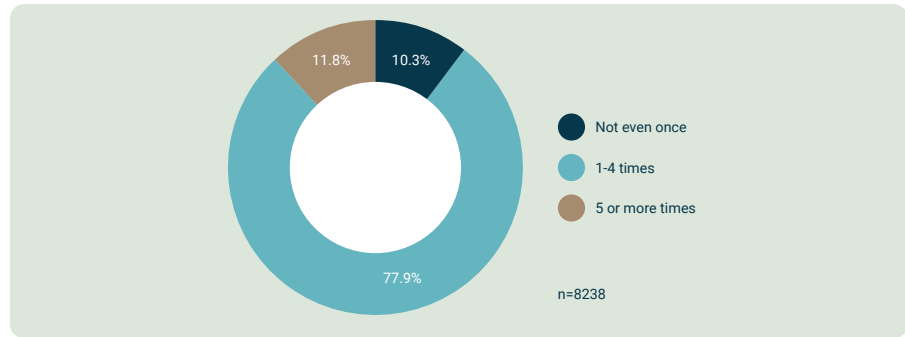
Teetotalers – those who never drank alcohol – were more likely to be young, poorly educated, financially disadvantaged mothers living in smaller settlements and raising several children. At the same time, a lower proportion (65.9 per cent) of those who considered themselves to be in poor health abstained from alcohol, compared to those who regarded themselves as in good health (75.1 per cent).

As well as unhealthy lifestyle behaviours, we also analysed mothers' sleeping habits when their children were 6 months old. Mothers with infants were able to sleep for an average of 6.7 hours a night; nearly half (46.9 per cent) were able to sleep for less than 7 hours and some (1.5 per cent) only managed to get up to 3 hours rest. Sleep at night was mostly intermittent: on average, mothers woke up 2.5 times a night. Only one mother in 10 was lucky enough to be able to sleep through the

90 per cent of mothers with a 6-month-old child were unable to sleep through the night.

night; 11.8 per cent woke up at least five times a night. The most common (26.8 per cent) was waking up twice a night.

FIGURE 4.3.6. NUMBER OF TIMES A NIGHT THAT MOTHERS WITH A 6-MONTH-OLD CHILD WOKE UP



Weighted database (maternal weight)

4.4. Employment and future plans

Turning to the economic activity of mothers with a 6-month-old child, we examined the proportion of participants who had returned to the job market after the birth. Furthermore, we analysed the evolution of the plans for future employment among those mothers who were not yet working.

Just 3.6 per cent of mothers were actively working 6 months after the birth.

In Hungary – due partly to the structure of the family support system and partly to the persistence of traditional views on gender roles – women make extensive use of maternity benefits and stay at home even until their child turns 3, in the process putting their working careers on hold. The notion that a mother's place is at home until her child turns 3 is still strong in Hungarian society, and so the findings of the second wave of data collection are not entirely surprising: only 3.6 per cent of the women were actively working at the time the survey was conducted, when their child was 6 months old. As for their plans for future employment, most women (73.5 per cent) had a definite idea of how old they wanted their child to be before they returned to the labour market; 7.4 per cent planned to return to work only after they have had another child; and 9.2 per cent were planning to start working, although they did not yet know when. Six months after giving birth, 6.2 per cent of the mothers had no plans to work at all.

In terms of their planning, it is clear that the relaxation of the conditions for undertaking work while still claiming GYED/GYES (the payments a woman can receive while on maternity leave – see above) has had an effect, as has the slow modernization of attitudes toward social roles: 25.1 per cent of mothers plan to start or resume work when their child is aged between 1 and 2 years (13–24 months), while 37.4 per cent plan to start working when their child is aged 2–3 years (25–36 months). However, 7.1 per cent of respondents intend to put off entering the labour market until their child is 3 years old (37 months or more).

In terms of individual socio-demographic characteristics, mothers aged 40 and above made up the highest proportion of those who were already actively working when their child was aged 6 months (6.8 per cent). Some 32 per cent of that age group planned to go back to work when their child was aged 1–2 years; and 37.6 per cent planned to return when their child was aged 2–3. It is the younger age groups that are more likely to postpone their future employment plans: only 15.9 per cent of 20–24-year-olds were planning to start working when their child was 1–2 years, and 41.4 per cent were intending to start when their child was 2–3. A similar trend can be observed in the youngest age group (19 years and younger), where 8 per cent of respondents were planning to take a job when their child was 1–2 years, and 37.5 per cent were intending to do so only when their child was 2–3 years old. The highest proportion of ‘uncertain’ respondents – those who were planning to work, but did not yet know when – was to be found in the youngest age groups (16.9 per cent). The idea of waiting to have another baby before going back to work was most common in the prime childbearing age: 11.7 per cent of 25–29-year-olds said they only wanted to go back to work once they had had another child. And the notion of not going back to work at all was most noticeable in the youngest age group, where 22 per cent did not think they would join the labour market. This rate is lowest among 35–39-year-old mothers: only 2.9 per cent of them were contemplating not working again.

More than a third of mothers were planning to go back to work when their child was 2–3 years old.

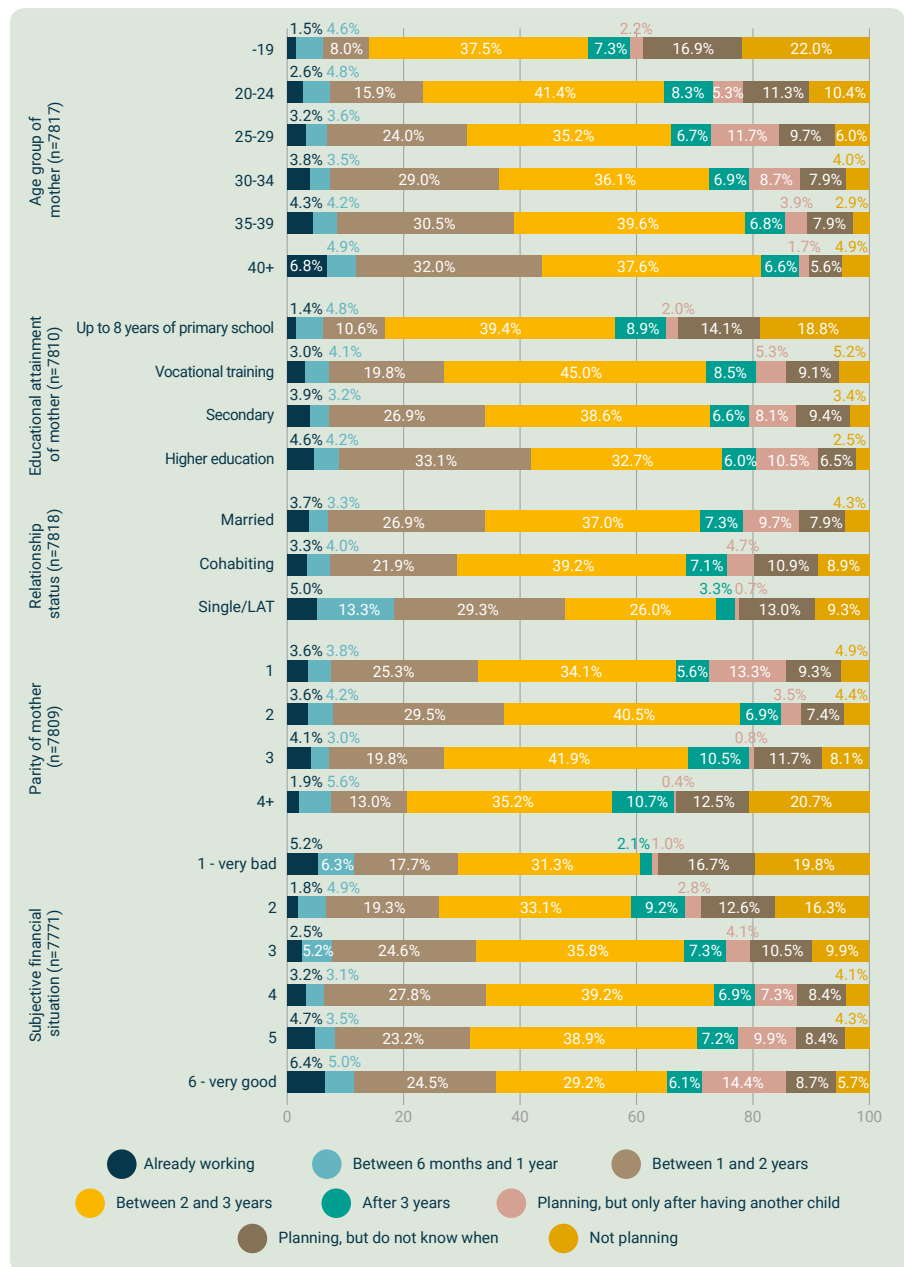
In terms of educational attainment, mothers with a higher education degree were those most likely already to be working when their child was 6 months old (4.6 per cent). Irrespective of educational attainment, it is quite unusual for mothers to plan to go back to work when their child is aged 6–12 months; however, the rates are highest among mothers with at most 8 years of schooling (4.8 per cent) and among those with tertiary education (4.2 per cent). As for plans to resume employment when the child is 1–2 years old, the proportion tends to rise in line with the mothers’ level of education. By contrast, the higher their level of education, the lower the proportion of mothers who intend not to work again or who are uncertain of their plans. With regard to this latter group, it is noticeable that those with secondary education are more likely than those with a vocational qualification to have no concrete plans. While 18.8 per cent of mothers with at most 8 years of schooling were not planning to work again, the figure dropped to 2.5 per cent among mothers with tertiary education.

Turning to partnership status, the proportion of those who were already working (5 per cent) and of those who were planning to go back to work when their child was 1–2 years old (13.3 per cent) was highest among those who lived alone.

As for the number of children, the highest proportion of mothers who were already working when their child was 6 months old (4.1 per cent) was to be found among women with three children. Interestingly, the largest proportion of those who were considering going back to work when their child was 6–12 months (5.6 per cent) was among mothers with four or more children. At the same time, the highest proportion of mothers who had no intention of ever working again (20.7 per cent) was also to be found in this group.

