



Pregnancy in Hungary

Report on the First Wave of the Cohort '18 – Growing Up In Hungary

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Foreword

The Cohort '18 Growing Up In Hungary longitudinal research programme was launched back in 2017 by the Hungarian Demographic Research Institute of the Hungarian Central Statistical Office. It is another in a series of significant social research projects undertaken by the institute.

This volume describes the main findings of the first wave of the study. It includes reflections on earlier Hungarian child growth studies and international study trends, as well as on the survey of expectant mothers.

The timeline for the study is ambitious: it is due to last until the 2018 birth cohort is grown up. And the range of topics studied is just as extensive. The aim is to identify the complex factors that determine what it is like for a child to grow up in Hungarian society today. Consequently, our study covers the way in which socio-demographic background, family, economic situation, institutional provisions and many other external influences all have the power to shape a child's development right from the foetal age.

Those children who were born in 2018, of whom about 8,500 are participants in the cohort study, offer a snapshot of what it is like to grow up in Hungary. Their experiences will inform the study – and indeed society – in the years to come.

This volume – the first study report of the Cohort '18 – Growing Up In Hungary – represents the first stage in this major social research undertaking, and I commend it to interested readers.

Zsolt Spéder

Director

HCSO Hungarian Demographic Research Institute

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The Team Working on the Cohort '18 Study

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Acknowledgements

The Cohort '18 - Growing Up In Hungary follows and monitors the growth of children born in Hungary. In doing so, we take a peek into the lives of families, and we ask many sensitive and private questions of those women who have agreed to participate in the study on behalf of their unborn cohort child. A great many – a total of 8,287 pregnant women – decided to honour us with their trust and agreed to answer our questions. First and foremost, we would like to take this opportunity to thank them. With the help of the survey data acquired, we promise to present important and clear results, in order to arrive at an answer to the main question posed by our study: What is it like to grow up in Hungary today?

The initial sample of the Cohort '18 Study and the first two waves of data collection relied on the district health visitor system and the health visitors who work within it. The Hungarian pregnancy care system – the health visitors' district network – provides substantial, high-quality care to families that are expecting a child. This network has provided a solid basis on which to win over expectant mothers and persuade them to participate in the study, and has enabled their responses to be collected in a professional, yet trusting environment and manner. We are grateful to the 721 cooperating health visitors and 64 senior health visitors working within the 52 nursing districts that form the study sample. Thanks to their cooperation, we knew that the basic data collection for our study was in good hands and that we could have confidence in the results we obtained.

The Cohort '18 Study has been accompanied by lively professional interest and significant (professional) support, right from the earliest preparations. Several domestic and international scholars within the field of the social sciences supported the initiative and contributed to the creation of its methodological and conceptual foundations through professional discussions, expert board meetings and consultations, or through their work on preparatory materials, background studies and expert opinions. We would like to thank those scholars who participated in our joint effort for the opportunity to work with them on the launch of the Growing Up In Hungary.

In addition to the institute's internal resources, we were able to count on the help of external partners from many fields to implement our nationwide data collection. We thank those experts who have worked with us for supporting the successful completion of the first wave of the Cohort '18 study.

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Facts about expectant women



8287 persons
participated
in the research



54.4%
are married



34.5%
have a degree

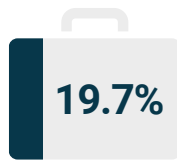
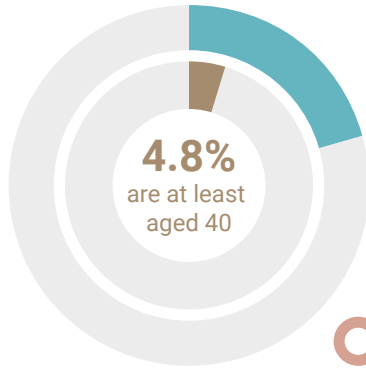
20.8% are under the
age of 25



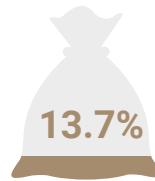
9.2%
have no work experience



95.4%
use social media



19.7%
worked actively in
the seventh month
of pregnancy



13.7%
are not satisfied with
their financial situation



29.1%
are definitely satisfied
with their life



59.2% contact their mother
on daily basis



are expecting their
first child



are planning to have
another child later



66%
consciously planned to
have children



7.6%
became pregnant
with medical
assistance



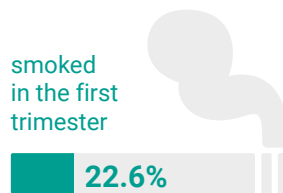
30.5%
used only private
gynaecological care



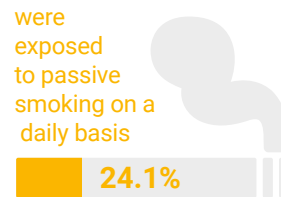
21.6% have some kind of
chronic illness



24.1% exercise regularly



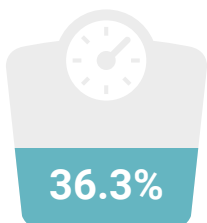
smoked
in the first
trimester



were
exposed
to passive
smoking on a
daily basis



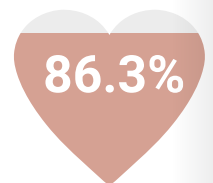
74.6%
took folic acid in
the first trimester
of pregnancy



were overweight
or obese before
becoming pregnant



body weight increased
average of **9.3 kg**
by the end of the seventh
month of pregnancy



86.3%
reported positive
feelings about
their pregnancy



72.5%

would like their child's
father to be there during
childbirth



want to exclusively breastfeed their new-born baby

91.8%



15.7%
struggle with significant
anxiety symptoms

Facts about families expecting a child



82.5%

are single-family households



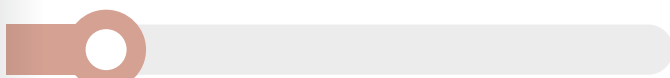
4% have no running water



6.9% have no GP care at their place of residence



77.9% have a car

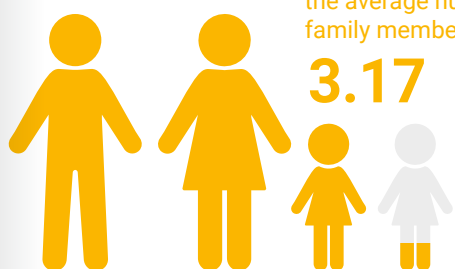


14.9% live in a rented apartment



36.2%

have less than one shelf of books



the average number of family members is

3.17



the father is on average

3.5 years

older than the mother



2.3% neither of the parents was employed



7.5% can only cover their household expenses with difficulty



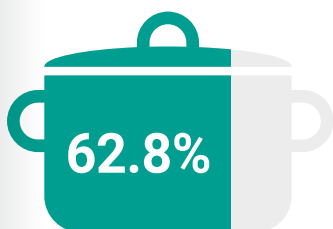
85.6%

can count on outside financial help if there is a problem



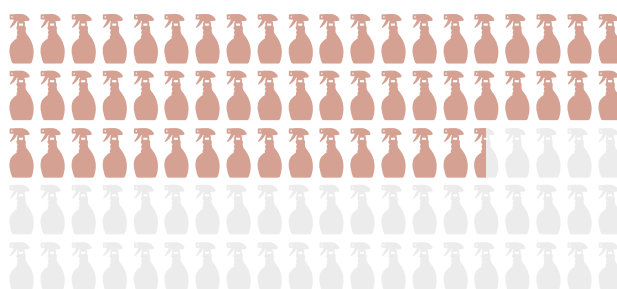
62.8%

had a vacation last year



62.8%

regard cooking as the responsibility of the mother



55.4%

regard cleaning as the responsibility of the mother



1. The Cohort '18

1.1. About the study

WHAT IS IT LIKE TO GROW UP IN HUNGARY TODAY?

The Hungarian Demographic Research Institute (HDRI) of the Hungarian Central Statistical Office (HCSO) undertook to answer this question when it launched its Cohort '18 - Growing Up In Hungary in 2017. This longitudinal research project aims to describe what it is like as a child to grow up in Hungary and what the influencing factors are.

In this birth cohort study, the common starting cohort constituted those children due to be born in a single period (2018/19). The monitoring of their development started at the foetal age, during maternal pregnancy; the study envisages further waves, with follow-up investigations when the cohort babies are aged 6 months, 18 months and 3 years. Our plan is to follow the children included in the study until they reach adulthood. On the one hand, the cohort study seeks to capture different aspects of development, such as physical, cognitive and emotional development, health, well-being, performance and mobility. On the other hand, it examines the factors that determine childhood growth, along with the relationships and interactions between them. These might include family and social environmental factors, social/origin differences, health status and psychological characteristics, as well as institutional provision and the employment status, lifestyle, expectations and plans of families that are raising children.

The Cohort '18 study is primarily a classical sociological survey; but in addition to using the knowledge base created by the study for scientific purposes, its findings will also inform the work of the social care system, the child protection system, public health professionals, service providers, government actors and non-governmental organizations, helping them to achieve more efficient operations and to make better decisions. In addition, the findings of the study will, over time, also serve as a source of information for the public, building awareness around childbearing practices.

The research programme is unique in the sense that, while the vast majority of cohort studies commence after the birth of a child, the Cohort '18 study began by surveying expectant mothers. The importance of a survey conducted during pregnancy lies in the fact that experiences during the antenatal period relate closely to the development of many later life events. This method allows us to collect data on pregnancy directly, rather than retrospectively, and to acquire information on subjective opinions and attitudes that is not available in medical, hospital or (district) health visitor records. At the same time, it also means that the first data collection takes place at a particularly delicate stage, and touches on sensitive issues. For this very reason, we enlisted health visitors in collecting data on pregnant women. The unique feature of the Hungarian network of health visitors is that it covers essentially the entire country. Moreover,

health visitors are experienced in dealing with pregnant women, and a relationship of trust develops between them over time. Finally, having health visitors collect the data allows a lot of additional information to be garnered about expectant mothers and the course of the pregnancy. It has proved very useful to have this information included in the study (having been transferred along with the pregnancy care book).

The Cohort '18 study is part of a priority project of the EFOP-1.9.4-VEKOP-16-2016-00001, Renewal of Methodology and Information Systems in the Social Sector, within the framework of an EU-funded project.

Participation in the study is voluntary and by invitation; the terms of participation and the management of participants' data are governed by a strict and transparent protocol.

Ways of analysing cohort studies

1.2.

Birth cohort studies are among the most complex types of inquiry; yet at the same time, they hold out the greatest scientific and practical prospects in social science research. Using cohort data, we can look at the development of a birth cohort with some considerable accuracy. However, interpreting the results of such studies requires greater attention and methodological rigour on the part of both the reader and the researcher.

One group of data on birth and (early) childhood refers to a specific life event: a statistical data sheet describing the new-born child and its parents is filled in at birth; at the age of 3 years, a status survey performed by health visitors assesses characteristics specific to this age; and later on, competency tests determine the level of knowledge of students in a given school year, etc. The analyses and statistics derived from these data always refer to facts pertaining to the given year: in 2018, for example, 56 per cent of women who gave birth were married, whereas in 2019, the figure was 61 per cent.

Another set of data examines not life events, but rather groups. It provides a cross-sectional picture of those who belong to a particular group. For example, the 2016 Hungarian Youth Study examined people aged 15–29 in that particular year. But censuses and micro-censuses also provide cross-sectional pictures of society as a whole at a given point in time.

Follow-up (so-called longitudinal) studies are inquiries that examine the same population several times, consecutively, returning to the same group of people over and over again; thus, changes in the measurements recorded over time can be interpreted not only at the aggregate, but also at the individual level. A successful series of snapshots can dynamically represent people and groups in motion, while also providing an accurate cross-sectional image.

The Cohort '18 - Growing Up In Hungary focuses on a relatively narrow group within Hungarian society: children born in 2018/19, their mothers, caregivers, families and

the surrounding social institutional system (nurseries, kindergartens, etc.). However, in relation to this observed group, it combines life event data collection and cross-sectional measurements. We hope that the repeated cross-sectional measurements will form a dynamic knowledge base that describes the group, which will also make it possible to learn about the processes and causal relationships underpinning it. At the same time, precisely because of the generational specificity of the group under examination, the generalizability of the results obtained will always have to be considered. To what extent can the data, trends and correlations observed in the case of members of the Cohort '18 study be generalized? And to what extent can they be considered valid for children born earlier (or later), or for those who face rather different socio-economic conditions and their families? Naturally, we hope that many of the findings will be generalizable, and that the study will be able to provide a generally valid picture of what it is like both to raise a child in the first decades of the twenty-first century and to be a child in Hungary at that time.

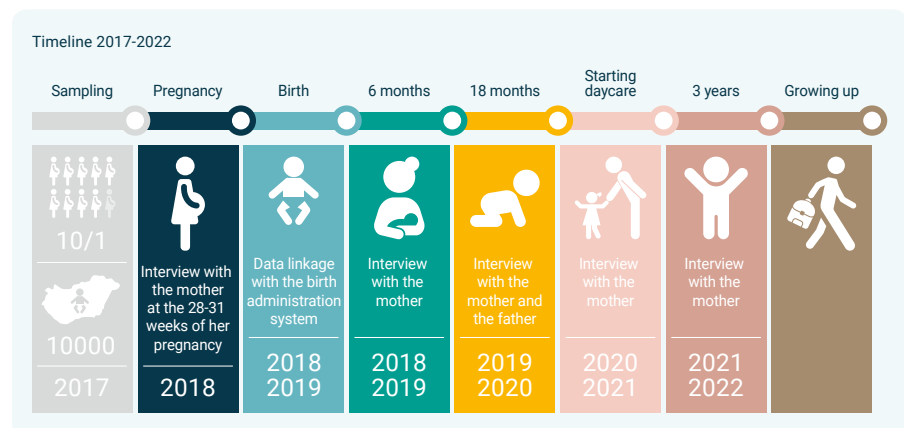
However, at the first stage of the study, these methodological possibilities and the issues associated with them are still of limited validity: the study is still at the beginning of a long 'journey'.

1.3. The course of the study

The core population of the Cohort '18 study includes children born in Hungary between 1 April 2018 and 30 April 2019 and their families. The study population is roughly 90,000 strong, of whom nearly 10 per cent were sampled for our study. The first wave of data collection commenced on 1 January 2018 with a survey of expectant mothers in the 28th to the 31st week of pregnancy; this lasted for a year. The respondents in this first wave formed the sample of the initial cohort, and the database built from their responses forms the basis of this study report.

Within the framework of Cohort '18, the pregnancy-wave survey is followed by three additional face-to-face interviews, when the cohort baby is aged 6 months, 18 months and 3 years.