Turning now to subjective income, it would appear that mothers who claimed to have great difficulty in meeting everyday household expenses were those most likely to have gone back to work before their child was 6 months old (5.2 per cent) and also those most likely to intend to start work when their child was 6–12 months old (6.3 per cent). However, the highest proportion of those who were planning never to work again is also to be found among these mothers. While 19.8 per cent of those in great financial difficulty said they did not plan to take a job in the future, the figure was 4.3 per cent among mothers who claimed to be easily able to meet household expenses.

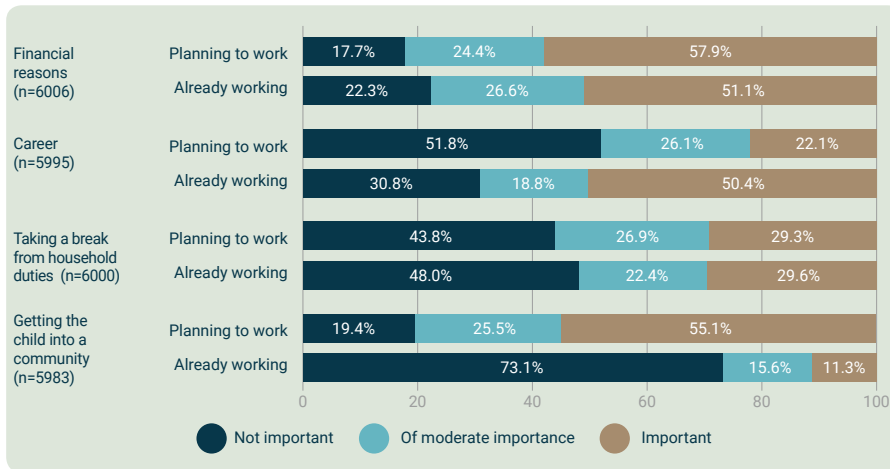
FIGURE 4.4.1. EMPLOYMENT AND EMPLOYMENT PLANS ALONG CERTAIN SOCIO-DEMOGRAPHIC DIMENSIONS



Weighted database (maternal weight)

Observing some of the key aspects of the decision regarding the timing of employment, it seems that most of those who intend to work – beyond the financial reasons – consider it important for their child to become socialized. However, in the case of those who were already actively working, the continuation of their career was also an important aspect, alongside financial reasons. The importance of taking a break from household duties was almost equally important for those planning to work (29.3 per cent) and those who were already working (29.6 per cent).

FIGURE 4.4.2. ASPECTS OF EMPLOYMENT - AMONG MOTHERS WORKING OR PLANNING TO WORK



Alongside financial reasons, the child’s socialization and the mother’s career featured most strongly as motivations for taking a job.

Weighted database (maternal weight)

Workplace rights as a parent

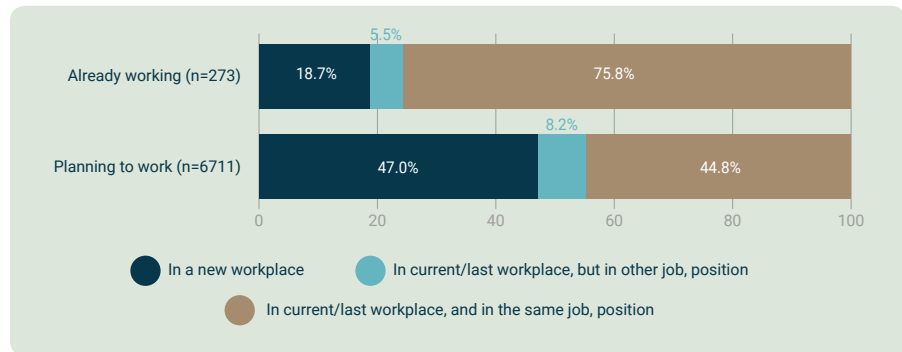
Under the 2012 amendment to the Labour Code, an employer is required to provide part-time employment to any employee with a child under the age of 3 who requests it. Following a 2019 modification to the Labour Code, from 1 January 2020 employees with a single child have been able to apply to work part time until the child turns 4; if the parent has more than one child, the cut-off point has been extended to when the youngest child turns 6 (up from 5). However, at the time of the Cohort '18 6-month wave, this change had not yet taken effect. The question relating to part-time work thus concerned the earlier legislation. The responses revealed that nearly half of the mothers (47.5 per cent) were unaware of the possibility of part-time work and 5.8 per cent were unsure in their knowledge of the legislation.

The majority of mothers (75.8 per cent) who were already working when their child was 6 months old were back at their previous workplace, in the same job or position; 18.7 per cent had taken a completely new job; and 5.5 per cent had returned to their old workplace, but were doing a different job or working in a

different position. Nearly half of the respondents (47 per cent) who were planning to go back to work wanted to find a job at a new workplace, while 44.8 per cent wanted to return to where they had been working before the birth.

FIGURE 4.4.3. PLANNED AND ACTIVE EMPLOYMENT ACCORDING TO PREVIOUS WORKPLACE - AMONG MOTHERS WORKING OR PLANNING TO WORK

75.8 per cent of the working mothers were working at their old workplace, in the same job or position as before they left to have their baby.



Weighted database (maternal weight)

4.5. Summary

The relationship mothers had with their 6-month-old child was of a high quality and was characterized by positive feelings. The vast majority of mothers were generally satisfied with their lives: only 4.7 per cent were moderately satisfied and 2.9 per cent less satisfied than that. Most of the mothers rarely experienced anxiety or depressive symptoms (the figure was somewhat lower than during the pregnancy survey). The incidence of anxiety and depressive symptoms depends somewhat on socio-economic background, and it was higher among mothers who had had similar symptoms during pregnancy. Some 57 per cent of mothers had experienced at least one type of negative life event since the start of their pregnancy, and 19 per cent reported having suffered three or more negative life events. The largest proportion (22 per cent) mentioned health problems during pregnancy. The mothers typically had 3–4 close friends, but 6.7 per cent of them had no close friends. Meanwhile, 29 per cent had five or more friends – down from when the pregnancy survey was conducted, when the figure was 37 per cent. As was the case during pregnancy, the mothers talked most often to their mothers: 85 per cent spoke every week or even more frequently. They also often turned to their friends: 83 per cent spoke at least once a week to a friend. It was very common for those mothers in a relationship to say that they had a pleasant, congenial time with their partner, while conflict situations were rare. Nevertheless, 9 per cent overall had already thought of ending the relationship. Among those in a LAT relationship and those in the worst financial position, more than a third had thought about ending the relationship.

Surveyed when their child was 6 months old, 88 per cent of mothers rated their own health 'good' or 'very good'. However, only 53 per cent did not complain of any postpartum health problems. The mothers slept very little on average – 6–7 hours a night – and typically woke up 2–3 times a night. Around 24 per cent of mothers smoked, most of them every day; 8 per cent of the 6-month-olds were exposed to passive smoking (meaning that they were sometimes in a room with someone smoking). Socio-economic factors – especially financial difficulties and educational attainment – are significantly related to maternal health and smoking habits. As for alcohol consumption, 75 per cent of the mothers reported abstaining completely, while only 3.6 per cent reported drinking at least weekly.

The majority of the mothers with a 6-month-old child were at home with their child, and only 3.6 per cent worked. Mothers aged 40 and over were the age group most likely to be working (6.8 per cent). Most mothers were planning to return to the labour market when their child was aged 2–3 years. As for the reasons that influenced the timing of the planned return to work, leaving aside financial issues, most of the mothers who intended to work considered the socialization of their child to be an important aspect; meanwhile, most of those who were already actively working had chosen to continue their job or career. The majority of those mothers who were already working – 81 per cent – had returned to their previous jobs. By contrast, 47 per cent of those planning to work intended to seek a new job.



5. The Children at 6 months

5.1. Everyday life of 6-month-old children

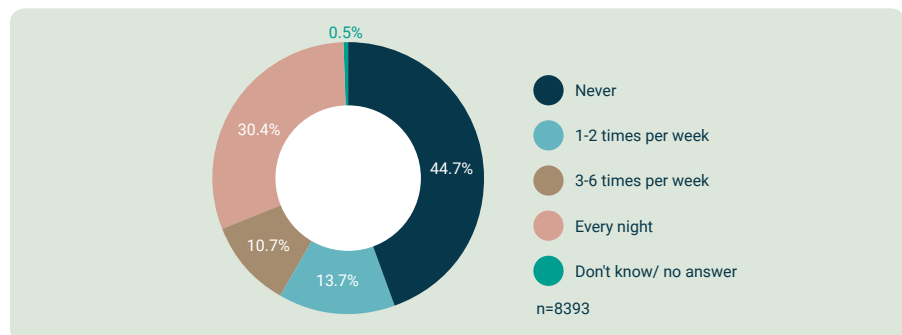
With regard to the daily schedule of infants, we examined their sleeping habits, as well as the topics of crying, the use of pacifiers and bathing. We also analysed the number of nights spent apart from the mother and the reasons for this.

The 6-month-olds were sleeping for an average of 12.5 out of every 24 hours.

According to the mothers,²¹ the 6-month-old infants slept for an average of 3.4 hours during the day (SD=1.6) and 9.1 hours at night (SD=1.6) – a total of 12.5 hours out of every 24. At this age, infants need at least 12 hours of sleep a day; overall, 30.8 per cent of children were sleeping for less than that.

A significant proportion of infants (44.7 per cent) never slept through the night; 24.4 per cent sometimes did so; and 30.4 per cent always did so, according to the mothers. Only 0.5 per cent of the mothers were unable or unwilling to answer this question, indicating that they were fairly certain about their infants' sleeping habits.

FIGURE 5.1.1. FREQUENCY OF SLEEPING THROUGH THE NIGHT



Weighted database (child weight)

69 per cent of the 6-month-old children tended to wake up at night, most of them twice a night.

The 6-month-olds would wake up 0–9 times a night, but on average 1.7 times. We can, however, observe great variability: 30.6 per cent did not wake up at all; 21.4 per cent would wake up once; 22.2 per cent – twice; 13.5 per cent – three times; and 12.4 per cent – four times or more.

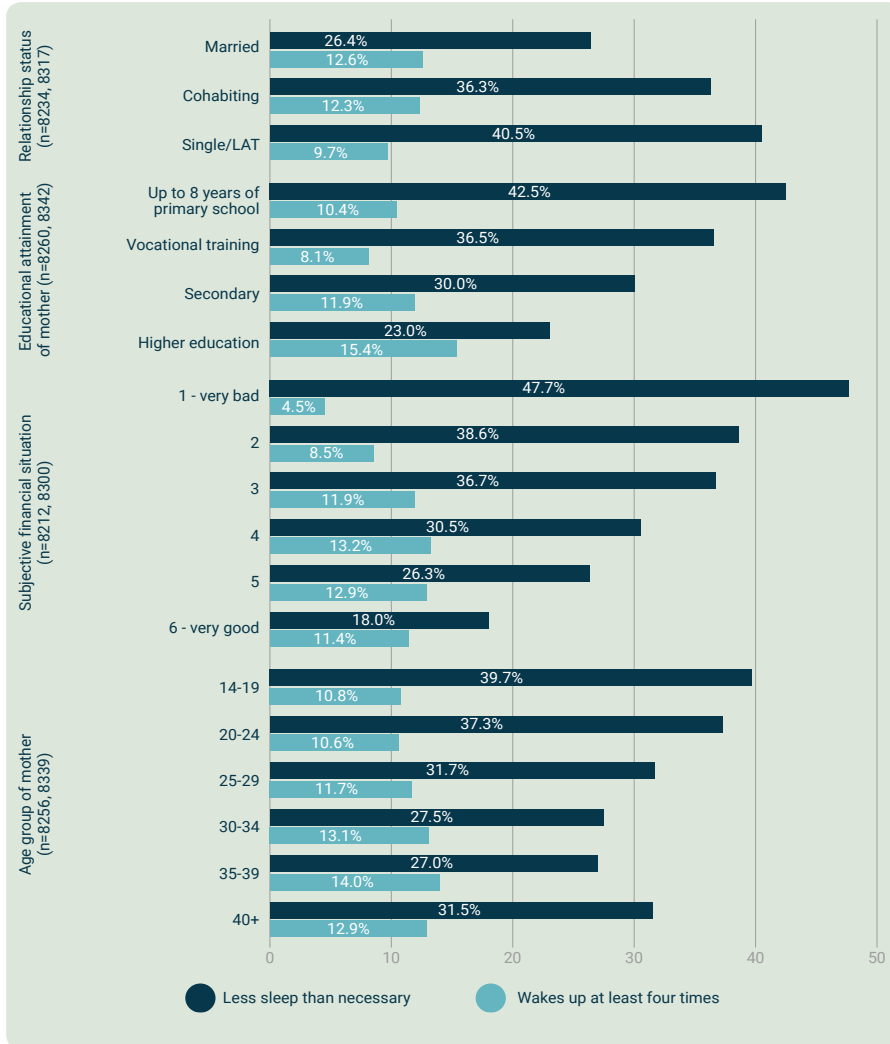
According to their mothers, of those children who sometimes woke up at night (n=5799), the average was 2.4 times a night, with the most commonly reported value being 2.

Problems with sleeping can be classified as either getting less than the required 12 hours of sleep (which was typical for 30.8 per cent of the children) or waking up four

²¹ In some cases (n=33), questions about children were answered not by their birth mother, but by another primary caregiver. Given its low incidence, for the sake of clarity this chapter also refers to them as 'mothers', indicating separately where data are only available from the birth mothers.

times or more (which was true of 12.4 per cent of them). For a 6-month-old child, getting less sleep than required was more common if their mother was unmarried; had a lower level of education; was in a difficult financial situation; and was under the age of 24. Furthermore, although the reports of children not getting enough sleep decreased as the mothers' level of education and financial security increased, the proportion of babies who woke up frequently actually increased.

FIGURE 5.1.2. INCIDENCE OF SLEEP PROBLEMS AMONG 6-MONTH-OLD CHILDREN BY SOCIO-DEMOGRAPHIC GROUP



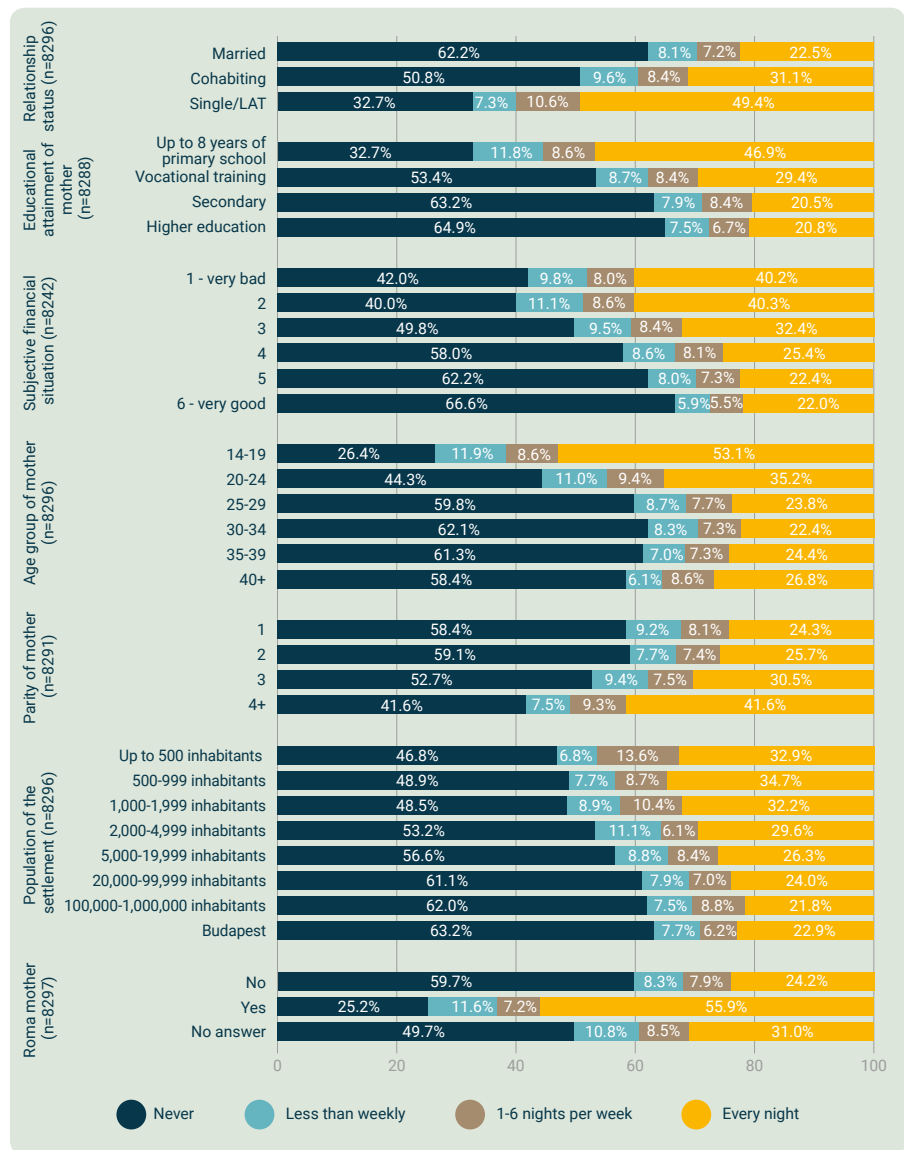
Weighted database (child weight)

In 54.8 per cent of cases, the mothers did not feel at all stressed by the child's sleeping habits (i.e. putting to bed, waking up at night). But others did indicate that they were somewhat (27.1 per cent), moderately (12.1 per cent) or severely (5.9 per cent) stressed by the sleeping habits. The burden on the mothers was, of course, closely related to how often the child woke up at night: 28.7 per cent of those mothers whose children woke up four or more times a night reporting feeling moderately stressed and 22.8 per cent felt severely stressed.

56.6 per cent of 6-month-olds never slept in their parents' bed, while 26.9 per cent spent at least part of every night there.

In terms of bed-sharing, 56.6 per cent of children raised by their birth mother never slept in their parents' bed; 8.6 per cent occasionally did (less than weekly); 7.9 per cent spent 1–6 nights a week in their parents' bed; and 26.9 per cent spent (at least part of) every night in their parents' bed. The socio-demographic background of sleeping with an infant shows a definite pattern: regular bed-sharing by parents and infants was more common if the mother did not live with a partner; had only primary education; was in a challenging financial situation; lived in a small settlement; had other children; and regarded herself as Roma.

FIGURE 5.1.3. FREQUENCY OF SLEEPING WITH A PARENT, BY SOCIO-DEMOGRAPHIC GROUP



Weighted database (child weight)

We asked mothers about their responsiveness to the crying of their babies and about the pressure they felt in relation to this. In 54.1 per cent of cases, the mothers picked their babies up as soon as they started to cry; 45.5 per cent of infants were left to cry and were only picked up if they didn't settle; and 0.4 per cent were picked up while crying only if they would have been picked up anyway. In 18.9 per cent of cases, the mother reported that it was stressful when her child cried.

We also asked mothers about the use of pacifiers at the age of 6 months and about the frequency of bathing. The majority of children (63 per cent) used pacifiers. The vast majority of the 6-month-olds were bathed daily by their parents: 3.1 per cent several times a day; 85.4 per cent daily; 10.9 per cent every second day; 0.5 per cent weekly; and only 0.1 per cent less frequently than once a week.

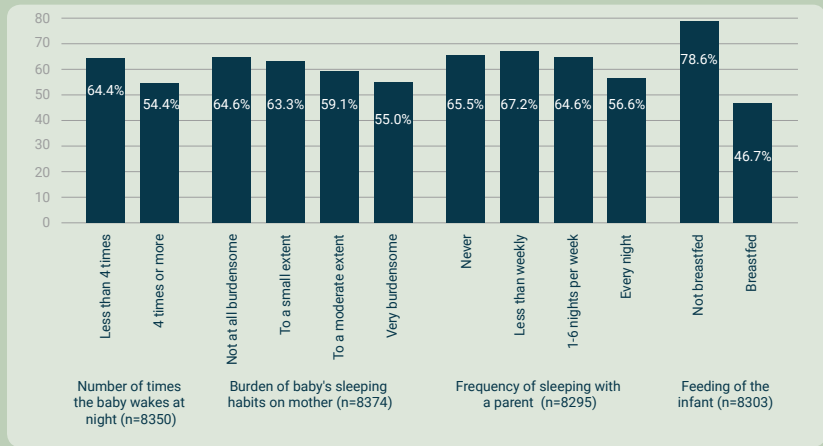
54 per cent of 6-month-olds were picked up immediately if they cried.

What influences pacifier use?