FIGURE 1. THE COURSE OF THE STUDY



In the first two waves of the study – i.e. during pregnancy and when the child is 6 months old – the role of the health visitors is significant. Invitations were issued to expectant mothers and the first data collection was carried out by these nurses; the health visitor districts were also used as the basis for the sample design. The initial sample included 600 health visitor districts selected by multi-stage sampling procedure, which in many respects represent the entire population of the country; within these districts, all women who were expecting a child in the given period (1 April 2018 to 30 April 2019) were invited to participate in the study. Data collection took place in person at a time agreed upon by the pregnant woman and her assigned health visitor, in the seventh month of pregnancy (weeks 28–31). A combination of paper-based and web-based tools was available for recording the data.

TABLE 1. DATA COLLECTION METHODS OF COHORT '18

| | Main questionnaire | Self-administered questionnaire | Pregnancy care book | Health visitor's questionnaire |
|-------------------------------|---------------------------|--|----------------------------|---------------------------------------|
| Data collection method | CAPI or PAPI | PAPI | CAPI | CAPI |

At the time of the initial data collection, both the health visitor and the participating mother-to-be completed a paper-based consent form. The answers to the questions in the main questionnaire and the data from the pregnancy care book could be recorded by the health visitor directly, using either the internet (CAPI) or a paper-based questionnaire (PAPI). If the latter option was used, online data recording was carried out later. Respondents could only complete the self-administered questionnaire on paper; it typically included sensitive questions. Finally, the data from the health visitor's questionnaire were later recorded online. In addition, the health visitors constantly recorded the main data from interviews successfully conducted during the study and planned the next stages of data collection using a pre-prepared folder. The number of failed interviews and certain key characteristics of non-responders were also recorded here. These aggregated data played a role in the sample-fit analysis of the sample of pregnant women, performed once the data collection came to an end.

Data collection among expectant women, i.e. the first wave of Cohort '18, started on 1 January 2018 and ended in May 2019. The crude results were fitted by matrix weighting to the main distribution data available on the population in the complete register data.

1.4. Data

In the first data collection wave of the Cohort '18 Birth Cohort Study, 8,287 interviews were conducted with expectant mothers. Those are the respondents whose (then unborn) children make up the cohort. However, even in this first phase, the final study database was being built by drawing on several data collection tools and by connecting sub-databases. Such connections were made possible by assigning a unique identification number to each foetus; this number will remain unchanged throughout all the research waves, and thus allows various data elements to be combined, as they become available. Thanks to these personal IDs, it will be possible to concatenate different datasets at the individual level (survey, administrative, macro, etc.) by handling personal, identifiable data separately from the study databases.

The health visitors recorded the answers they received during the personal interview on an online interface (main questionnaire), to which we linked the data from the self-administered questionnaire using personal IDs. This was complemented with data from the pregnancy care book kept by the health visitor from the start of pregnancy, which focuses mainly on the course of the pregnancy, its health characteristics and the risk factors involved. The study database was also supplemented by data on the circumstances of the visit, which the health visitor uploaded to the online interface after the interview. Data derived from the consent forms and address cards also form a database that is treated separately, in line with the principles of personal privacy.

TABLE 2. PREGNANCY-WAVE DATABASES

| Name of the tool | Database | Sample size |
|---------------------------------------|---|-------------|
| Pregnant survey | Database of pregnant survey recorded on the online interface | 8287 |
| Self-administered questionnaire | Database of data recorded on paper and then subsequently recorded by the HDRI | 8191 |
| Pregnancy care book | Database of pregnancy care books recorded on the online interface | 8269 |
| Health visitor's questionnaire | Data from the health visitor survey recorded online | 8287 |
| Consent statement (filing, recording) | Database of data recorded on paper and then subsequently recorded by the HDRI | 8287 |
| Address card | Data recorded on paper and online; the database was constantly being updated as expectant mothers moved house | 8287 |

The complete research database, containing 8,287 responses from pregnant women, was created by linking these database elements. It forms the basis of the first Study Report of the Cohort '18 study.

Structure of the report

1.5.

In terms of genre, this is a research report. Thus, it undertakes a descriptive presentation of the findings of the Cohort '18 study. Its aim is to cover the life events and situations that occur during pregnancy, the various living conditions, and the differences experienced by women who are expecting a child in the current Hungarian socio-economic context. A further aim is to explore the immediate context in which the children of this cohort were expected in 2018: this is the context in which that cohort will begin life and will start to develop, and it will remain the focus of the research throughout the study project.

We use an ever-expanding perspective to present this context. First, we present the characteristics and life circumstances of the narrow family of the unborn child, and then of the wider family. We focus not only on family structure, but also on the family's relationships, lifestyle and the values that will go to make up the environment of the (as yet unborn) child.

The description of the family background is followed by a detailed presentation of the place of residence and living conditions. The lives and the development of children are greatly influenced by the environment in which they grow up: in addition to the characteristics of the type of settlement and the housing of the family, we deal separately with its financial circumstances and provisions. As well as a number of objective aspects and indicators, we also look at how mothers assess their own living conditions.

In the final section, we collate the findings related to the pregnancy itself. We build up a picture of the lifestyle, mental and physical health of pregnant women in Hungary, and we also examine the use of the main pillars of the Hungarian pregnancy care system. Once again, our approach focuses on differences. We can monitor the effects of inequalities that are already present at the foetal age, and we will be able to trace these as our study progresses.



2. Families Expecting a Child

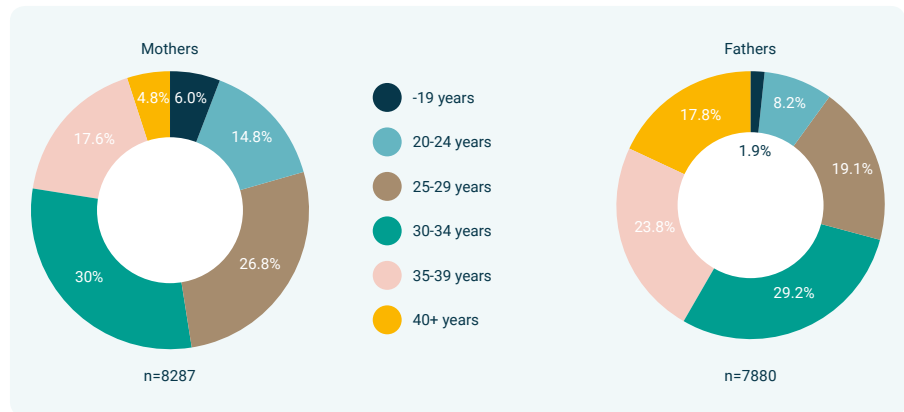
2. Families Expecting a Child

2.1. Demographic characteristics of parents

The families involved in the Cohort '18 study represent families from all over the country that are expecting a child. At the time of the data collection respondents were typically in their seventh month of pregnancy.

Among expectant mothers, the most populous group was aged 30–34; slightly less than nine tenths of women were aged between 20 and 39. Teenage pregnant women accounted for 6 per cent, and 4.8 per cent of respondents were aged 40 or older. However, due to the time lag, the age of the respondent (in the seventh month of pregnancy) is not the same as her age at the time of birth (known from official statistics); but the weighted database of the cohort study sample does fit very well with the comprehensive data available from the official statistics.

FIGURE 2. DISTRIBUTION OF PREGNANT WOMEN AND THE FATHERS-TO-BE LIVING WITH THEM, BY AGE GROUP, %



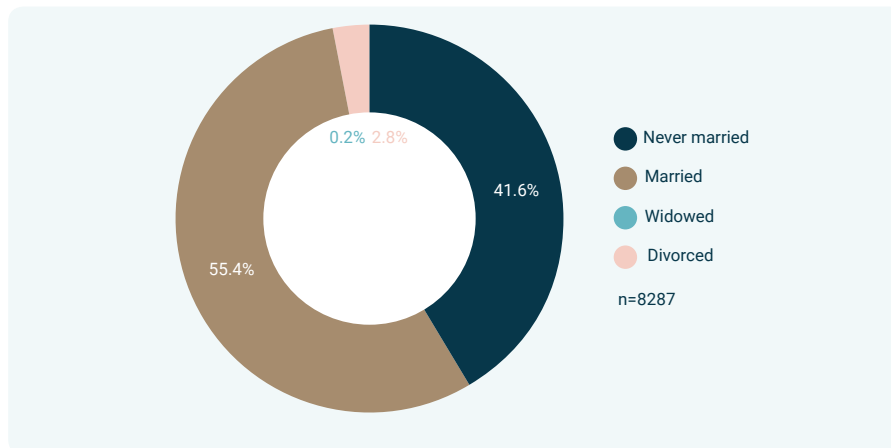
It was the mothers-to-be who responded to our questionnaire and who gave the age of the father of the unborn child; consequently, data on fathers are missing in some cases. If we look at fathers living with an expectant mother (married or cohabiting), we can observe the well-known fact that fathers are typically older than mothers: in 73 per cent of cases, the men were at least one year older than their partner. Fathers living in the same household were typically 3.5 years older than their expectant partners.

Younger mothers were much more likely to have a child with an older man: pregnant women under the age of 25 were on average 5.5 years younger than their male partner, whereas from the age of 40 the average age gap was only 0.5 years. It was among women in their forties that it was most common to have a younger partner: if a woman had a child at the age of 40 (or older), there was only a 52 per cent chance that her partner was older.

Fathers-to-be living with their partners were typically 3.5 years older than the expectant mother. As the age of the woman increased, so the average age difference between the partners decreased.

Aside from age, another important demographic feature was marital status: 55.5 per cent of the pregnant women were married at the time of the interview (though some of them were not living with their spouse). The proportion of unwed expectant mothers was 41.6 per cent; divorcees accounted for 2.8 per cent; and the proportion of widows was negligible.

FIGURE 3. DISTRIBUTION OF PREGNANT WOMEN, BY OFFICIAL MARITAL STATUS, %



More and more unmarried couples are living together and having children. Given the spread of cohabitation (i.e. without marriage), it is increasingly important to examine the circumstances of the cohabiting couples. The reason for this is that in Hungary today, the documents issued at birth only contain data on the official marital status of the parents; thus, we know precisely how the ratio of married to unmarried parents changes. However, the official statistics do not show either the proportion of women with children who are unmarried but live with a partner, or the proportion who have a child alone, without a partner. The findings of the Cohort '18 - Growing Up In Hungary thus are clearly a novelty in this respect.

Marriage plans of expectant mothers

Although it was common during the decades of socialism for couples to get married when the baby was already 'on its way', the importance of post-partum marriages today is remarkable. That is why data on the marriage plans of cohabittees may be interesting. Some 62.4 per cent of cohabiting pregnant women planned to marry their partner 'someday', whereas the proportion of those who had clearly rejected marriage ('not marrying at all') was only 10.5 per cent. Almost exactly half of those pregnant women who were planning to get married at some point hoped soon to be standing before the registrar: 50.1 per cent said they planned to marry their partner 'in the near future, within a year'. The next waves of data collection will provide an opportunity to examine the extent to which couples have actually been able to carry through these plans.

According to data collected around the seventh month of pregnancy, 54.5 per cent of those expecting a child were married and living with their spouse, while 41.4 per cent were cohabiting, regardless of their official marital status. The proportion of pregnant women who were having their child either without a partner at all or with a partner who was living separately was 4.1 per cent. Thus, in Hungary the vast majority of women who have children out of wedlock are in a cohabiting relationship.

In all, 54.5 per cent of expectant mothers were married and living with their spouse, while 41.4 per cent were cohabiting with a partner. Some 4.1 per cent of pregnant women were having their child either without a partner at all, or with a partner who lives apart.

The figure of 4.1 per cent of women who were having a child in a single-parent family without a cohabiting partner, is low by international standards. For example, at the turn of the century, the Millennium Cohort Study in the UK found a single-parent rate of 15 per cent (with 60.1 per cent of parents married and 24.9 per cent cohabiting)². According to infant data from the Irish Birth Cohort Study, 14 per cent of children in Ireland in 2008 were born into a single-parent family.³

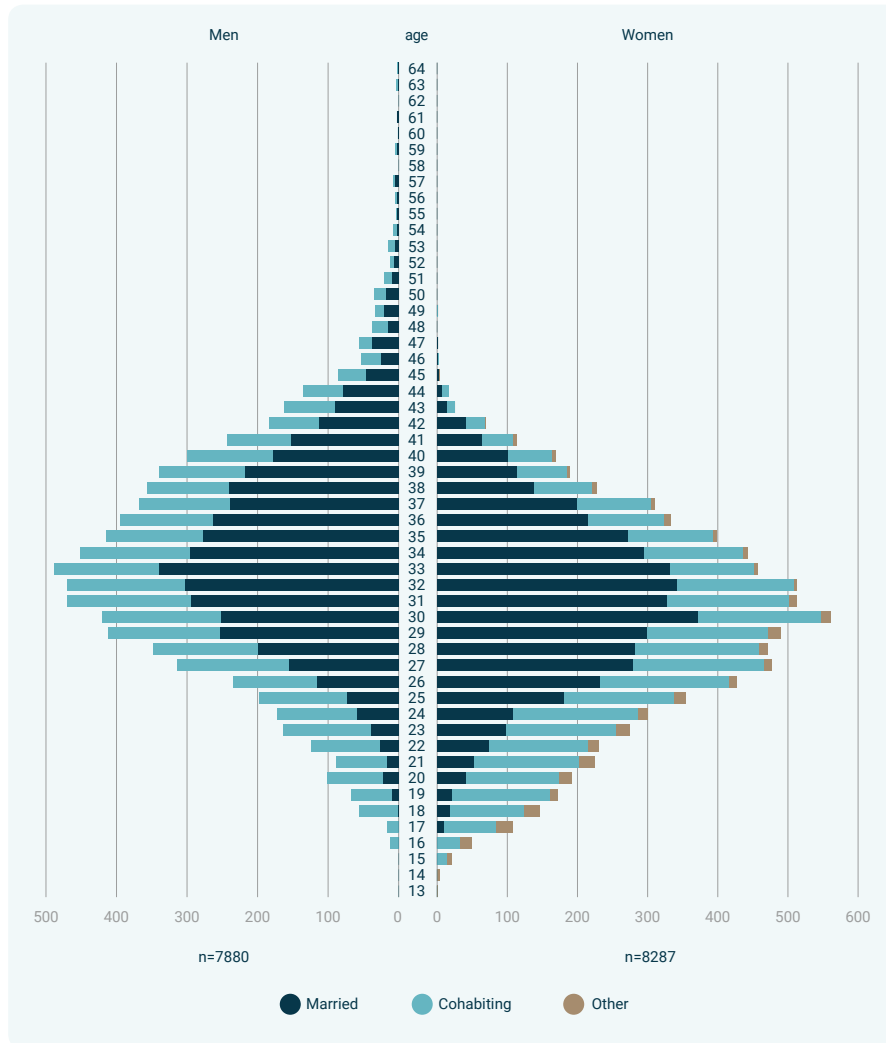
Naturally, the 'real relationship status' is associated with other demographic and social characteristics, such as the age of those who have children. Figure 4. shows the distribution of pregnant women and expectant fathers living with them, according to their age and partnership status (on a so-called age pyramid). It is apparent that the age structure of those who have children in a cohabiting relationship is far more diffuse than among married couples. Among women, married childbearing is typically concentrated between the ages of 25 and 40; those under the age of 25 are more likely to have a child while in a cohabiting relationship. Childbearing without a cohabiting partner is rare,

² Millennium Cohort Study: <https://cls.ucl.ac.uk/cls-studies/millennium-cohort-study/>

³ Growing Up in Ireland: <https://www.growingup.ie/>

and is more likely to be observed among women under the age of 30. That said, there is no hard-and-fast rule: single childbearing cannot clearly be linked to any particular age group – in contrast to Britain, for example, where childbearing without a cohabiting partner is not only more prevalent, but is also much more closely linked to youth.

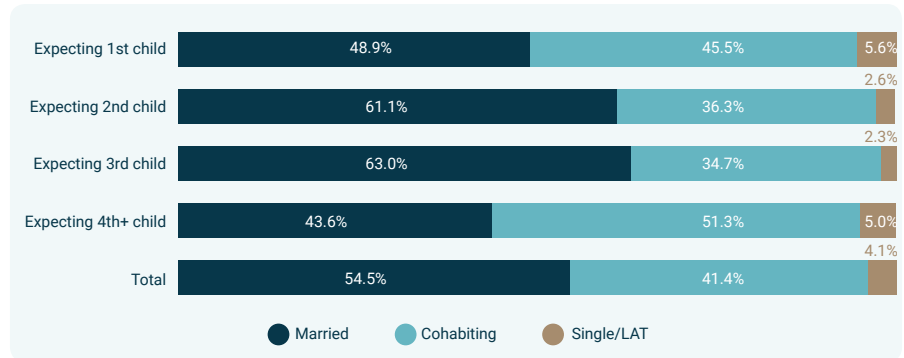
FIGURE 4. AGE PYRAMID OF EXPECTANT MOTHERS AND COHABITING FATHERS-TO-BE, BY MARITAL STATUS



The relationship between the number of children and the partnership situation is significantly stronger. Out-of-wedlock childbearing (with or without cohabitation) was more prevalent in relation to the first or to the fourth (or subsequent) child. Whereas women who were having their second or their third child were likely to be married (in more than 60 per cent of cases), this was not true in the case of either their first child (49 per cent) or their fourth (or subsequent) child (43.6 per cent). There is an obvious mix of adaptation and selection effects that lies behind these figures. On the one hand, many women marry having had their first child, but before the birth of their second (adaptation effect); on the other hand, married people are more likely to have a second or a third child. By contrast, having four or more children (out of wedlock) is characteristic of a small social group, and therefore reflects a selection effect.

Out-of-wedlock childbearing is more common in the case of a first or a fourth (or subsequent) child.

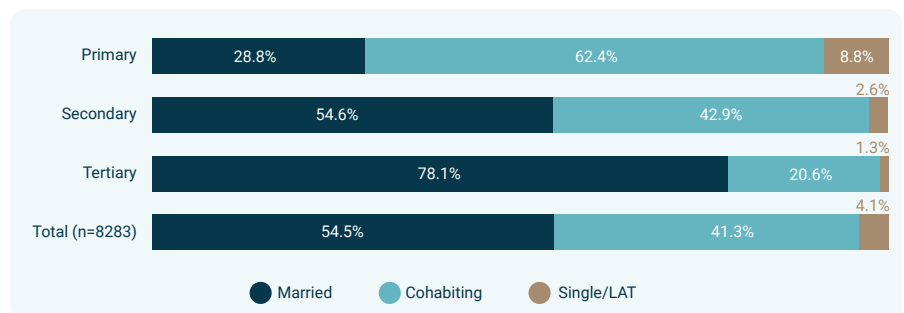
FIGURE 5. MARITAL (RELATIONSHIP) STATUS OF EXPECTANT MOTHERS, BY NUMBER OF CHILDREN, %



In terms of the partnership background of women having a child, social factors – in particular, educational attainment – are much stronger than demographic factors. The data show that almost four fifths (78.1 per cent) of female graduates in Hungary were having their child within marriage. This was also the case for more than half (54.6 per cent) of high-school graduates. But a mere 28.8 per cent of low-educated women were married by the time they were in the last months of pregnancy. Women without a high-school diploma but with children already were more likely to be in a cohabiting relationship (as opposed to marriage), and it was also within this group that having children without a cohabiting partner was most prevalent. (Some 8.8 per cent of women without a high-school diploma but with children had no cohabiting partner, while 67.9 per cent of those who had children without a cohabiting partner lacked a completed high-school education.)

Unmarried childbearing was least common among female university graduates.

FIGURE 6. THE PARTNERSHIP SITUATION OF EXPECTANT MOTHERS, ACCORDING TO THEIR EDUCATIONAL ATTAINMENT, %



Fathers living separately

From the responses of the women, we could also collect data on those fathers-to-be who were not living with the expectant mother; however, the limited number of cases (just 340 respondents in this group) means that the data need to be treated with greater caution. An important finding in connection with this group is that more than half (54 per cent) of the women who were not living with the father of their unborn child still had a close relationship with him. These are the so-called 'visiting relationships' or couples 'living apart together' (LAT). At the other end of the spectrum, 4–5 per cent of women who were having a child without a partner did not even know who the father was. The remaining 40 per cent or so of the group of women having a child without a partner (about 2 per cent of all births) knew who the father of the unborn child was, but did not have a relationship with him.

The social background of parents

2.2.

The questions on parental background in the Cohort '18 study captured socially originated inequalities from the perspective of the child included in the cohort study. Accordingly, different measurements of the status of mothers and fathers were performed, including an inquiry into their employment situation and the adequacy of their family capital.

During the social background survey to assign parents a position on the labour market, our measurements were based on the form of employment (in the case of the mothers-to-be, their most recent employment) according to the HSCO-08 classification⁴, in accordance with the job-type groups⁵ used in the HCSO HDRI's Turning Points of Life Course demographic panel study⁶, and using a series of questions based on the multidimensional occupational categorization of the 'Andorka schema'⁷. This blueprint captures well the position of an individual in the occupational structure by considering the nature of the employment, the level of responsibility and whether the work is mainly white-collar or mainly blue-collar, while also integrating educational attainment.

For pregnant women, if we look at the nature of their occupation, we can see that 9.2 per cent of respondents had not yet had paid employment.

Around 9 per cent of expectant women had no labour market experience.

At the time of the response, those women who had previously worked as employees formed the highest proportion – 83.3 per cent. Within that group, the two most common

⁴ HSCO-08 - Hungarian Standard Classification of Occupations (Hungarian acronym: FEOR): <https://www.ksh.hu/docs/szolgalatasok/hun/feor08/feorlista.html>

⁵ Ferge, Zs. (1969). Társadalmunk rétegződése. Elvek és tények [Social Stratification: Principles and facts]. Budapest, KJK.

⁶ HCSO Demographic Research Institute – Turning Points of Life Course: <https://demografia.hu/en/ef>

⁷ Andorka, R. (1982). A társadalmi mobilitás változásai Magyarországon [Changes in Social Mobility in Hungary]. Budapest, Gondolat.

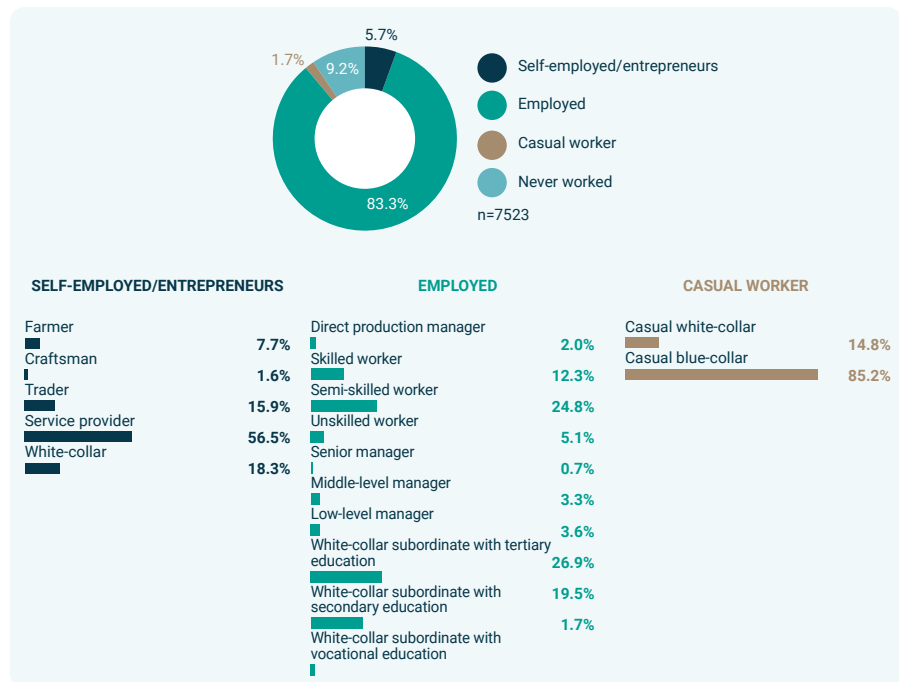
categories were graduate white-collar employees (22.4 per cent of respondents and 26.9 per cent of employees) and semi-skilled workers (20.6 per cent of respondents and 24.8 per cent of employees). Entrepreneurs and the self-employed were rare within this social group, making up only 5.7 per cent, and were mostly engaged in service sector activities. The least common type of work among the women was casual employment: only 1.7 per cent were engaged in such work, and it was mainly blue-collar.

The majority of the expectant women were employees, while the proportion of entrepreneurs and the self-employed was just 6 per cent.

This categorization shows that 52.6 per cent of those women who had ever been active in the labour market were (or had been) engaged in white-collar work, while the remaining 47.4 per cent did blue-collar labour. Of employees, those working as managers made up 9.7 per cent.

Of those expectant mothers who were employees, 9.7 per cent worked as managers.

TABLE 3. (MOST RECENT) OCCUPATION OF EXPECTANT WOMEN, BY TYPE OF EMPLOYMENT, %

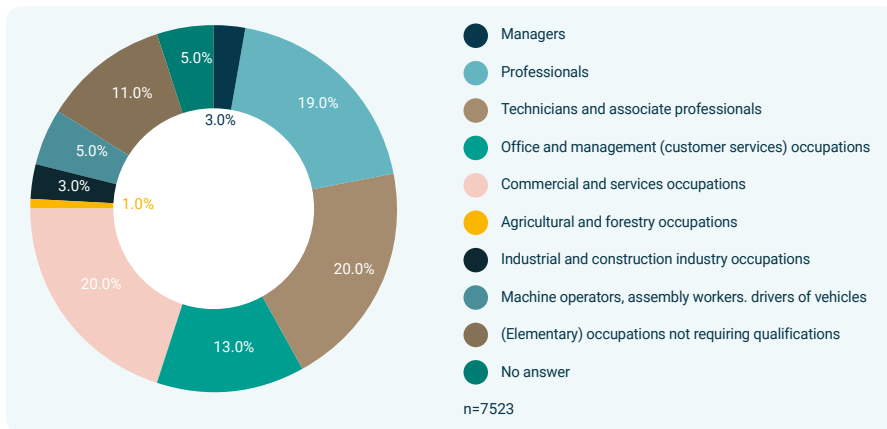


The occupational categories derived from the HSCO-08 codes and based on the answers to open questions referring to the woman's (most recent) occupation incorporated the dimensions of managerial level, educational attainment and sector of employment. Thus, the most common occupations for this group of pregnant women – around 20 per

cent in three categories – were those that required professional skills or that necessitated having higher or secondary education, or else were jobs involving commercial and service tasks. The proportion of those performing office and administrative work was 13 per cent. Based on the HSCO classification, 1 in 10 (of those who were or had been employed) performed (simple) work that did not require any (vocational) qualifications.

One fifth of the employed mothers-to-be performed work in the commercial or service sectors. Around 10 per cent of the sample of expectant mothers performed unskilled work.

FIGURE 7. (MOST RECENT) OCCUPATION OF PREGNANT WOMEN, BY HSCO-08 MAIN GROUPS, %



The most common occupations among expectant mothers

The women’s responses to open-ended questions about their employment showed that the most common occupations were shop assistant and administrative jobs: 8.4 per cent of the expectant mothers who had ever been employed were shop assistants, while administrators accounted for 5.2 per cent. Considered in terms of the HSCO-08 main groups, the table below shows the most common jobs among pregnant women.

TABLE 4. THE MOST COMMON OCCUPATIONS AMONG EXPECTANT MOTHERS

| HSCO-08 main group | Most common occupations |
|--------------------|--|
| Managers | <ul style="list-style-type: none"> • head of retail shop |
| Professionals | <ul style="list-style-type: none"> • primary school teacher, teacher • kindergarten/nursery assistant, kindergarten teacher • financial analyst |

| | |
|--|--|
| Technicians and associate professionals | <ul style="list-style-type: none"> • nurse • financial, commercial clerk |
| Office and management (customer services) occupations | <ul style="list-style-type: none"> • administrator • accountant • telephone customer service representative |
| Commercial and services occupations | <ul style="list-style-type: none"> • shop assistant • check-out assistant |
| Agricultural and forestry occupations | <ul style="list-style-type: none"> • ornamental plant, flower, nursery gardener, seedling grower |
| Industrial and construction industry occupations | <ul style="list-style-type: none"> • baker, confectioner • tailor, seamstress |
| Machine operators, assembly workers, drivers of vehicles | <ul style="list-style-type: none"> • product assembler • mechanical machinery assembler |
| (Elementary) occupations not requiring qualifications | <ul style="list-style-type: none"> • hand packer • kitchen assistant • cleaner |

We collected data on the employment of fathers-to-be through the expectant mothers' responses, with a simplified set of employment questions that primarily measured activity and some employer characteristics. Thus, of the fathers living with their expectant partner, the proportion of employees (78.6 per cent) was slightly lower than the figure among the women (83 per cent). However, at 12.4 per cent, the proportion of fathers-to-be who were entrepreneurs, self-employed or business owners was twice that of the women. Fathers-to-be were also twice as likely to be in casual work (3.4 per cent). Another 3.4 per cent of fathers-to-be who were living with an expectant mother were not working at the time of the inquiry. This inactive employment status mostly meant unemployment.

Employees also formed the most dominant group among fathers-to-be; the proportion of inactive fathers was 3.4 per cent. Among fathers, around 12 per cent were self-employed – twice the rate among expectant mothers.

A comparison of the employment status of expectant parents is informative in assessing the social background of a given family. Thus, a disadvantaged group can be identified: this consists of 2.3 per cent of families, where neither the father nor the pregnant mother had a job at the time of the interview; 71.4 per cent of families reported that both parents were actively employed on the labour market at the time of the survey.