Pacifier use is popular among both girls and boys at the age of 6 months: 64 per cent of boys and 62 per cent of girls used a pacifier, a difference that is statistically insignificant. This rate was unaffected by the number of children a mother had, by the mother's response to crying or by the pressure she felt under when the baby was crying. There was no significant difference between babies who used pacifiers and those who did not in terms of the length of time that they spent asleep.

A lower proportion of those 6-month-old babies who woke up four times or more a night, whose sleeping habits were stressful for the mother and who regularly slept with their parents used pacifiers. At least in part, this may have to do with breastfeeding. When it came to the children's feeding habits, the frequency of pacifier use varied considerably: 47 per cent of infants who breastfed used pacifiers, compared with 79 per cent of non-breastfed children.

FIGURE 5.1.4. RATE OF PACIFIER USE, ACCORDING TO CERTAIN SLEEPING AND BREASTFEEDING CHARACTERISTICS OF THE INFANTS

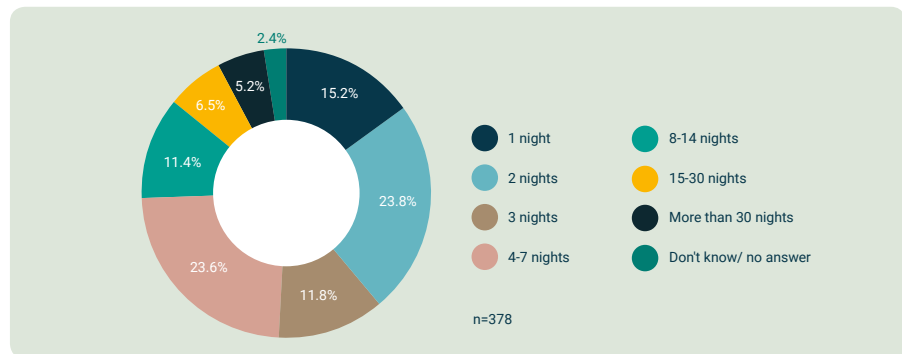


Weighted database (child weight)

Regarding time spent apart from the mother, we found that the vast majority of the children being raised by their birth mother (95.5 per cent) had not spent even two days (one night) apart. Only 4.5 per cent of the babies (378) had spent at least two days apart from their mothers since they were born. Within this group, the number of nights spent apart varied greatly – from 1 night to 180 nights; the average was 8.96 nights (SD=18.97) and the most frequently reported response was 2 nights.

FIGURE 5.1.5. NUMBER OF NIGHTS SPENT APART FROM THE MOTHER IN THE 6 MONTHS SINCE BIRTH - AMONG CHILDREN RAISED BY THEIR BIRTH MOTHERS WHO HAD TO SPEND AT LEAST ONE NIGHT APART FROM THEIR MOTHERS

Only 4.5 per cent of 6-month-olds had spent at least two days apart from their mothers.



Weighted database (child weight)

Regarding the reason for time spent apart, the mothers of 368 of the children provided free text answers: 57 per cent of those 6-month-olds had spent at least one night apart from their mother, usually for health reasons – typically illness or hospitalization of the mother, the infant or a sibling; in 31 per cent of cases, it had been because the parents had been engaged in some form of recreation or leisure activity – travel, vacation or attending a wedding. Other responses included giving the child an opportunity to spend time with the grandparents; work or educational commitments; relationship conflicts; and various crisis situations (e.g. imprisonment, bereavement). The number of nights spent apart depended, of course, on the reason for the separation. If the mother cited 'recreation', the average number of nights spent apart was 3.3 (SD=3.2); but the number could be significantly higher if the mother cited 'health' (average 10.7; SD=17.3) or 'other' reasons (average 16.0; SD=36.8).

Feeding children

5.2.

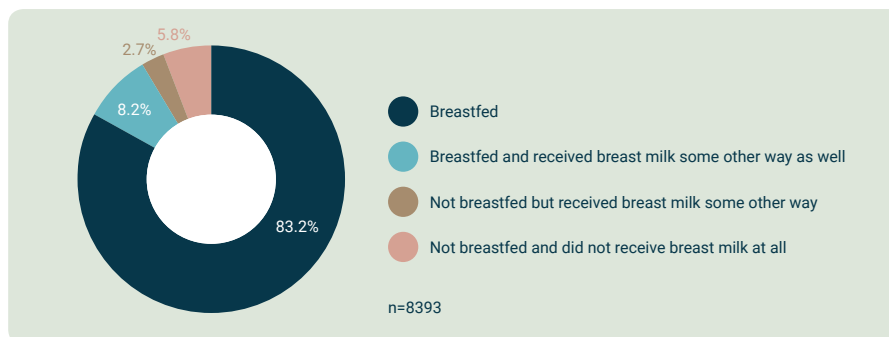
We mapped the breastfeeding plans of expectant mothers during the pregnancy survey. At the time of the 6-month wave, we examined whether the plans for breastfeeding had been fulfilled; whether complementary feeding had begun; and if so, when.

Many professional organizations stress the importance of mothers breastfeeding: breastfed children are healthier, have a lower chance of becoming obese in later life, score higher on intelligence tests, and later go on to achieve more at school. In addition, breastfeeding has a beneficial effect on maternal health: it reduces the risk of ovarian and breast cancer. According to the World Health Organization, exclusive breastfeeding is definitely best for babies up to the age of 6 months, but it recommends complementary breastfeeding (up to 2 years of age), with half of the child's energy intake between 6 and 12 months of age coming from breast milk, and a third between 12 and 24 months.²²

At the time of the pregnancy survey, the vast majority of mothers (98 per cent) planned to breastfeed their baby – 91.8 per cent exclusively and 6.1 per cent in combination with formula. The proportion of unsure responses was 1.4 per cent and only 0.6 per cent said they would feed their baby using formula alone.

In the majority of cases, the plans had come to fruition: 94.2 per cent of the children in the cohort were receiving breast milk, almost all of them (91.4 per cent) being breastfed by their own mother; 8.2 per cent of them were breastfed and also received breast milk some other way. The proportion of children whose mothers were unable to breastfeed but who ingested breast milk some other way was 2.7 per cent; 17 children (5.8 per cent) went entirely without breast milk.

FIGURE 5.2.1. BREASTFEEDING OF CHILDREN



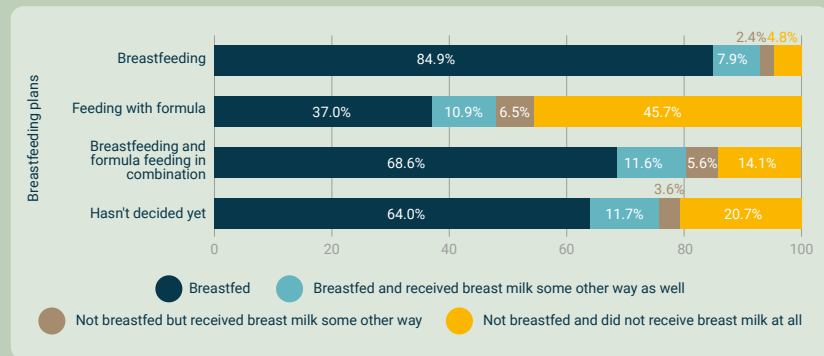
Weighted database (child weight)

²² World Health Organization (2021). Infant and young child feeding. <https://www.who.int/news-room/fact-sheets/detail/infant-and-young-child-feeding>

Breastfeeding plans and their fulfilment

Of those children whose mothers had planned only to breastfeed them, 84.9 per cent were indeed breastfed exclusively; unfortunately, however, 4.8 per cent of that group did not receive any breast milk at all. Interestingly, more than half of those children whose mothers had planned not to breastfeed, did in fact receive breast milk (although we should not rush to any conclusions here, due to the small number of cases).

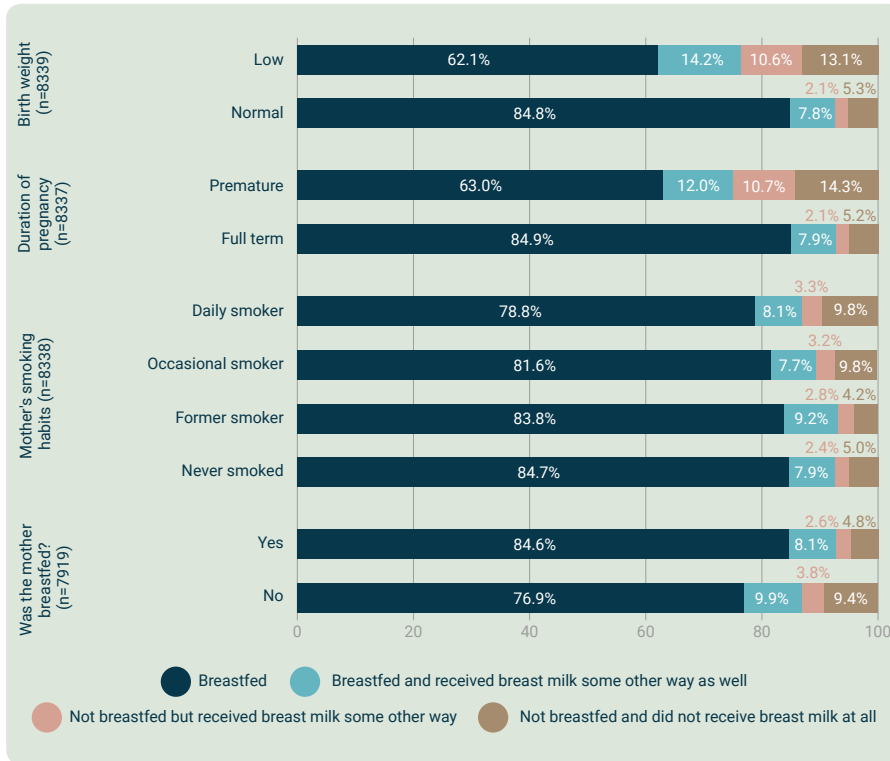
FIGURE 5.2.2. BREASTFEEDING PLANS DURING PREGNANCY AND BREASTFEEDING AFTER THE BIRTH



Weighted database (child weight)

The mothers' socio-demographic background played only an insignificant role in determining whether breastfeeding occurred. The age, education, partnership status and place of residence of the mothers showed no strong correlation with whether the infant received breast milk or not. The mothers' financial position had a greater impact: 78.6 per cent of those in financially straitened circumstances breastfed their children exclusively, while the figure for those in the best financial position was 84.1 per cent. Among those mothers in the worst financial category, one in 10 of their children did not receive breast milk at all (9.8 per cent), whereas in families with few financial worries the proportion was only 3.8 per cent. The number of children in the family also affected breastfeeding to some extent: exclusive breastfeeding was most common if the child was the mother's first (80.5 per cent); meanwhile it was among children with at least three siblings that the lowest rate of not breastfeeding at all was recorded (8.6 per cent). The mother's lifestyle also had an impact on breastfeeding: babies whose mothers smoked every day had a lower rate of breastfeeding generally, and a higher proportion of them were not breastfed at all (9.8 per cent). Interestingly, there was also a correlation between breastfeeding and whether the mother herself had been breastfed: the children of mothers who had not been breastfed were twice as likely not to receive breast milk as those who had been. Some other characteristics of the cohort children also influenced breastfeeding: the proportion of exclusively breastfed infants was much lower among infants with low birthweight (<2,500g) and preterm infants (<37 weeks) – 62.1 per cent and 63 per cent, respectively.