In 2.3 per cent of families expecting a child, neither parent was employed.

TABLE 5. COMPARISON OF PARENTS' EMPLOYMENT STATUS, %

| Mother's employment status | Employment status of partner | | |
|---------------------------------|------------------------------|---------------------|-------|
| | Partner is not employed | Partner is employed | Total |
| Expectant woman is not employed | 2,3 | 25,0 | 27,2 |
| Expectant woman is employed | 1,3 | 71,4 | 72,8 |
| Total | 3,6 | 96,4 | 100,0 |

In addition to identifying the position of parents on the labour market, we examined inequalities in terms of capital distribution and inequalities that derived from this and that further explain the social background of families. In contrast to the traditional triple typology of Bourdieu (economic/cultural/social forms of capital)⁸, we worked with a simplified measurement in the initial cohort research questionnaire. In the case of economic capital, we examined maternal and household income; and in the case of cultural capital, we looked at the level of education of the parents. The measurement of social capital has been shifted to later waves of the study.

With reference to income, in the self-administered questionnaire module we asked about the previous month's net income of the household and the previous month's net income of the mother, using open-ended and categorical closed-ended questions. In addition to the objective, quantitative measurement of income, the subjective financial situation was also measured (this will be discussed in more detail in the section exploring the financial situation of the family).

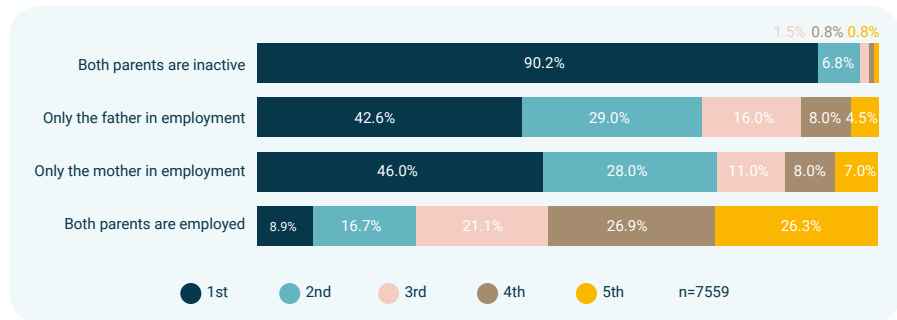
The main background variable for the financial situation is the equivalent monthly household income quintile per household member to measure the household's income situation. This was created from the (cleaned) values of the continuous variables measuring the household's monthly income and household size. For those who only provided answers to categorical household income questions, their income value was replaced by the category average.

Dividing the variable of the equivalent household income quintile on the basis of the measurement of employment status explained above, the close connection between a family's economic situation and the position of an individual on the labour market can be clearly seen. The average household income of families with stable employment and two salaries tended toward the upper quintiles. The equivalent average household income of inactive parents was in the bottom quintile in 90 per cent of cases.

For two inactive parents, average household income per capita placed them in the bottom quintile in 90 per cent of cases.

⁸ Bourdieu, P. (1983). The forms of capital. In: J. Richardson (ed.), *Handbook of Theory and Research for the Sociology of Education*. New York, Greenwood Press.

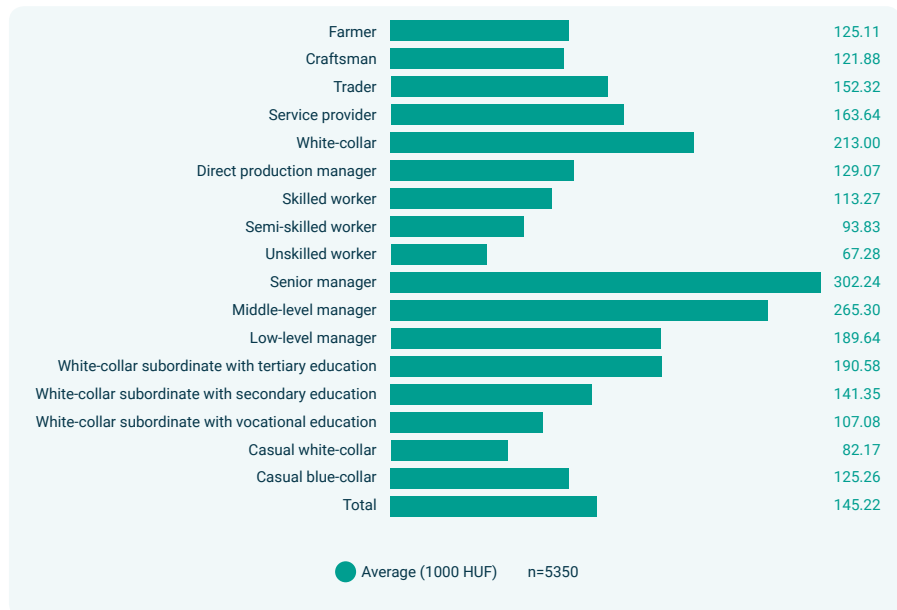
FIGURE 8. EQUIVALENT HOUSEHOLD INCOME QUINTILES, BY PARENTS' EMPLOYMENT STATUS, % - AMONG EXPECTANT WOMEN WITH A PARTNER



When measuring the income status of a pregnant woman, we asked the net income in the previous month using an open-ended and a categorized, closed-ended question. Naturally, we could only acquire data from those who had been employed at some point; thus, the average income among expectant women was HUF 140,736. It should be borne in mind that the sixth month of pregnancy also marks the suspension of active work for many mothers (discussed later). Therefore, it is worth reviewing the comparison of maternal income by employment category. We found that the highest average incomes were earned by managers and the self-employed (in white-collar positions), while the lowest were earned by semi- or unskilled workers. Furthermore, it can be seen that the monthly income of casual white-collar workers was well below average.

The average monthly net income of (ever) employed expectant women was HUF 140,736, based on self-declaration.

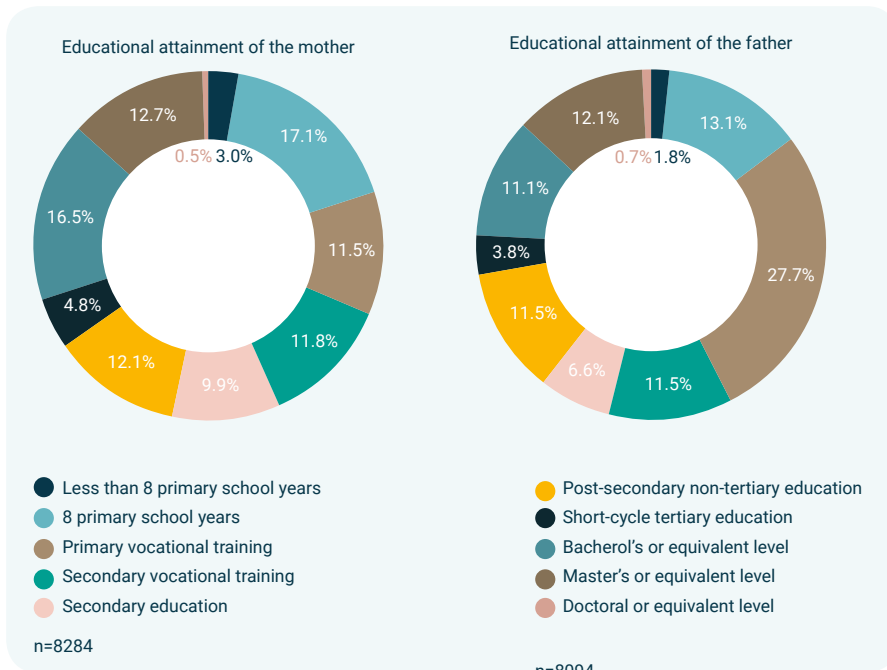
FIGURE 9. AVERAGE MONTHLY NET INCOME OF EXPECTANT WOMEN, BY OCCUPATION TYPE - IN '000 HUNGARIAN FORINT- RESPONDENTS WHO HAVE EVER WORKED



Cultural capital is represented at this stage of the study by parental educational attainment, a key variable in identifying birth inequalities. We examined this in relation to both fathers and mothers-to-be. The lowest-educated group (who had completed at most eight years of primary school) accounted for 14.9 per cent of fathers-to-be and 20 per cent of expectant mothers. There was a significantly higher proportion (27.6 per cent) of vocational workers among the men than among the women (11.5 per cent). Roughly a third of both parent groups had at most secondary education. The proportion of graduates of higher education was definitely greater among mothers-to-be (34.5 per cent) than among fathers-to-be (27.6 per cent).

Among expectant mothers, both the lowest and the highest educational groups were larger than among fathers-to-be. Among fathers-to-be, the proportion of vocational workers (27.6 per cent) was considerably larger than among expectant mothers.

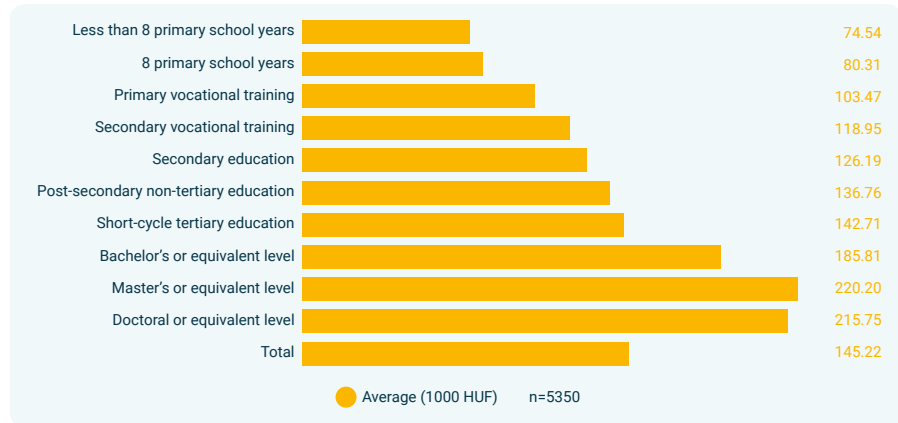
FIGURE 10. EDUCATIONAL ATTAINMENT OF THE EXPECTANT MOTHER AND FATHER, %



The level of education of the women was strongly correlated with their income. As the level of education increased, so the monthly net income averages steadily rose. In particular, a college/bachelor's degree raised income the most.

As the level of education increased, so the average monthly net income of expectant women rose steadily.

FIGURE 11. AVERAGE MONTHLY NET INCOME OF EXPECTANT WOMEN, BY LEVEL OF EDUCATION - IN '000 HUNGARIAN FORINT- RESPONDENTS WHO HAD EVER WORKED



2.3. Siblings within the family

The number of siblings in a child's life, the relationship with its siblings, and the number of children in the family are important socio-demographic characteristics determining childhood.

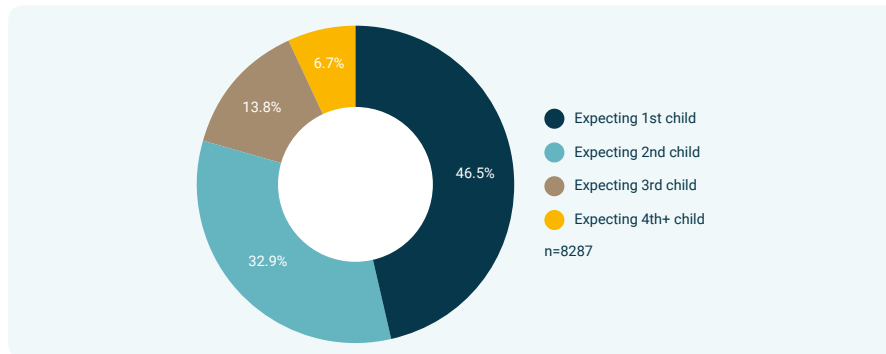
The topic of siblings is interesting not only in itself, as an element in household structure, but also as a factor that can affect many other things. Thus, the number of children a woman has is important from her perspective. However, it is also important to examine this question in terms of the child: what kind of family is he or she born into, and how many siblings do children born in Hungary have today?

The concept of a sibling is much more nuanced than we might think. Not only do we mean siblings living apart, half-siblings, stepsiblings and adopted children, but also siblings who were no longer alive when the 'cohort baby' was born. Another question that arises when talking about siblings is whether to consider all siblings or only those currently living in the family/household of the child.

In this study report, we basically use the demographic concept of parity to measure the number of children a mother has had, and thus to approximate the number of siblings the unborn child will have. This was done by counting all those biological children of the pregnant woman who were alive at the time of the interview; thus, we did not take into account children who may have died or adopted children. But we also took into account the mother's children from a previous relationship who may have been growing up in a separate household. In the case of twin pregnancies, both fetuses were considered 'first twin children', and so a woman who had not previously given birth was expecting a 'first child' according to this grouping.

The results show that 46.5 per cent of the women were expecting their first child, while almost 33 per cent were expecting their second. Some 13.8 per cent were expecting their third child, and 6.7 per cent were preparing for the birth of their fourth (or subsequent) child.

FIGURE 12. DISTRIBUTION OF RESPONDENTS BY PARITY, %



The results show that 46.5 per cent of the women were expecting their first child, while almost 33 per cent were expecting their second.

Which child a mother is expecting (first, second, etc.) and whether or not that child will have siblings at birth is, of course, related to various socio-demographic background variables. Not surprisingly, the older the respondent, the more likely she was to have a child (or children) already. While 76 per cent of women in their teens were expecting their first child, among those in their forties that proportion was only 26.9 per cent. The chances of having a third (or subsequent) child increased with age. Interestingly, the proportion of those who were expecting their second child was relatively balanced, describing a U-shape in terms of the age groups. The proportion of women pregnant with their second child was highest in the age group 30–34 (38.7 per cent), after which a decrease could be observed.

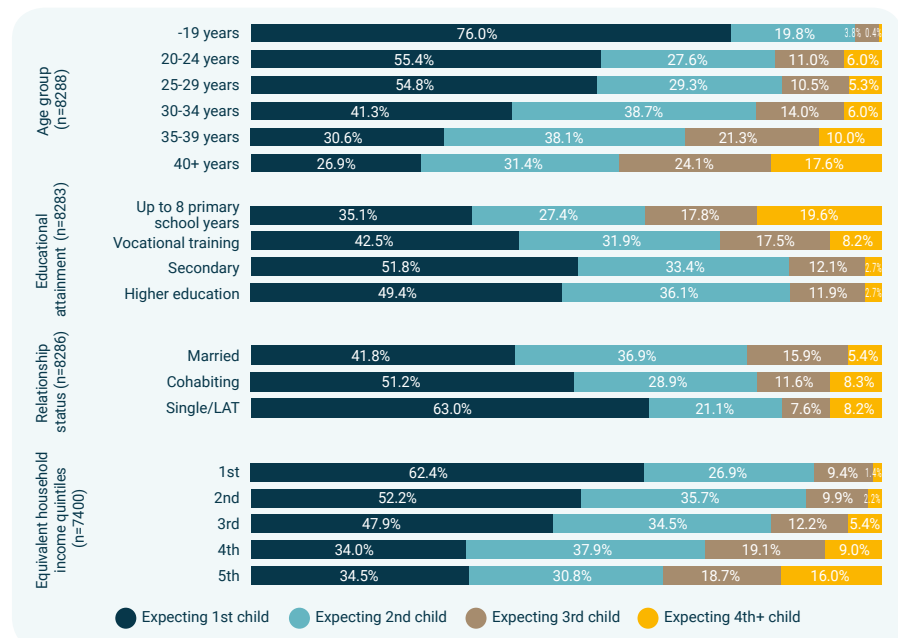
Educational attainment shows a strong correlation with having a fourth (or subsequent) child: almost a fifth (19.6 per cent) of those women who had completed at most eight years of primary school were expecting their fourth (or subsequent) child. By contrast, the chances of having a third child were much more evenly balanced: around 17 per cent in the lower-educated groups and around 12 per cent among high-school and university graduates. We can also witness a well-known Hungarian characteristic, by which the correlation between education and the number of children is not linear: the proportion of those who were having their first child was slightly higher among middle-educated women than among female university graduates. This means that the children of mothers with low educational attainment were most likely to be born into a large family, whereas a child who was born into a family without a sibling was likely to have a mother who held a high-school diploma as her highest level of education.

Nearly a fifth of those pregnant women who had completed at most eight classes of primary education were expecting their fourth (or subsequent) child. By contrast, the chances of having a third child were much more evenly balanced across the groups.

The relationship between partnership status and the number of children or siblings is more complex, as the partnership situation may change during the life course (e.g. a woman might have her first child in a cohabiting relationship, her second in a marriage, her third without a cohabiting partner, etc.). What is certain, however, is that the proportion of women having a second or third child is higher among those who are currently married; and the same goes for the proportion of those having a fourth (or subsequent) child in a cohabiting relationship. These are the two observations that stand out. Among women who were having a child without a cohabiting partner, the proportion who already had several children was relatively high, but so was the proportion of those who were only having their first child (without a partner living with them in the household) (63 per cent).

It is also worth briefly addressing the relationship between the number of children/siblings and the household's income (discussed in the previous section): the more children a mother has, the greater the chances that the household belongs to a lower stratum of household income. This was especially true of those who were having their fourth (or subsequent) child, as they mostly belonged in the bottom two income quintiles. By contrast, in households in the upper income quintile, 62.4 per cent of the unborn children would be first children. However, in a sense this relationship follows its own logic: the income situation of a household is clearly affected by the number of people living in that household, and the per capita income available also decreases – simply because more people are living in the household. Cross-sectional data from the pregnancy-wave survey show that this almost unavoidable decline in income due to a growth in household size can be mitigated by certain government policies and cash benefits (child tax credit, family allowance, etc.), but cannot be completely remedied. However, the impact of childbirth on the financial situation of households will be examined at a later date, using data collected at later stages (waves) of the cohort study (once the cohort babies have already been born).

FIGURE 13. DISTRIBUTION OF WOMEN HAVING A CHILD, BY THE SEQUENCE NUMBER OF THE CHILD IN EACH SOCIO-DEMOGRAPHIC GROUP, %

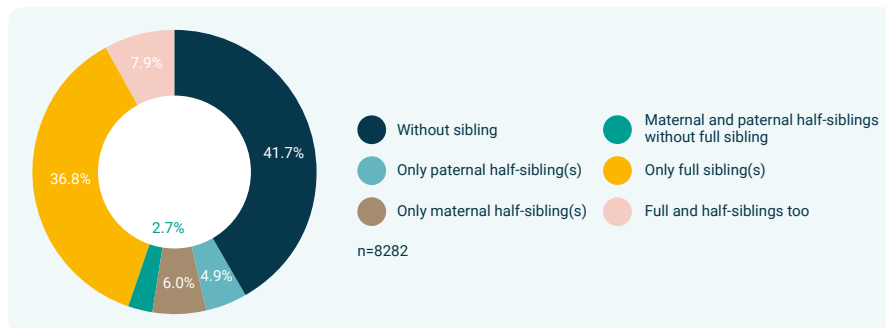


The use of parity is a good measure by default, although it provides a simplistic approximation of how many siblings a child on the way will have (since, for example, paternal half-siblings and stepsiblings are not taken into account). However, it is also worth presenting in more detail the ‘types’ of siblings from the perspective of the unborn child: will the cohort baby, if he/she has any siblings at birth, have traditional ‘biological (full) siblings’, half-siblings, etc.?

Some 41.7 per cent of children to be born would not have a sibling at birth, and 36.8 per cent would ‘only’ have traditional siblings. However, in addition to those groups, the proportion of children born into non-traditional family circumstances is not negligible: 13.6 per cent of the children would only have a half-sibling (paternal or maternal) or half-siblings (paternal and maternal), but no traditional (full biological) siblings. The proportion of children who would have both a traditional sibling and a half-sibling at birth was 7.9 per cent.

Some 21.5 per cent of the unborn children would have at least one half-sibling at birth.

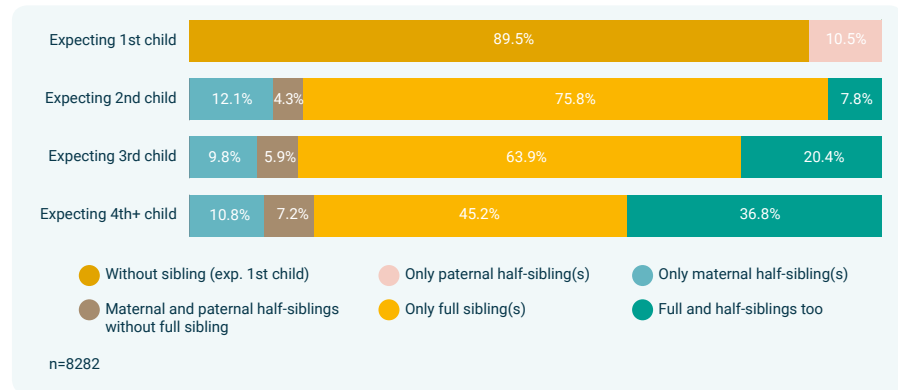
FIGURE 14. DISTRIBUTION OF CHILDREN TO BE BORN, BY TYPE OF SIBLINGS, %



Naturally, the picture varies depending on how many children a mother already has. In Figure 15, the ‘traditional’ situations are indicated in yellow: if the baby is born as the mother’s first child, he/she has no siblings; but if the baby is a second child, he/she will have a ‘full’ sibling, and so on. It should be noted that almost nine tenths of mothers’ first children will be ‘exclusively’ first children; but 10 per cent of the children will already have a half-sibling on the father’s side. As the number of previous children born to a mother increases, so do the chances of diversity of siblings from the perspective of the unborn child: from a maternal point of view, only 64 per cent of third children and 45 per cent of fourth (or subsequent) children are born into a family where there are only ‘traditional’ siblings. So, the fact that someone is born into a large family (as not the first child) in Hungary today does not mean that they are born into a ‘traditional’ large family. Quite the reverse, in fact. Those children whose mothers already have several children are more likely to be born into non-traditional family circumstances, with complex ‘sibling relationships’.

Babies whose mothers already have several children are more likely to be born into a non-traditional family.

FIGURE 15. TYPES OF SIBLINGS OF CHILDREN BORN, BY THE NUMBER OF CHILDREN A MOTHER ALREADY HAS



Half-siblings in the household

Half-siblings, as we have seen, are quite common in Hungarian society and in Hungarian families. However, whether these half-siblings also grow up in the same household as the cohort baby depends primarily on whether they are maternal or paternal half-siblings. Maternal half-siblings typically do grow up with the cohort child, as children from different fathers are mostly raised in the mother's household. By contrast, paternal half-siblings – i.e. children from the father's previous relationship(s) – are much less likely to be in the same household as the unborn cohort baby: 10.3 per cent of expected children are born into a household where they have a maternal half-sibling, while only 0.7 per cent are born into a household with a paternal half-sibling. Furthermore, only 0.3 per cent of babies arrive in a household where there are both paternal and maternal half-siblings present.

2.4. The family

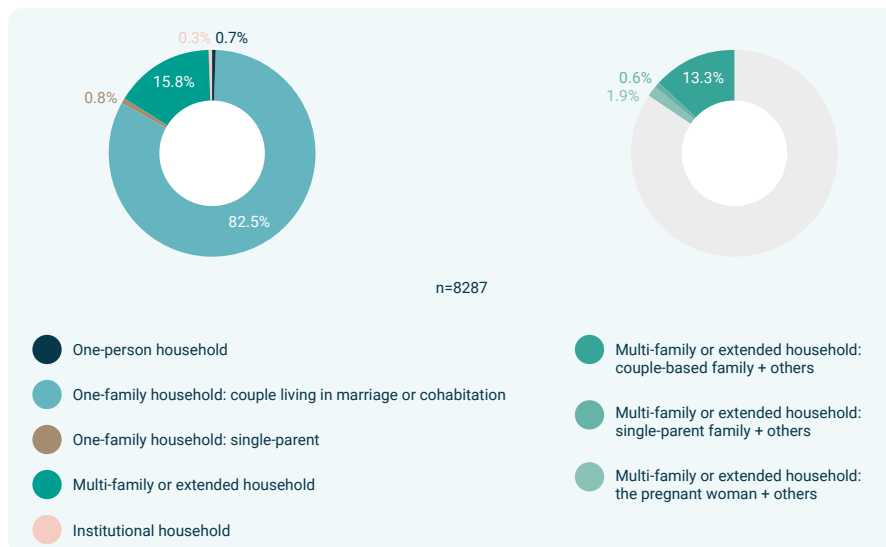
The decisive events of family formation – such as marriage, divorce, moving in together and widowhood – are all among the primary topics of demographic analysis.

The way the composition and structure of a family changes over time refers to changes in the framework of its members' daily lives and changes in family life. All these mechanisms are important drivers of divorce and the spread of cohabita-

tion and single-parent families⁹, the pluralization of family life, i.e. diversification of individual and family careers¹⁰. Looking at the data from the first wave of the Cohort '18 study, we can only gain a snapshot of the respondents' households at the time of the survey: how many people were living together at that point in time, and who were they? However, subsequent surveys can be used to track changes in the composition and structure of the households.

In Hungary in 2016, the vast majority of the population, 98 per cent, lived in private households, and only 2 per cent were in institutions. However, among those pregnant women who participated in the Cohort '18 study, the proportion of those in institutional households was even lower: 0.3 per cent (22 pregnant women). Most of them (15) lived in maternity homes, but some were in public care homes, workers' hostels or dormitories.

FIGURE 16. HOUSEHOLD COMPOSITION OF PREGNANT WOMEN, %



The vast majority of the women were living in one-family households: 82.5 per cent with a partner (married or cohabiting) and 0.8 per cent in a single-parent family. There was no one living in these households apart from the pregnant woman and her immediate family. The proportion of the women living in multi-family or extended households was also relatively high (15.8 per cent).¹¹ Of these, 13.3 per cent were living in a couple-based household with others (relatives and/or non-relatives), while 2.5 per cent were living on their own or as a single parent with others. The proportion of the women living in a one-person household was 0.7 per cent: neither a partner, nor a child, nor any other person was living with them.

⁹ Spéder, Zs. (2005). The rise of cohabitation as first union in Hungary and some reflections on recent demographic transition, *Demográfia*, 48(3–4), 187–217; Monostori, J. and Murinkó, L. (2020). Household and family structure. In: J. Monostori, P. Óri and Zs. Spéder (eds), *Demographic Portrait of Hungary 2018*. Budapest, HCSO HDRI, 179–199; Murinkó, L. and Rohr, A. (2018). Partnerships and marriage. In: Monostori et al., *Demographic Portrait of Hungary 2018*, 9–29.

¹⁰ Harcsa, I. and Monostori, J. (2012). Családi struktúrák az életciklusban [Family structures in the life cycle]. In: T. Kolosi and I. Gy. Tóth (eds), *Társadalmi Riport [Social Report]*. Budapest, Társi, 65–92.

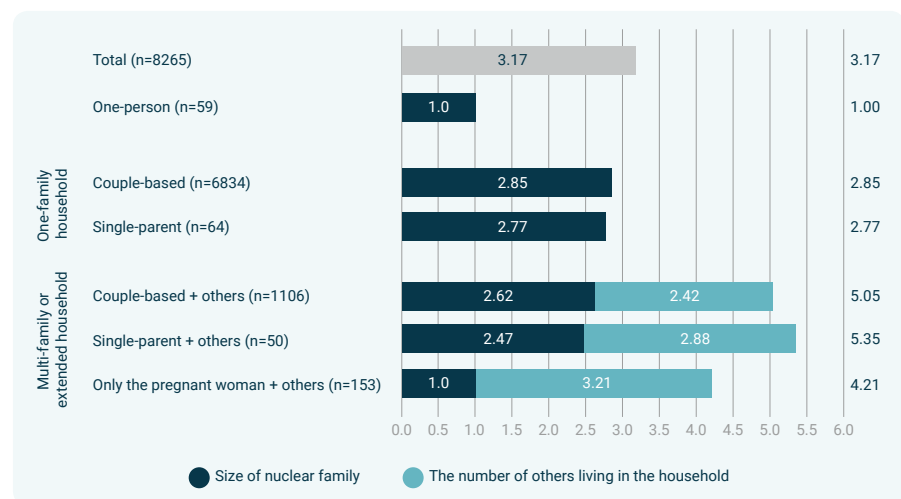
¹¹ These are households where several families live together (multi-family), or other people live in the household with the pregnant woman's family (extended), or a non-relative lives in the same household as the pregnant woman (for example, two siblings or two friends living together).

Some 82.5 per cent of the women were living in a single-family household based on marriage or cohabitation.

The average size of a household was 3.17 persons. In one-family households based on marriage or cohabitation, the average size was 2.85; in single-parent households, the average was 2.77. Multi-family or extended households were larger. However, couple-based households were smaller if they were part of an extended type of household than if they were single-family households (2.62 vs. 2.85). On the other hand, when the expectant woman was in a one-family single-parent household, the household size was larger than if the mother lived as a single parent in an extended type of household (2.77 vs. 2.47) – i.e. when the mother and her children were fewer in number, they were more likely to live with others.

The average size of one-family households based on marriage or cohabitation was 2.85.