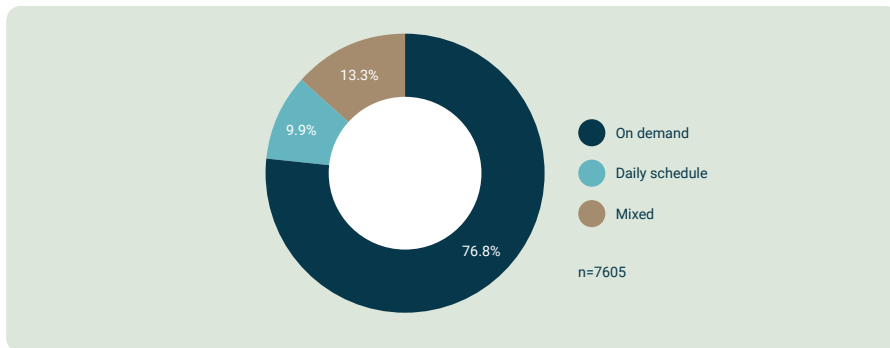
FIGURE 5.2.3. BREASTFEEDING OF CHILDREN ACCORDING TO CERTAIN MATERNAL AND CHILD CHARACTERISTICS



Weighted database (child weight)

In most cases (76.8 per cent) breastfeeding followed the latest recommendations and occurred in line with the child’s needs, i.e. on-demand breastfeeding. In around 10 per cent of cases, the mother believed the daily routine should take priority, and so the baby was breastfed only at predetermined intervals. In the case of one child in seven, while the mother considered routine to be important, on occasion the child’s needs were also taken into account.

FIGURE 5.2.4. WAYS OF BREASTFEEDING CHILDREN - AMONG BREASTFEEDING MOTHERS

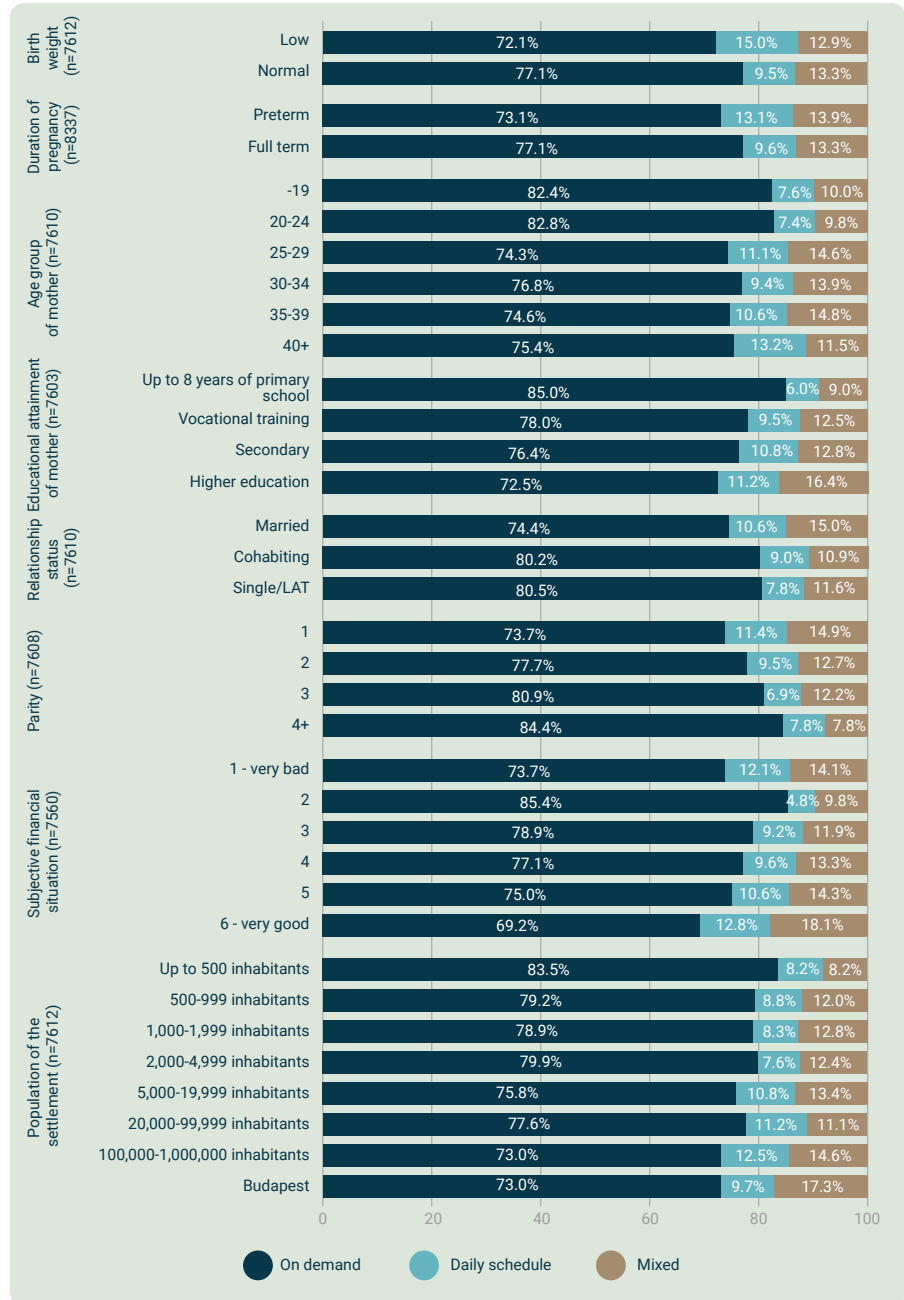


Weighted database (child weight)

A smaller proportion of premature and low-birth-weight infants were breastfed.

On-demand breastfeeding was lower among preterm and low-birthweight children, and a higher proportion of them were breastfed according to a daily schedule. If we look at the characteristics of their mothers, we find that the children who were more likely to be breastfed on demand were those born to younger women; those with a lower level of education; those living in smaller settlements; those who had several children; and those who were in a worse (but not the worst) financial situation.

FIGURE 5.2.5. WAYS OF BREASTFEEDING AND THE MOTHER'S CHARACTERISTICS
- AMONG BREASTFEEDING MOTHERS



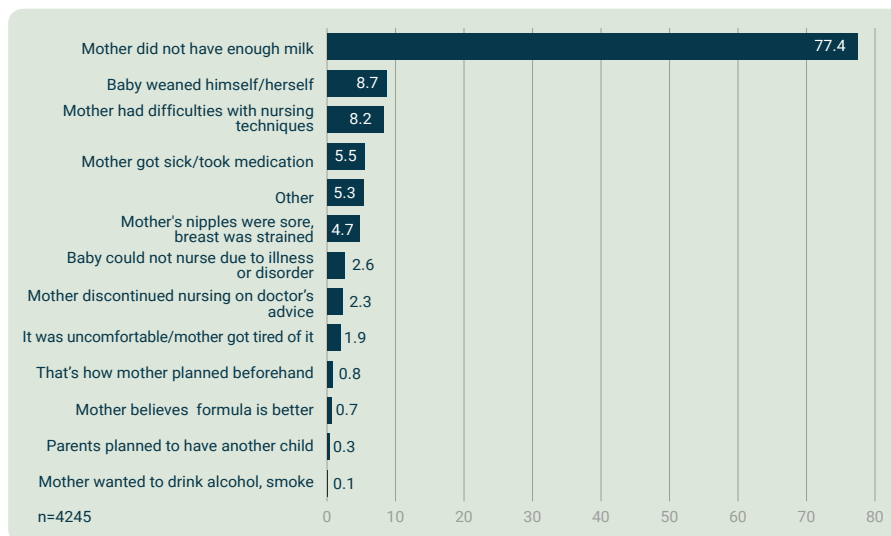
Weighted database (child weight)

Although the recommendations state that exclusive breastfeeding is the best option for children up until the age of 6 months, the survey found that only just over half (57.3 per cent) of those babies who had been breastfed were still receiving breast milk at 6 months, while only 27.3 per cent were still being breastfed exclusively. If, on the other hand, we look at all babies – i.e. including those who had never been breastfed by their mother – we can say that just over half of 6-month-olds were still being breastfed (53.9 per cent). At 4 weeks, 86.4 per cent of the babies had been breastfed (65.8 per cent exclusively), but at 12 weeks the figure was no more than 68.2 per cent (48.9 per cent exclusively).

Just over half of all 6-month-old children were still being breastfed.

The main reason for stopping (or not starting) breastfeeding was that the mother did not have enough milk (77.4 per cent). Breastfeeding techniques had been a problem for many; but in many cases, it was illness (or health problems) on the part of the mother or the infant that was the underlying reason. The proportion of those who mentioned personal convenience in this regard was negligible.

FIGURE 5.2.6. REASONS FOR STOPPING BREASTFEEDING - AMONG MOTHERS WHO WERE NOT BREASTFEEDING THEIR 6-MONTH-OLD BABIES



Weighted database (child weight)

Those who were had never breastfed were more likely to mention difficulties with breastfeeding techniques (15.8 per cent) and the mother's or the child's illness (8.4 per cent and 7.7 per cent, respectively).