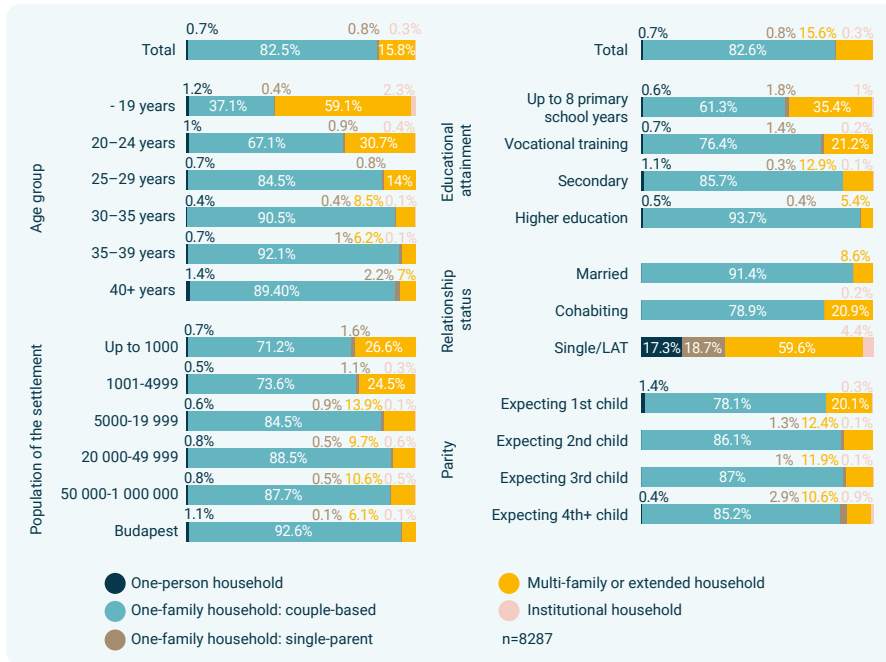
FIGURE 17. SIZE OF HOUSEHOLD, BY HOUSEHOLD TYPE - AMONG THOSE LIVING IN PRIVATE HOUSEHOLDS (AVERAGE)



The vast majority of the expectant women, regardless of their demographic characteristics, were living in a one-family household based on marriage or cohabitation. Those under the age of 19 and those who did not have (or did not live with) a partner mostly lived in extended households (59.1 per cent and 59.6 per cent, respectively). Of the latter, 17.3 per cent lived in a one-person and 18.7 per cent in a single-parent household. The proportion of mothers living in an institutional household was also significantly higher in those two groups: 2.3 per cent of the women under the age of 19 and 4.4 per cent of those who had no partner (or who lived without him) were in an institutional household. The younger, the less well educated, those with fewer children and those who lived in settlements with a smaller population were all more likely to live in an extended household. This was also less common for pregnant

women living with their spouse than it was for those who were not in a relationship or who were in a visiting relationship (living separately).

FIGURE 18. COMPOSITION OF THE HOUSEHOLDS OF PREGNANT WOMEN, BY THEIR DEMOGRAPHIC CHARACTERISTICS, %



To gain a more accurate picture of the structure of households, it is also important to see whether or not they already contain children (see previous section) – and if they do, to determine what age those children are, as households with smaller and older children have different needs and opportunities. By definition, everyone in a one-person household was currently living without a child; also by definition, no one in a single-parent family can be childless. The women, if they were living with their children, were living mostly with children under the age of 18. Just 0.9 per cent of couples in a one-family household and 1.9 per cent of couples in an extended household were living with a child aged 18 or over. However, 3.2 per cent of single mothers were living with a child aged 18 or over.

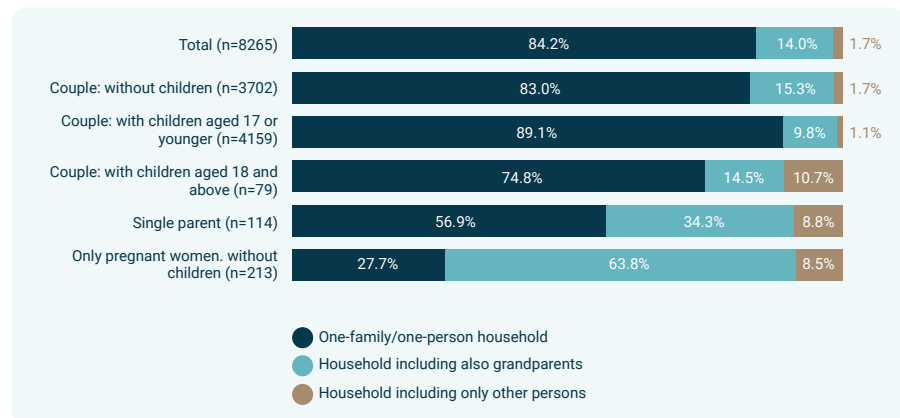
Adult children: where were they most often living?

A small proportion of the expectant women had their own or their partner’s grown-up children (i.e. over the age of 18) living in the household. Among those women who were in a single-parent household, this occurred most frequently among widows (6 per cent of widows had an adult child living with them). Other groups that were more likely to have an adult child living with them included women in a partnership, those who were divorced (5.7 per cent), those over the age of 40 (10.5 per cent) and those who were expecting their fourth (or subsequent) child (6.2 per cent).

Another important topic about the structure of households has to do with who is living (parents, siblings, other relatives or non-relatives) with the pregnant woman and her immediate family. This is an important question: expectant women may well receive a lot of assistance from their parents, for example, but they may also have to provide their parents with a lot of support. As we mentioned above, the proportion of the pregnant women living in an extended household was relatively high (15.8 per cent), though this varied greatly according to the partnership status of the woman and the age of her children. Single women were those most likely to live with their parents (63.8 per cent of such women), though the figure is also relatively high among single parents (34.3 per cent). Among pregnant women living in a relationship, childless couples were more likely to be living with their forebears (parents, grandparents; 15.3 per cent), as were those who had children aged both under 18 (9.8 per cent) and 18+ (14.5 per cent). In this last case, when a couple has children aged 18+, they were relatively more likely to live not only with their forebears, but also with other non-relatives (10.7 per cent of them).

Nearly two thirds of single, childless women were living in a household with older relative.

FIGURE 19. PROPORTION OF WOMEN AND COUPLES LIVING WITH THEIR PARENTS OR GRANDPARENTS AND WITH OTHER PEOPLE, BY HOUSEHOLD STRUCTURE - AMONG THOSE LIVING IN PRIVATE HOUSEHOLDS



2.5. Childbearing plans

The pregnant women surveyed desired to have 2.5 children on average, including the baby they were expecting and any children they already had.

Since the spread of modern contraceptives, it has become easier to take a conscious decision to schedule childbirth and plan for the desired number of children. As childbearing intentions have increasingly become meaningful predictors of real childbearing, so the study of these intentions has become an important area of modern de-

mographic research since the 1970s.¹² Nevertheless, it is a well-known fact that there remains a significant discrepancy between childbearing plans and actual childbearing practices.¹³ However, the realization of the Cohort '18 study participants' childbearing plans can only be checked against the data from later waves. Thus, in this short report we can only undertake a presentation of the women's initial plans.

There are three different ways of conceptualizing childbearing intentions based on the existing literature: a) intention regarding the final number of children; b) intention of having an additional child (sometime in the future); and c) intention of having a child within a certain period of time or at a certain age.¹⁴ Thus, in our research, when the women were in the seventh month of pregnancy, we asked them not only how many children they desired in total (including the child they were expecting and any children already born), but also whether they had any plans for another child in the next three years. Furthermore, if they had no plans to have a child within the next three years, we inquired whether they were planning to have a child/children sometime later? Because demographic research also indicates that the total number of children born is heavily influenced by the age of the mother at the birth of her first child,¹⁵ we also asked the expectant mother what she thought the ideal age was nowadays for a woman to have her first child.

On average, the women in our study desired 2.5 children in total, including the baby they were expecting and any children they already had. This figure is slightly higher than values measured in previous studies: for decades, the average in Hungary has been around 2.1.¹⁶ However, the participants in our study were pregnant women aged 13–49, and thus their attitudes to the issue may have been significantly different from those of the population as a whole, due to their special life situation.

The women in the Cohort '18 study desired a total of 2.5 children on average.

Those women aged over 40, those that had no more than eight years of education and those who already had two or more children wanted more than the average 2.5 children. Those who already had two children wanted a total of 3.1, while those who already had at least three children desired a total of 4.9. Those who did not have a partner (or who had one but were not living with him) desired fewer than 2.5 children (in total), as did those who were expecting their first child, those who were aged 19 or younger and those with at least a high-school diploma.

¹² Ajzen, I. (1991). The theory of planned behavior, *Organizational Behavior and Human Decision Processes*, 50(2), 179–211; Spéder, Zs. and Kapitány, B. (2009). How are time-dependent childbearing intentions realized? Realization, postponement, abandonment, bringing forward, *European Journal of Population*, 25, 503–523.

¹³ Pongrácz, T. (2007). A gyermekvállalás, gyermektelenség és a gyermek értéke közötti kapcsolat az európai régió országaiban [The relationship between childbearing, childlessness and the value of the child in European countries], *Demográfia*, 50(2–3), 197–219; Kapitány, B. and Spéder, Zs. (2020). Fertility. In: Monostori et al., *Demographic Portrait of Hungary 2018*, 49–66; Pongrácz, T. (2011). A családi értékek és a demográfiai magatartás változásai [Changes in family values and demographic behaviour], *Kutatási Jelentések*, 91.

¹⁴ Spéder, Zs. and Kapitány, B. (2014). Failure to realize fertility intentions: A key aspect of the post-communist fertility transition, *Population Research and Policy Review*, 33, 393–418.

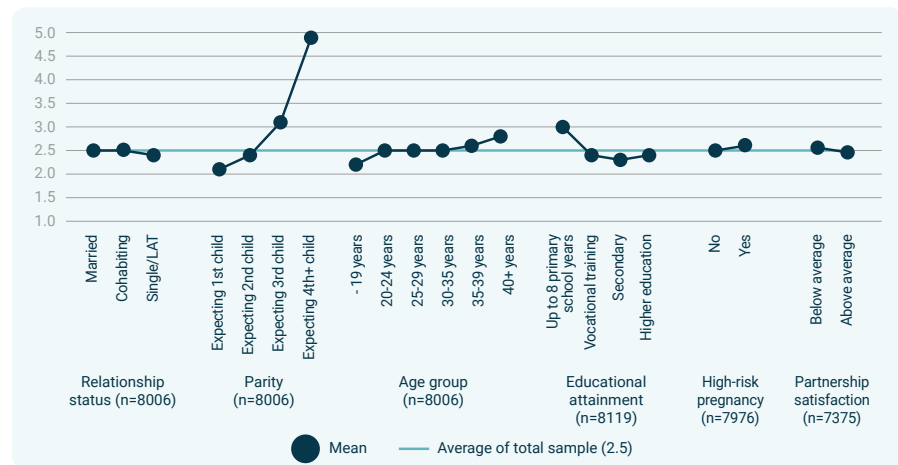
¹⁵ *ibid.*

¹⁶ Kapitány and Spéder, (2020). *ibid.*

Those over the age of 40, those with basic schooling of no more than eight years and those who already had two or more children wished to have more than 2.5 children in total.

Interestingly, neither a risky pregnancy nor satisfaction with one's partnership showed any correlation with the desired number of children.

FIGURE 20. THE AVERAGE TOTAL NUMBER OF CHILDREN DESIRED, BY DEMOGRAPHIC GROUP



The intention to have children in the short term (for example, within three years) is the result of careful consideration. Those planning to have a child in the near future take into account the material and emotional advantages and disadvantages of doing so. Short-term intentions can be considered as committed fertility intentions with a higher rate of realization, while long-term intentions are not as certain and are more likely to remain unfulfilled or unfeasible¹⁷. Some 15.8 per cent of the women in our survey were definitely planning to have another child within three years, while 18.8 per cent were less certain, but were also minded to try. A third of the respondents categorically ruled out having another child in the next three years (32.8 per cent). Looking at further plans, nearly half of the respondents (45.1 per cent) were planning to have another child, and the other half were not planning to have another (46.8 per cent). Signs of uncertainty can also be noted in the relatively high proportion of 'don't know' responses in the case of both short-term (5.4 per cent) and long-term (8.1 per cent) childbearing plans.

Some 35 per cent of the women were planning to have another child within three years, while 45 per cent expected another child later.

¹⁷ There is more uncertainty in terms of how many children the respondent would like to have in general than whether someone is planning a child within a certain period of time. One reason for the uncertainty is that additional children can only be planned after the birth of the first/next child; another is that whoever intends to have another child does not always know how many he/she wants.

Around 42 per cent of the women were not planning to have any more children at all.

FIGURE 21. SHORT- AND LONG-TERM INTENTIONS OF HAVING A CHILD, %



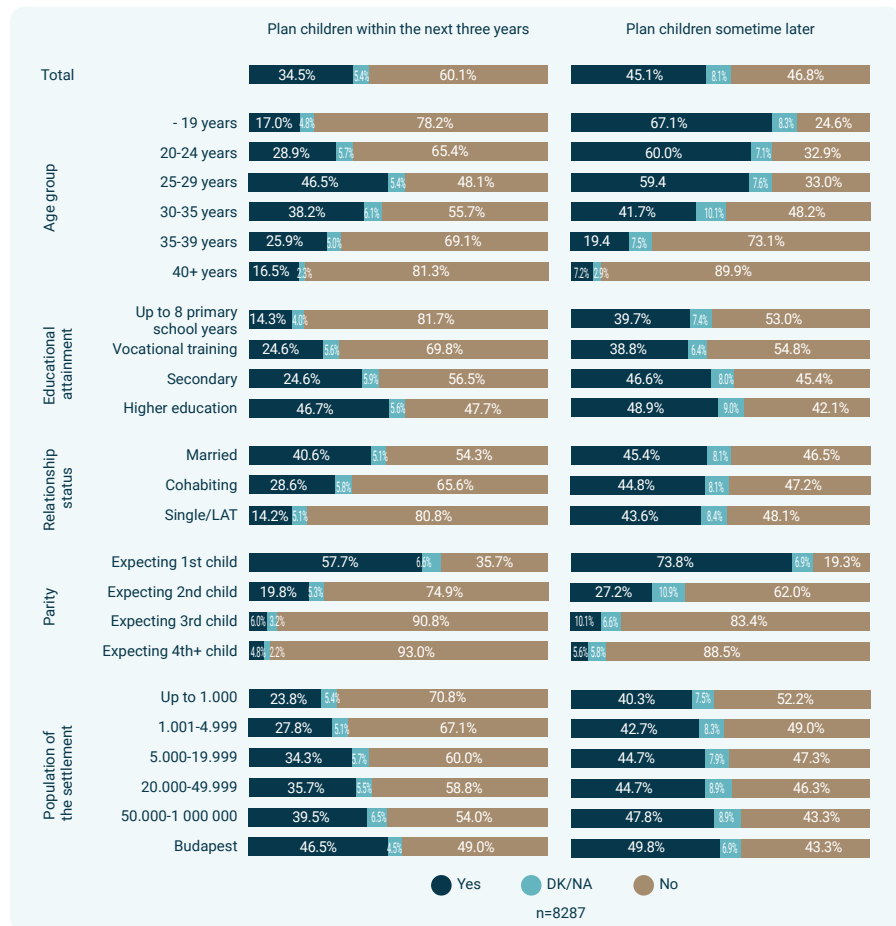
Certain socio-demographic characteristics, such as young age, the birth of a child or a stable relationship, provide more favourable contexts for the realization of intentions. Other demographic situations, on the other hand – such as older age, infertility, but also even the presence of two or more existing children – make it harder to realize childbearing plans. It is worth looking at the following figure with these points in mind. Those aged 25–34, those with at least a secondary education, those who lived with their spouse, who were expecting their first child and who were living in a settlement with at least 20,000 inhabitants were more likely to plan to have a child in the short run. Meanwhile, long-term childbearing plans were more common among those aged 29 or under, those with at least a high-school diploma and those who were expecting their first child.

In all, 58 per cent of women expecting their first child wanted to have another child within three years.

Unsurprisingly, those over the age of 35 and those expecting at least their third child did not plan to have more children in the long run.

Some 7 per cent of respondents over the age of 40 were planning to have a child even later on, if they failed to do so within three years.

FIGURE 22. SHORT- AND LONG-TERM CHILDBEARING INTENTIONS, BY DEMOGRAPHIC GROUPS, %



What is the ideal age for childbirth?

The mean age at which women in Hungary first gave birth was 29.8 in 2018. However, the pregnant women in our study thought that a younger age was better for having a first child: in their opinion, nowadays 25.7 years would be the best age. The youngest age mentioned by the respondents in our study was 15 years, while the oldest was 42. The older the respondent, the higher the age she considered to be ideal: those under 19 reported an average of 21.7 years, while those over 40 cited an average of 27.6 years. The correlation was similarly positive between the ideal age at first birth and educational level or settlement size, while it was negative between ideal age and parity. The ideal age at first birth was highest among women living with their husband (26.3 years); was lower among those cohabiting (25.1 years) or in a LAT relationship (24.7 years); and was lowest of all among those without a partner (23.7 years).

Attitudes toward family and gender roles

2.6.

Attitudes about gender roles, marriage, family and the role of the father within the family can all have an impact on the life course, future plans and life events of the pregnant woman and her family.

Attitudes toward family and gender roles affect the way in which the tasks of housework and childcare are split within the family; how many children are planned and how many are actually born; how satisfied the pregnant woman is with her relationship; and how, where and how much the expectant woman can work at a later date and how much she can earn.¹⁸ We measured attitudes concerning gender roles, marriage and family through 11 questions; the woman answered these on a five-point scale, where 1 meant that she did not agree at all with the statement, and 5 indicated that she was in full agreement.

In terms of attitudes toward marriage, the vast majority accepted both cohabitation out of wedlock (77.2 per cent) and divorce as a way out of an unhappy marriage, even if the couple had previously had children (72.2 per cent agreed totally or partly). Nevertheless, a large proportion of respondents, 68.8 per cent, did not consider marriage an outdated institution.

Some 72 per cent of the women agreed that it is better to divorce, even with children, if the marriage becomes unhappy.

Attitudes about time spent with the child are contrasted with attitudes regarding the parents' work and life goals. Unsurprisingly, the women were largely 'child centred'. A very large majority of them thought that children suffer if their father is too busy with work (81.1 per cent); and 72.2 per cent did not agree with the proposition that a woman with a good job and good career prospects should prioritize her work over having more children. At the same time, nearly two thirds of them agreed that although parents have responsibilities, they do not have to give up their life goals because of these (63.1 per cent).

The women agreed overwhelmingly that children suffer if their fathers work too much.

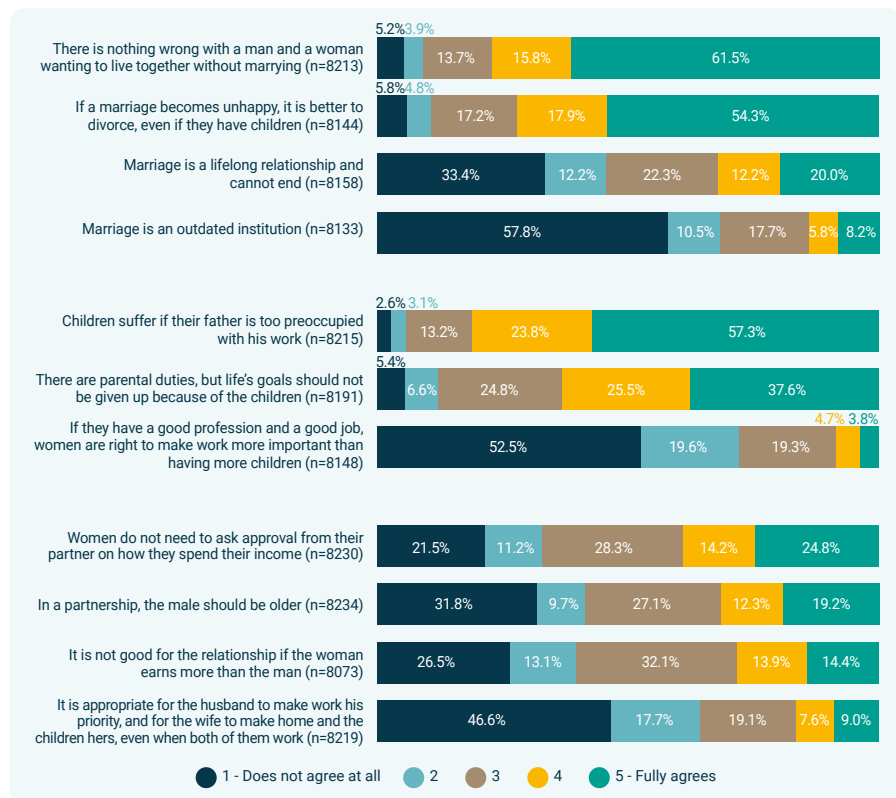
The responses to the gender inequality questions showed that the women were more pro-equality. There were many who did not agree that it is right for a husband to prioritize his job, while the wife's priority should be the home and the children, even if both parents have work (64.3 per cent disagreed). Nor did they agree either

¹⁸ Scharle, Á. (2015). Attitudes to gender roles in the Czech Republic, Hungary and Poland, GRINCOH Working Paper Series, Paper No. 5.09; Blaskó, Zs. (2005). Should women work? Changes in the Hungarian population's opinions related to gender roles, *Demográfia*, 48(3–4), 159–186.

that the man should be older (41.4 per cent disagreed) or that a relationship suffers if a woman earns more than her partner (39.5 per cent disagreed).

Some 40 per cent of the women disagreed that a relationship suffers if a woman earns more than her partner, while 28 per cent agreed.

FIGURE 23. DISTRIBUTION OF ATTITUDES TOWARD GENDER ROLES AND FAMILY, %



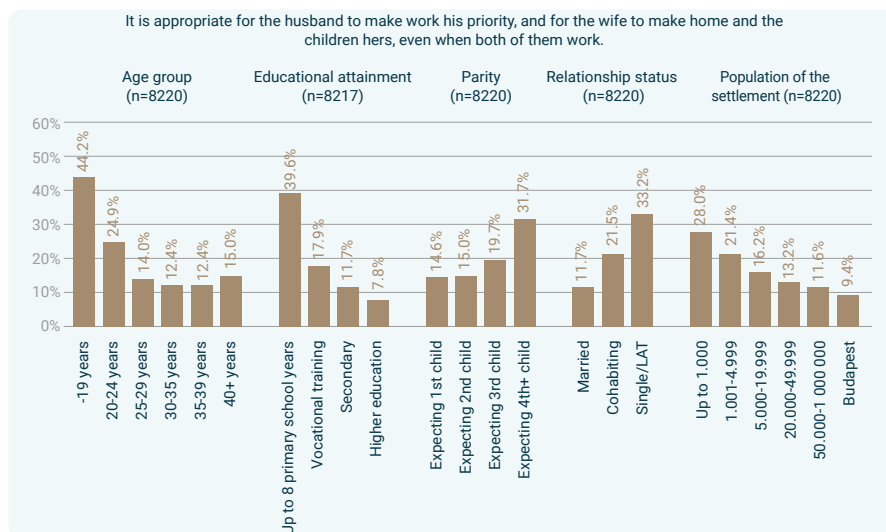
Those who were living with their spouse were more likely to support the institution of marriage: for example, just 4.4 per cent of those living with their spouse, 24.7 per cent of those cohabiting and 37.6 per cent of those with no partner (or living separately from him) agreed that the institution of marriage is outdated.¹⁹ There is also an age gap in attitudes: marriage is supported more by those over 30 than by younger women. However, the situation is reversed when it comes to the suggestion that marriage is a lifelong relationship and thus should not end: the greatest support for that proposition was among the 25–35 age group (35.3 per cent) and least among the oldest groups (24.5 per cent). The duration of marriage also influenced attitudes: those who had been married for more than five years were less likely to agree that people should quit an unhappy marriage or that there is nothing wrong with living together without marriage.

¹⁹The inverse relationship may also be true: for example, those who say that marriage is an outdated institution prefer rather to live together in a cohabiting relationship.

Those under the age of 20, those who did not have a high-school diploma and those who lived in settlements with fewer than 5,000 inhabitants tended to believe that marriage is an outdated institution.

The greater the educational attainment of the women and their partners, the more they believed that children suffer if their father works too much. However, interestingly, the results also showed that those mothers who already had (several) children were less likely to agree on this point. It was mainly the younger age group, the lower educated, those with more children and those who lived in smaller settlements who agreed that it is right for the man to prioritize his work, while the woman focuses on the home and the children (even if both are employed). Meanwhile, those who lived with their spouse were less in agreement with this statement than were those who did not have a partner (or did not live with him).

FIGURE 24. ATTITUDES CONCERNING THE TRADITIONAL DIVISION OF LABOUR BETWEEN HUSBAND AND WIFE - PROPORTION OF THOSE WHO PARTIALLY OR COMPLETELY AGREED WITH THE STATEMENT, BY MAIN DEMOGRAPHIC CHARACTERISTICS

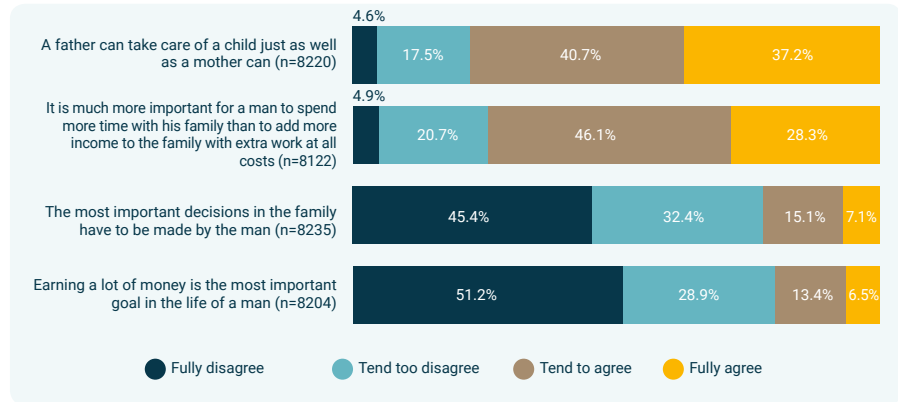


We were also curious to find out what the pregnant women thought about the role of fathers. We know from previous Hungarian studies that the vast majority of the population expects fathers to fulfil a dual role: to be traditional breadwinners, but at the same time to be family centred.²⁰ However, respondents in the Cohort '18 study clearly preferred the family-centred role over the traditional, breadwinning role: 77.9 per cent said a father was just as capable as a mother of taking care of a child. Moreover, a similarly high rate of respondents agreed that it is much more important for a man to spend more time with his family than with extra work. Consistent with this attitude, a high proportion rejected the 'traditional' male role: 80.1 per cent of the women disagreed that making a lot of money should be the most important goal in a man's life, and 77.7 per cent did not agree that the man should take the most important family decisions.

²⁰ Makay, Z. and Spéder, Zs. (2018). Fatherhood: Parenthood and family roles for man. In: Monostori et al., Demographic Portrait of Hungary 2018, 67–84.

The women were more likely to expect men to fulfil a family-centred role, and less likely to want them to adopt a traditional, breadwinning role.

FIGURE 25. ATTITUDES CONCERNING PATERNAL ROLES, %



Men facing dual expectations

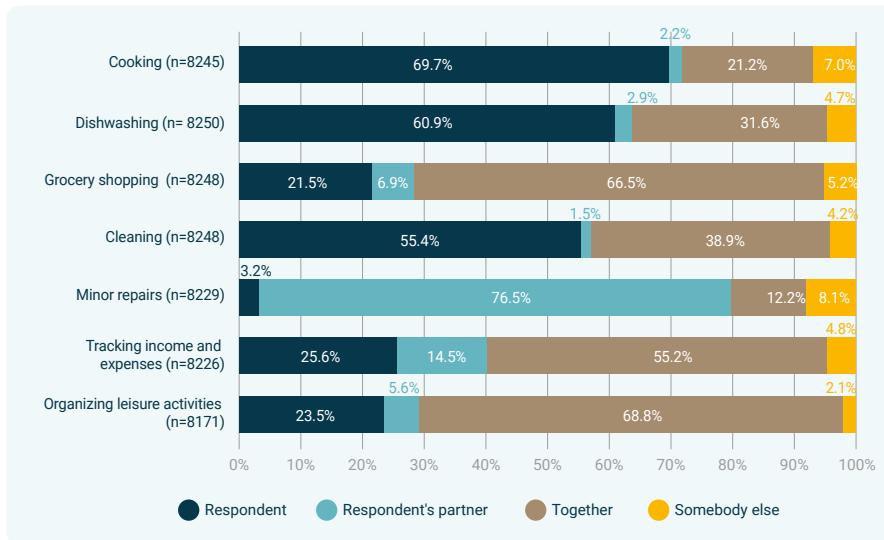
Some 14.1 per cent of the women had a dual expectation of men: they agreed that making a lot of money is the most important goal in a man's life, but at the same time they also agreed that it is much more important for a man to spend more time with his family than with extra work (to support the family). This dual expectation of men was more common among women aged under 20, those who did not have a high-school diploma, those who lived in a settlement with fewer than 5,000 inhabitants, those with three or more children, and those who cohabited, had a LAT partner or did not have partner at all (i.e. all those who were not living as part of a married couple).

2.7. Division of labour within the family

Although Hungary has a high proportion of women in the labour market, in accordance with traditional societal roles, the majority of household tasks still fall to women.

Regarding the household activities examined in the study, the majority of the women who responded stated that the cooking (69.7 per cent), the dishwashing (60.9 per cent) and the cleaning (55.4 per cent) were almost always performed by them. Grocery shopping, the organizing of leisure activities, and the tracking of income and expenses were typically shared responsibilities. Some 76.5 per cent of the women said their partner was solely responsible for carrying out minor repairs around the house or apartment.