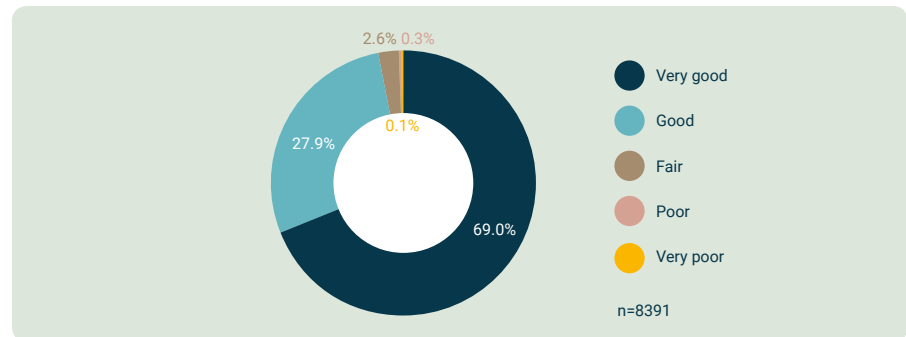
Every sixth infant (16.2 per cent) had (also) been fed formula since birth; but overall, 60.5 per cent of the 6-month-old children had had formula at some point since they were born, and only two fifths had never received formula. In all, 3.8 per cent of the 6-month-olds had not yet had any food other than breast milk and baby food; most had tasted other food or drink for the first time at 16 weeks (17.3 per cent) or 20 weeks (12.2 per cent). The most common types of food at the start of weaning were fruit (apples, peaches, bananas) and vegetables (potatoes, carrots, pumpkin); drinks included water and tea.

5.3. Infants' health

We also examined the health of 6-month-olds, looking at their general health and at the frequency of occurrence of congenital or later-onset conditions. In addition, the survey covered any injuries that may have occurred, as well as accidents and other health issues that required hospital treatment.

The vast majority of the 6-month-old children (96.9 per cent) were assessed by their mothers as being in 'good' or 'very good' health generally. Overall, the proportion of children considered to be in poor health was less than 0.5 per cent (2.6 per cent were in the intermediate 'fair' category).

FIGURE 5.3.1. THE GENERAL HEALTH OF 6-MONTH-OLDS, ACCORDING TO THEIR MOTHER

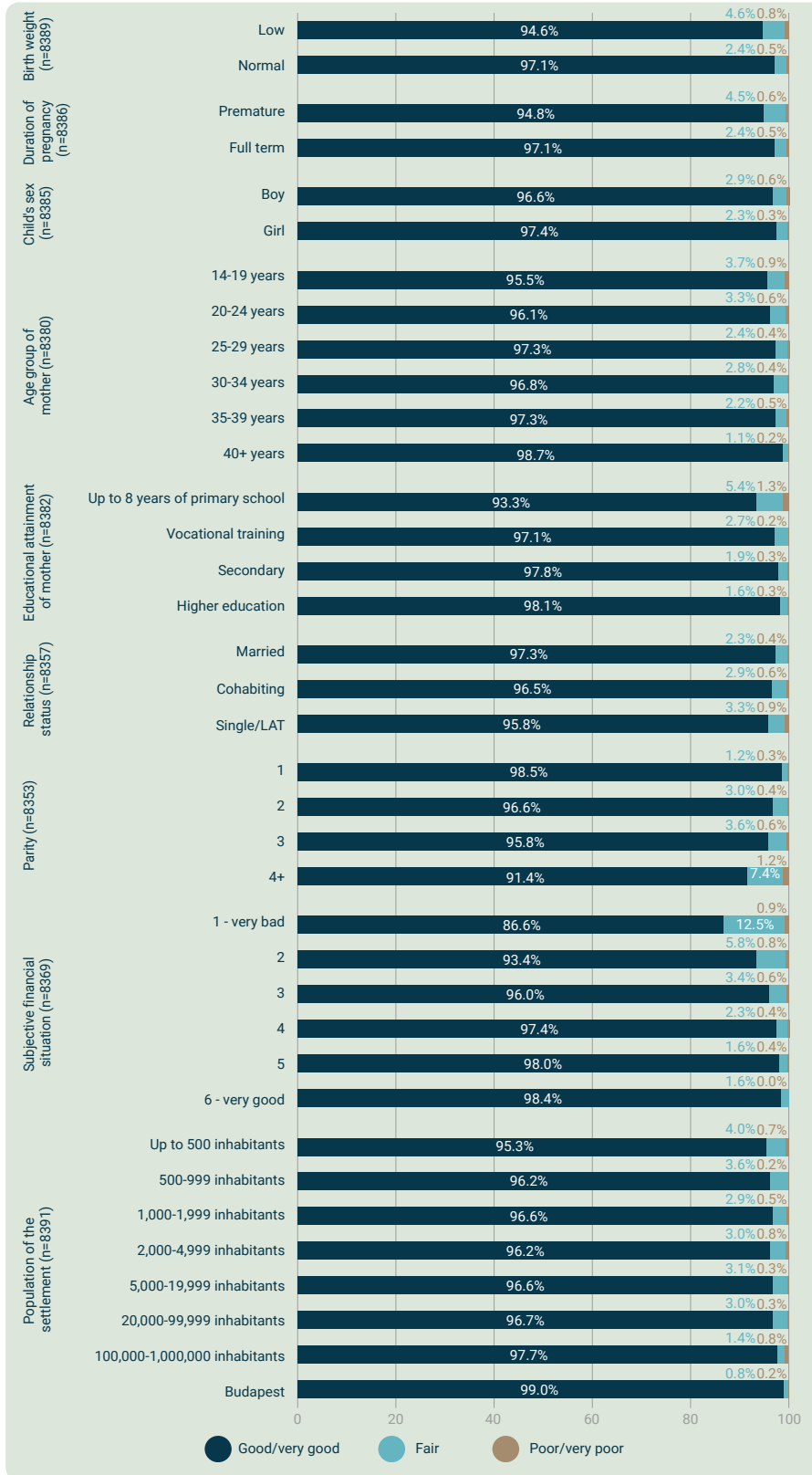


Weighted database (child weight)

Families living in the worst financial conditions have lower rates of healthy children.

Since the vast majority of the children were (fortunately) in good health, we cannot speak much of any significant differences in terms of either the background of the mothers or other background characteristics of the children. The only significant difference lay in the financial situation of the mothers: only 86.6 per cent of children whose families faced major financial difficulty were in 'good' or 'very good' health, whereas the figure was 98.4 per cent for children from families in the best financial situation. Other than that, we can highlight some small differences: the proportion of children in 'good' or 'very good' health was lower among those born premature or with low birthweight; among those with an older sibling; and among those whose mother was under the age of 20, had a low level of education, lived in a smaller settlement and had no cohabiting partner.

FIGURE 5.3.2. THE GENERAL HEALTH OF THE 6-MONTH-OLD BABIES, ACCORDING TO CERTAIN CHARACTERISTICS OF THE MOTHER AND THE CHILD



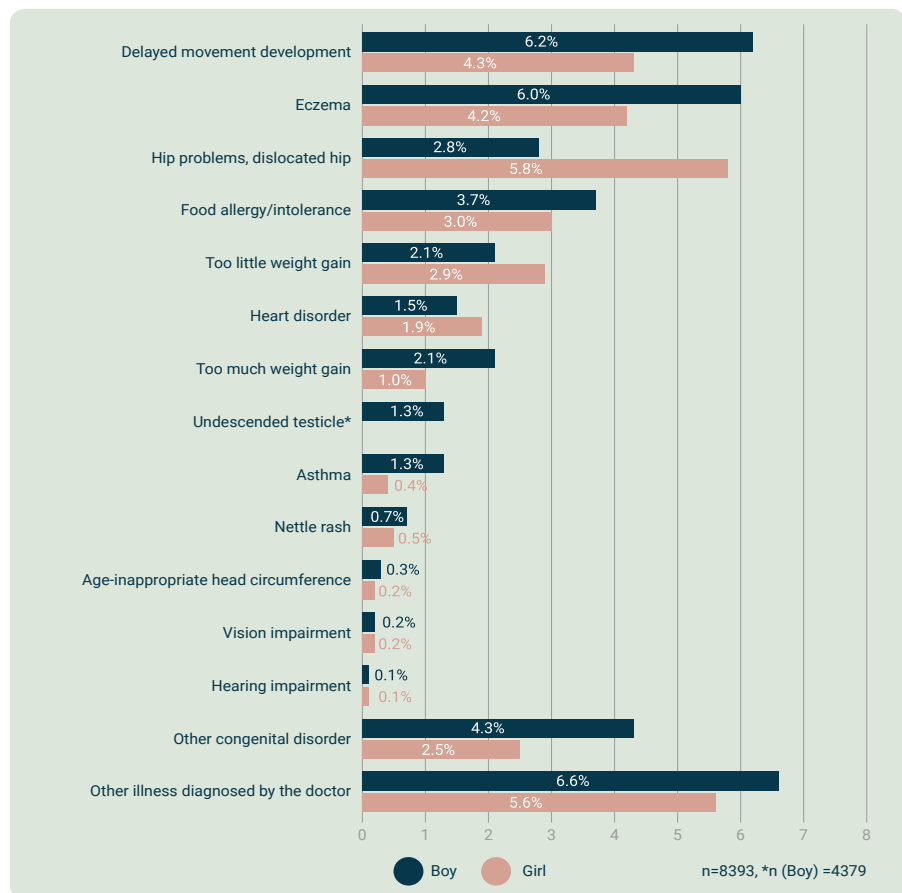
Weighted database (child weight)

Although almost without exception mothers described their children as generally being healthy, if we look at the incidence of specific diseases we find that some children who were otherwise considered healthy had had health problems at some point in their 6 months. Less than three quarters of the 6-month-olds (71.4 per cent) had had no illness or congenital disorder, while the remainder had had one (22.8 per cent) or more (5.8 per cent).

The most frequently mentioned problem was delayed movement development, which occurred in 5.3 per cent of children. Furthermore, eczema occurred at a similar rate (5.1 per cent). Hip problems or a dislocated hip had been experienced by 4.2 per cent, and food allergies were a concern in 3.4 per cent of the children. Other problems that affected more than 1 per cent of the children included too little weight gain (2.5 per cent), excessive weight gain (1.9 per cent) and heart problems (1.7 per cent).

While there was no significant difference in the general health of boys and girls, gender differences could be observed in the incidence of certain conditions. Boys were more likely to experience delayed movement development, eczema, asthma, food allergies and excessive weight gain. Girls, on the other hand, were more likely to have hip problems, heart problems and too little weight gain.

FIGURE 5.3.3. INCIDENCE OF ILLNESSES AND BIRTH DEFECTS IN 6-MONTH-OLD CHILDREN, BY SEX

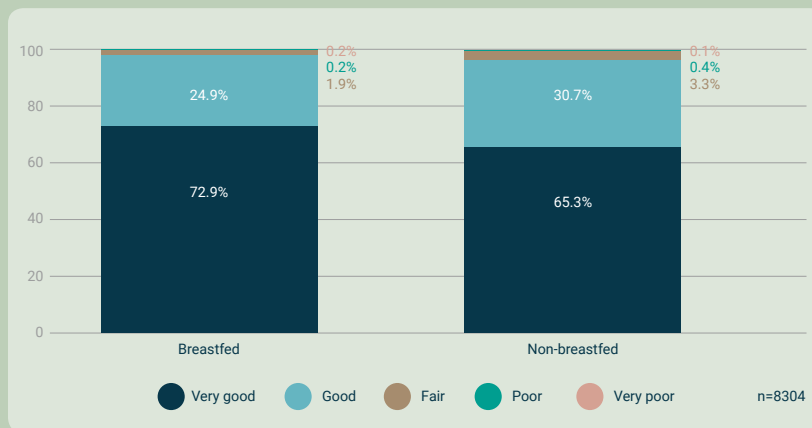


Weighted database (child weight)

Breastfeeding and children's health

Breastfeeding is recommended in literature as it has beneficial effects on the health of both the mother and child, and on the development of the child. At the present stage of our survey, we are not yet able to examine the long-term effects of breastfeeding; but we can look at whether there was a difference in the health of children who still receive breast milk at the age of 6 months and those who were no longer being breastfed. While the vast majority of children were fortunately in good health, a higher proportion (72.9 per cent) of those still being breastfed were deemed by their mothers to be in very good health than those who were no longer being breastfed (65.3 per cent).

FIGURE 5.3.4. GENERAL HEALTH OF 6-MONTH-OLD CHILDREN STILL BEING BREASTFED AND NO LONGER BEING BREASTFED, AS ASSESSED BY THEIR MOTHERS



Weighted database (child weight)

Among breastfed children, the proportion of those who did not have any illness or congenital disorder was slightly higher (72.9 per cent) than among those who were no longer receiving breast milk (69.8 per cent). Of the various illnesses, asthma and food allergies were the most common among children who were not being breastfed at 6 months. A higher proportion of non-breastfed children were in hospital (16.4 per cent) than their breastfed counterparts (10.1 per cent).

It should be mentioned, however, that we do not wish to draw premature causal conclusions from the data, as the relationship could be two-way: it is possible that the infant did not receive breast milk due to illness, health problems or spending time in hospital; but it is also a possibility that breastfeeding has a preventive effect in terms of the occurrence of illness. Clarification of this requires more in-depth analysis.

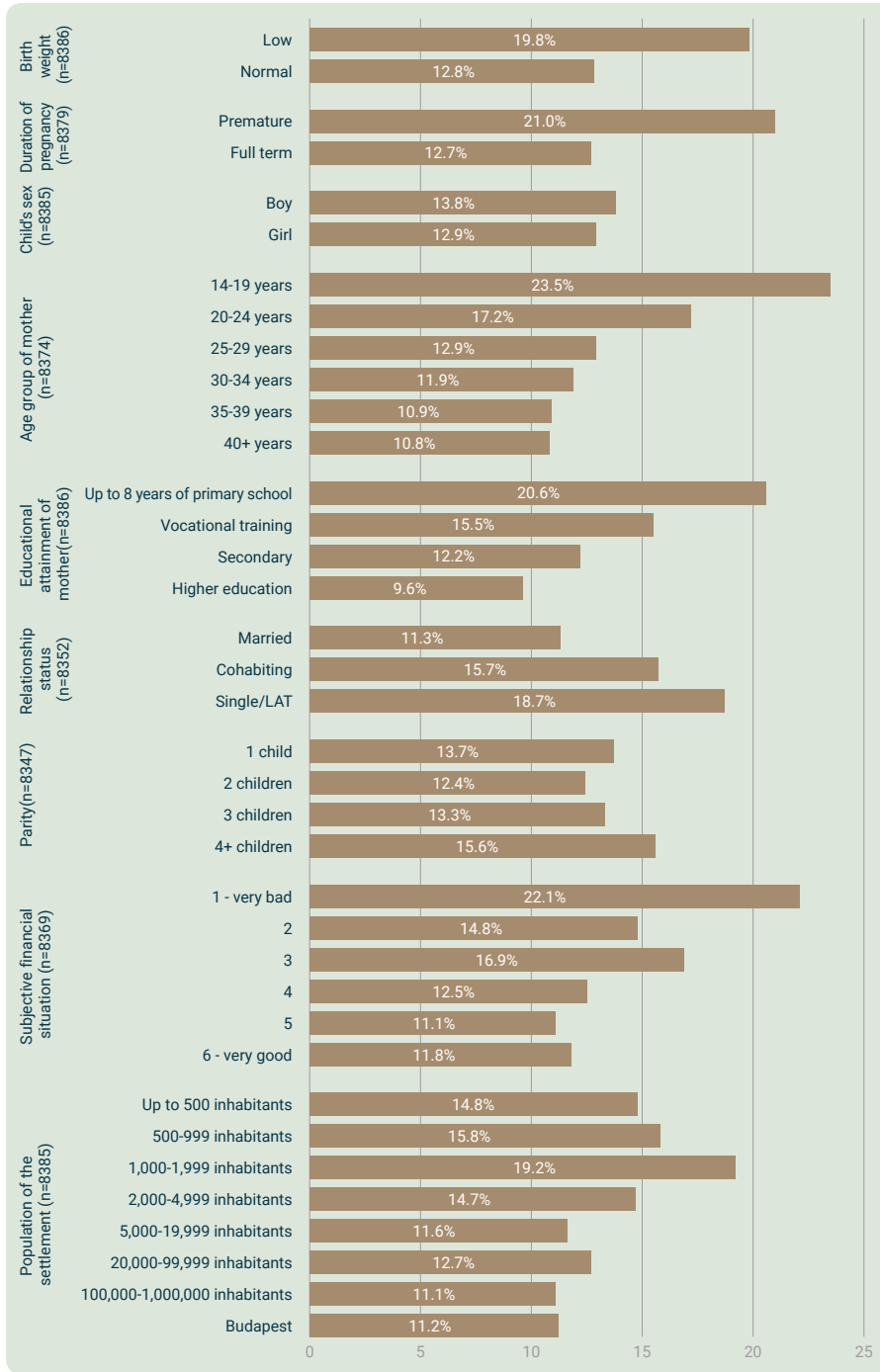
In addition to the various illnesses, we also assessed the proportion of children who had been admitted to hospital at some stage in their first 6 months. Apart

One in seven of the 6-month-olds had spent time in hospital.

from because of the birth, one baby in seven (13.3 per cent) had been to hospital. In a small proportion of cases, this had not necessarily been due to their own health: the child could have been admitted to hospital, for example, because of the mother's (or sibling's) illness. Excluding these cases, those admitted to hospital spent an average of 5 days on a ward: 15 per cent spent only one night in hospital; 83.7 per cent spent up to a week; and the remainder spent longer there.

Unsurprisingly, children born prematurely and with low birthweight were more likely to have been admitted to hospital after the birth – one and a half times more likely than those born full term and with normal weight. No significant gender difference can be detected in this regard. When socio-demographic factors are taken into account, however, it can be concluded that the mother's background had an impact on whether her child was admitted to hospital: the children stood an increased chance of being admitted to hospital if their mothers were young, had a low level of education, were living in poor financial conditions and were not living with their partner. First children had a slightly higher rate of hospital admission than children who had older siblings; however, having more than one sibling actually increased the chance of further hospital stays. Hospital admission was higher in smaller settlements with fewer than 2,000 inhabitants. If we break the smaller settlements down even further, we see that children living in settlements with a population of 1,000–2,000 were the most vulnerable in this respect: almost one in five had spent time in hospital during their first 6 months.

FIGURE 5.3.5. FREQUENCY OF HOSPITAL TREATMENT (WITH OVERNIGHT STAY) AMONG 6-MONTH-OLD CHILDREN, ACCORDING TO CERTAIN CHARACTERISTICS OF THE MOTHER AND THE CHILD



Weighted database (child weight)

The reasons for hospital admittance were manifold, but common cases included: viral infections, prolonged high fever, asthma attacks, other respiratory problems, diarrhoea, vomiting, dehydration, jaundice, pneumonia, nutritional and weight-gain problems, as well as accidents and injuries.

Accidents and injuries affected 1.4 per cent of children in their first 6 months. The most common accident was falling out of bed, but several had tumbled out of the pushchair, off a swing or from a lounge chair. A family member could (unintentionally) have provided the cause of the injury: for example, a mother may have tripped with her baby in her arms.

As the number of cases was small, no significant differences emerge when we look at social background. However, there are two points that can be made: first children are slightly more likely to have an accident than are infants with a sibling or siblings; and children who live in larger settlements are more at risk – 2.9 per cent of 6-month-olds in the capital had had some sort of injury, whereas in settlements with a population of fewer than 100,000 the incidence was around 1 per cent.

5.4. The infant's temperament

In our research, we examined the behaviour and attitudes of 6-month-old children towards external and internal stimuli in relation to their temperament. This was based on their behaviour in the week before the survey.

Temperament is a personality trait that we possess from birth and that is relatively stable throughout our lives.²³ With regard to temperament traits, we can see great diversity among children early in infancy: this is manifested in a tendency to be anxious and get upset; in positive emotions; and in the ability to focus and maintain attention.

The temperament characteristics of the 6-month-old children were measured using a 15-item questionnaire based on parental evaluation.²⁴ The items referred to children's reactions to different situations. The parent (in most cases the mother) had to respond, according to how often the child displayed the behaviour mentioned in the statement in the week before the survey. Their answers were given on a seven-point scale (1 = Never; 7 = Always), and a 'Not applicable' option was also available if the child had not been observed in the situation described during the past week, so that the respondent could not provide an accurate answer.

The items in the series of questions were divided into the following three categories: Negative Affectivity, Positive Affectivity and Orientation and Regulatory Capacity. These dimensions were measured by five items in each case. The questions belonging to the Positive Affectivity dimension asked about the infant's motor activity, extraversion and expression of positive emotions (smiling, laughing) – henceforth referred to as surgency. The Negative Affectivity questions related to how often a child became irritated in stressful situations. The Orientation and Regulatory Capacity dimension asked about the child's self-regulation and re-

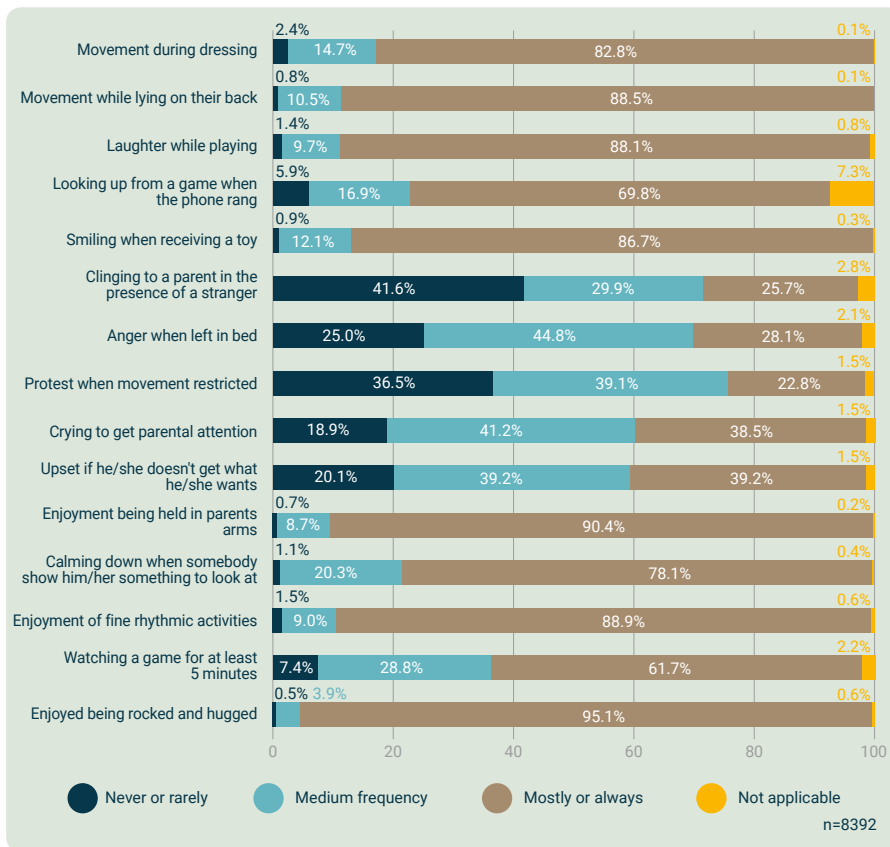
²³ Buss, A. and Plomin, R. (1984). *Temperament: Early developing personality traits*. London and New York: Psychology Press.

²⁴ Veroszta, Zs., Boros, J., Fábrián, I., Kapitány, B., Kis, R., Kopcsó, K., Leitheiser, F., Szabó, L. and Spéder, Zs. (2022). *Féléves kutatási szakasz. Technikai riport. Kohorsz '18 Magyar Születési Kohorszvizsgálat [The 6-month wave. Technical Report. Cohort '18 – Growing Up in Hungary]*. Kutatási Jelentések 105. KSH Népeségstudományi Kutatóintézet, Budapest. DOI: 10.21543/Kut.2022.105.

sponsiveness, ability to be reassured, and reaction to physical contact (henceforth self-regulation and responsiveness). The total score of the three dimensions was calculated by averaging the responses.²⁵ Thus, the minimum was 1 point and the maximum was 7 points.

For the items measuring surgency and self-regulation and responsiveness, the mean score was the same – 6.3 points; for negative emotional states, it was less – 4.1 points. Thus, based on the frequency of occurrence, we can say that the parents reported negative emotional aspects of their child’s behaviour less often. By contrast, a greater proportion of parents experienced surgency and self-regulation and responsiveness in their child’s behaviour.

FIGURE 5.4.1. DISTRIBUTION OF RESPONSES BY MOTHERS CONCERNING THEIR CHILD’S BEHAVIOUR IN THE WEEK BEFORE THE SURVEY



The mothers reported behaviour that suggested surgency, self-regulation and responsiveness in their child more frequently than behaviour indicating a negative emotional state.

Weighted database (child weight)

Some 39.2 per cent of the mothers reported that their child had been mostly or always upset when they hadn't got what they wanted in the week before the survey; 69.8 per cent said their child had looked up most times or always when the phone had rung in the previous week; 90.4 per cent found very often or always that their child enjoyed being held; and 95.1 per cent said the child had enjoyed being rocked or hugged.

²⁵ Aggregate scale values were calculated if the mother responded to at least four items on that subscale.

'Not applicable' was treated as a missing answer when we summarized the scale: for most questions, no more than 0.1–2.8 per cent of mothers chose this option. Most 'Not applicable' answers were in response to the question about how often the child had looked up from a game when the phone rang during the previous week: 7.3 per cent of mothers responded 'Not applicable' to this item.

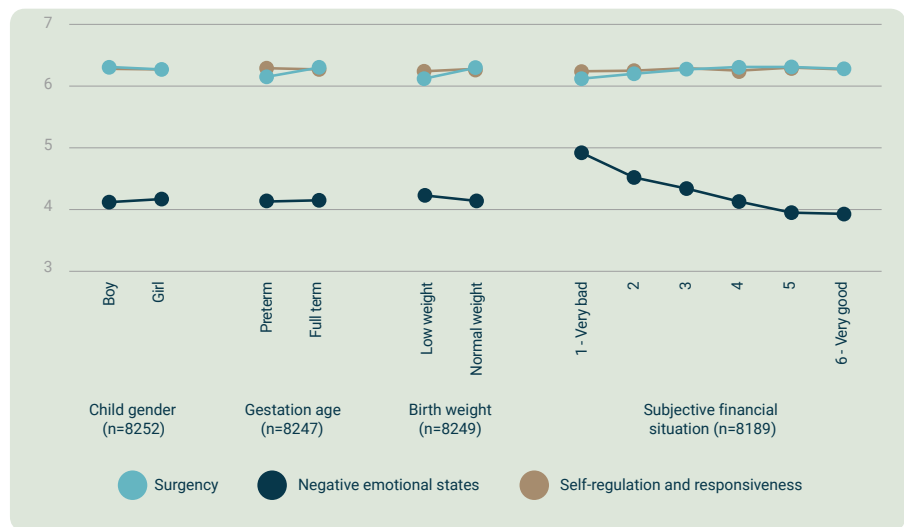
Signs of surgency were more frequent in boys than in girls in the week prior to the survey. In addition, preterm infants showed lower surgency rates than those born full term;²⁶ and children with low birthweight displayed a lower level of surgency than those with normal birthweight.²⁷

As for behaviour that indicated a negative emotional state, we found a higher average score among children whose households, according to the mother, found it hard to make ends meet than among those 6-month-olds whose households had no such problems.

The degree of children's self-regulation and responsiveness did not correlate with the socio-demographic indicators examined.

FIGURE 5.4.2. AVERAGE SCORES FOR THE TEMPERAMENT DIMENSIONS IN EACH SOCIO-DEMOGRAPHIC GROUP - AVERAGE POINT SCORE)

The general activity and surgency at 6 months of those children who had been born preterm or with low birthweight was slightly lower than among the other children.



Weighted database (child weight)

²⁶ In our calculations, preterm infants included children born before the 37th week of gestation.

²⁷ Low-birthweight children in our calculations were babies born under 2,500 grams.

Summary

The 6-month-old infants slept for an average of 12.5 hours per day: 3.4 hours during the day and 9.1 hours at night. Almost a third of the children slept for less than the recommended minimum for this age of 12 hours a day. A significant proportion of the 6-month-old children (44.7 per cent) never slept through the night. Some 56.6 per cent never slept in their parents' bed, while 26.9 per cent shared a bed with their parents every night. The vast majority of the 6-month-old babies were bathed daily by their parents. In all, 4.5 per cent had spent at least two days apart from their mothers in their 6 months. More than half (54.1 per cent) were picked up by their mother immediately they started crying, and in 18.9 per cent of responses the mother reported that it was stressful for her when her child cried. Some 94.2 per cent of the 6-month-olds had access to breast milk, and the majority (91.4 per cent) were breastfed by their own mothers; the proportion whose mothers could not breastfeed but who had breast milk by other means was 2.7 per cent; meanwhile 5.8 per cent went entirely without breast milk. In most cases (76.8 per cent), breastfeeding occurred on demand, though this figure was lower among preterm and low-birthweight infants: a higher proportion of them were breastfed according to a predetermined schedule. Although exclusive breastfeeding is still recommended at the age of 6 months, less than half of the 6-month-olds were still breastfeeding (53.9 per cent). The main reason for a mother stopping (or not starting) breastfeeding was that she did not have enough milk (77.4 per cent). Every sixth infant (16.2 per cent) had (also) been fed formula since birth, but overall 60.5 per cent of children had had formula at some point in their 6 months. In 96.9 per cent of cases, the mothers considered their 6-month-old children to be in 'good' or 'very good' health generally. Overall, the proportion of children deemed to be in poor health was less than 0.5 per cent. Some 71.4 per cent of the 6-month-olds did not have any illness or congenital condition; for the remainder, the health issue mentioned most frequently was delayed movement development (5.3 per cent). Boys were more likely to experience delayed movement development, eczema, asthma, food allergies or excessive weight gain. Girls, on the other hand, were more likely to have hip problems, heart abnormalities or too little weight gain. Excluding the birth, one child in seven (13.3 per cent) had been admitted to hospital. Injuries and accidents had affected 1.4 per cent of the children in their first 6 months.

As for the temperament of the 6-month-olds, the mothers reported more signs of positive emotional behaviour (surgency, self-regulation and responsiveness) in their children than negative emotional states (anxiety). At 6 months, the activity and surgency of those babies born premature or with low birthweight was less than among children born full term and with normal birthweight. Surgency was also less pronounced among girls than among boys.