FIGURE 26. DIVISION OF LABOUR WITHIN THE HOUSEHOLD



In terms of age group, women under the age of 20 and those aged 20–24 mentioned receiving more outside help from others (besides their partners) in carrying out certain household tasks. One possible reason for this is that it is more common in these age groups for pregnant women not to have their own homes (or an independent income), but to live with their own parents (or their partner's parents). In the case of tracking income and expenditure, 35.6 per cent of the expectant mothers aged under 20 and 10.7 per cent of those aged 20–24 said they received help from someone else (other than their parents), compared to 2.5 per cent of those aged 25–29. Such help continues to decline with age. A similar trend can be observed concerning minor repairs around the house, cooking and grocery shopping.

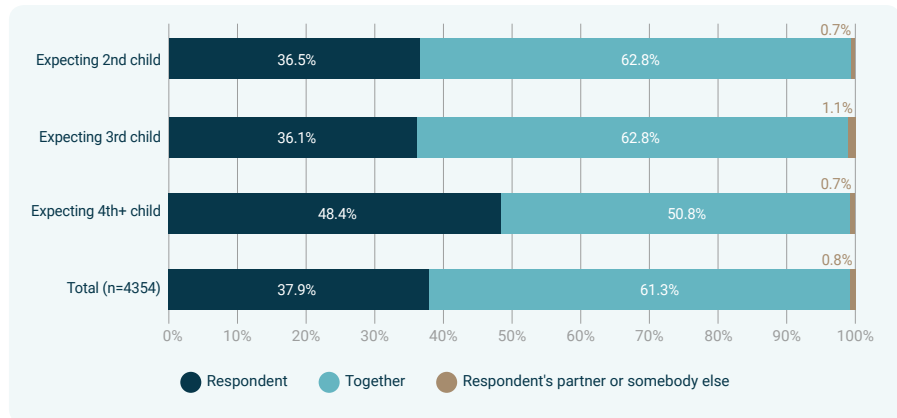
The women reported having to perform the lion's share of all household chores, except for minor repairs around the house.

Grocery shopping and the organization of leisure activities were shared by more than 65 per cent of couples.

In addition to the shared activities presented above, we looked separately at the sharing of childcare in the household. In relation to this question ('Who does the following tasks nowadays in your flat/house, or around the house: Taking care of the children') we only asked those who already had at least one child. Overall, 61.3 per cent said they shared childcare, while 37.9 per cent undertook it alone. If we look at the issue in terms of the number of children, we find that when the woman was expecting her fourth (or subsequent) child, the balance of the division of tasks shifted more and more onto the woman: whereas 62.8 per cent of respondents who were expecting their second or third child said they shared childcare responsibilities with their partner, among those expecting their fourth (or subsequent) child the figure dropped to 50.8 per cent.

In the case of families, where the mothers were expecting the fourth (or subsequent) child, childcare responsibilities fell to the mother to a greater extent.

FIGURE 27. PERFORMING TASKS CONCERNING CHILDREN - AMONG THOSE WHO ALREADY HAD AT LEAST ONE CHILD



In Hungary, it is quite rare to find families taking on hired help with household chores: 92.1 per cent of the women surveyed never paid for help (e.g. with cleaning or childcare), while 2.7 per cent had some paid help each month and another 2.7 per cent had weekly help. One of the main reasons for this is household income: people struggling to make ends meet cannot afford such help. However, as the women surveyed were at home during the later stages of pregnancy, they could perform such tasks anyway; so in most cases there might not have been any need for a cleaner or babysitter.

More than 90 per cent of the expectant mothers never received paid assistance with household chores.

If we examine the frequency of paying for assistance in the different age groups, it would seem that the practice is somewhat more common among older age groups: only 0.1 per cent of the 20–24 age group had weekly paid help with the household chores and/or childcare, but the figure rose to 6.1 per cent of those aged 40 and over. The number of children, like age, has a small effect on the use of paid assistance: slightly more women who were expecting their second or third child employed someone to help with the chores. Whereas 6 per cent of those expecting their first child and 5.4 per cent of those expecting (at least) their fourth child paid for someone to perform household chores at least once a year, the figure was 10.5 per cent among those expecting their second child and 9.1 per cent of those expecting their third.

Who can afford to pay for help?

Some 52.9 per cent of respondents who had paid help on a daily basis lived in financial circumstances in which they could easily cover their household's usual expenses; but 12 per cent of those paying for help found it a significant burden that they could only cover with some difficulty.

Social relationships

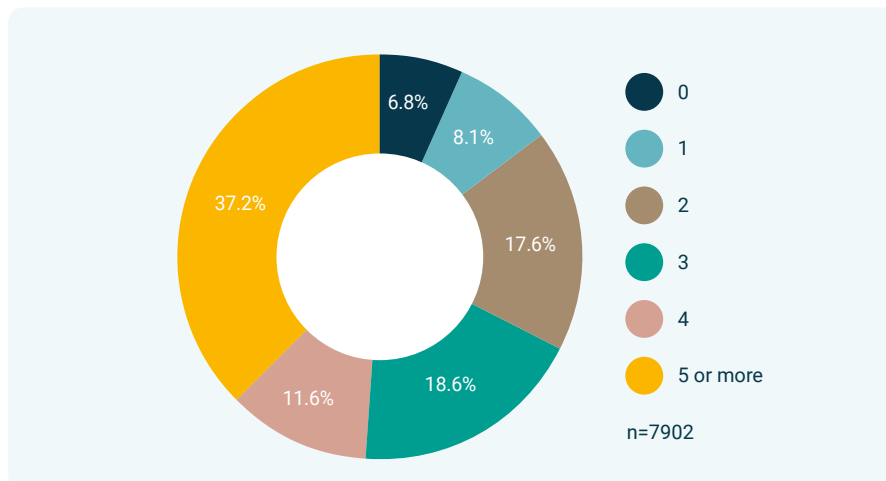
2.8.

As for the social relationships of the pregnant women, we examined the number of close friends they had, the frequency of contact with their family members and friends, the extent of their subjective social support, and their assessment of their partnership.

The average number of close friends was 4–5, and the most frequently mentioned number was three. Some 6.8 per cent of the women had no close friends, while 37.2 per cent reported having five or more close friends.

The expectant women had an average of 4–5 close friends.

FIGURE 28. NUMBER OF CLOSE FRIENDS OF THE EXPECTANT WOMEN, %



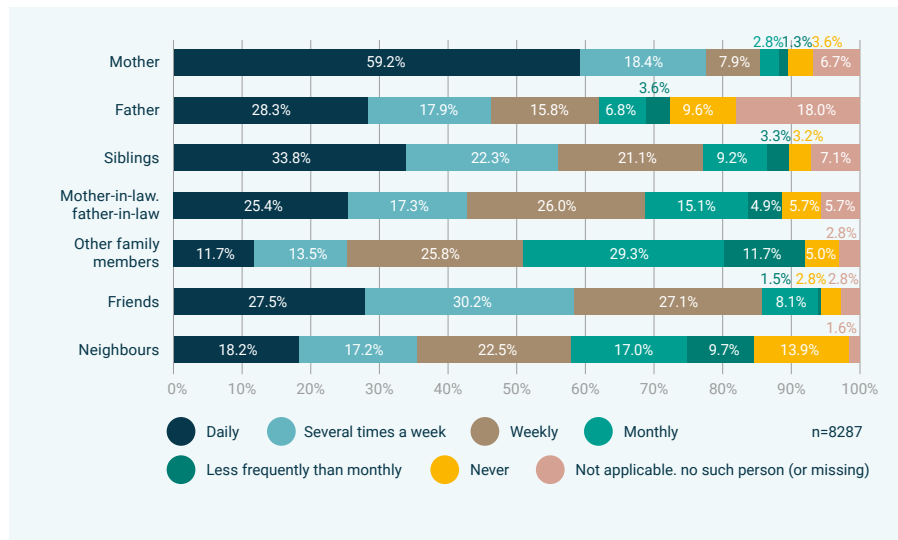
To explore the frequency of contact with others, we asked our participants how often they talked (face to face, on the phone, online) to certain family members, friends and neighbours.

The women talked most frequently to their mothers: 85.6 per cent at least weekly and 59.2 per cent daily. As for their fathers, 62 per cent of the pregnant women also talked to them at least weekly, and 28.3 per cent did so daily; however, 18 per cent either selected the 'Not applicable, no such person' response or did not answer the

question. It is with the neighbours that total lack of contact (not counting 'Not applicable, no such person' responses) was most common: 13.9 per cent of the women never spoke to their neighbours.

Some 59.2 per cent of the expectant women talked to their mothers and 28.3 per cent to their fathers every day.

FIGURE 29. FREQUENCY OF CONTACT OF EXPECTANT WOMEN WITH THEIR FAMILY MEMBERS AND ACQUAINTANCES, %



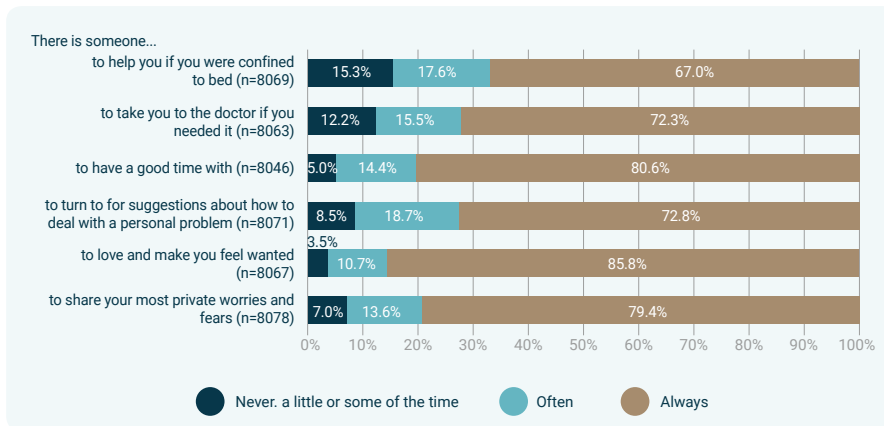
One might also wonder how often these contacts take place online. According to our data, 95.4 per cent of the pregnant women used social media networking sites (Facebook, Instagram, Viber, Skype, Messenger) to stay in touch, with 81.6 per cent using such applications on a daily basis. Only 4.6 per cent reported never using such sites as a means of communication.

We were also interested in the extent to which the women received support, which was measured using a six-question social support questionnaire.²¹ The questions focused on how often the women could count on the practical help and emotional support of others. For each question, the tendency was for the majority of participants always to have someone to rely on.

The women could, to a large extent, count on the support and help of others.

²¹ The questions were selected from the Hungarian version of the Medical Outcomes Study Social Support Survey. References: (1) Sherbourne, C.D. and Stewart, A.L. (1991). The MOS social support survey, *Social Science & Medicine*, 32(6), 705–714; (2) Sz. Makó, H., Bernáth, L., Szentiványi-Makó, N. et al. (2016). A MOS SSS – társas támasz mérésére szolgáló kérdőív magyar változatának pszichometriai jellemzői [The psychometric characteristics of the Hungarian version of MOS-SSS social support assessing scale]. *Alkalmazott Pszichológia*, 16(3), 145–162.

FIGURE 30. ACCESS TO SOCIAL SUPPORT FOR THE EXPECTANT WOMEN, %



Regarding the intimate relationships of the pregnant women, their satisfaction with the partnership, their commitment to it, the frequency of positive and negative interactions with their partner and possible intentions of divorce or break-up were all assessed. The results were analysed only in the case of women who were living with their spouse or partner (7,946 women, 95.9 per cent) or who had a partner who was living apart from them (LAT) (186 women, 2.2 per cent); thus, those who did not have a partner (155 women, 1.9 per cent) were excluded from the analysis.

Satisfaction with the relationship was measured using three statements, as was commitment to the relationship; the women indicated on a five-point scale the extent to which they agreed with each statement (1 = do not agree at all, 5 = agree completely).²² As can be seen from Figure 31, the mean score for each item ranged from 4.1 to 4.8, indicating that, on average, only with the proposition suggesting that their relationship was much better than that of other people did the women agree less than wholeheartedly.

Those women in an intimate relationship reported a high degree of satisfaction with and commitment to the partnership.

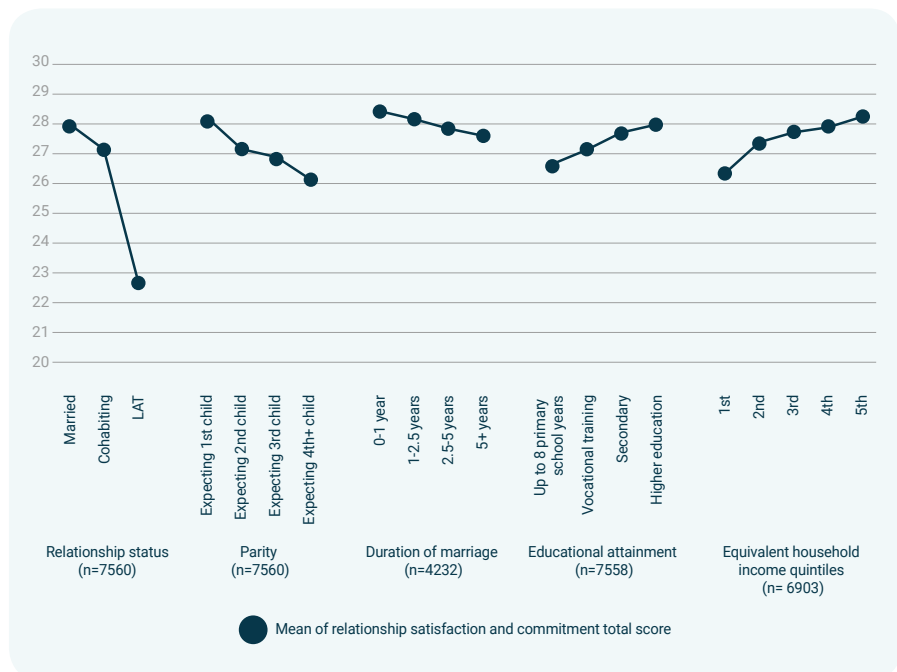
²²The questions were selected from the Hungarian translation of the Investment Model Scale. References: (1) Rusbult, C.E., Martz, J.M. and Agnew, C.R. (1998). The Investment Model Scale: Measuring commitment level, satisfaction level, quality of alternatives, and investment size, *Personal Relationships*, 5(4), 357–387; (2) Kozékiné Hammer, Zs. (2014). A párkapcsolati elégedettség vizsgálata rendszerszemléleti keretben [Assessment of the couple relationship satisfaction in a systemic framework]. Budapest, doctoral dissertation.

FIGURE 31. MEAN SCORES OF ITEMS MEASURING RELATIONSHIP SATISFACTION AND COMMITMENT - AMONG THOSE IN A RELATIONSHIP



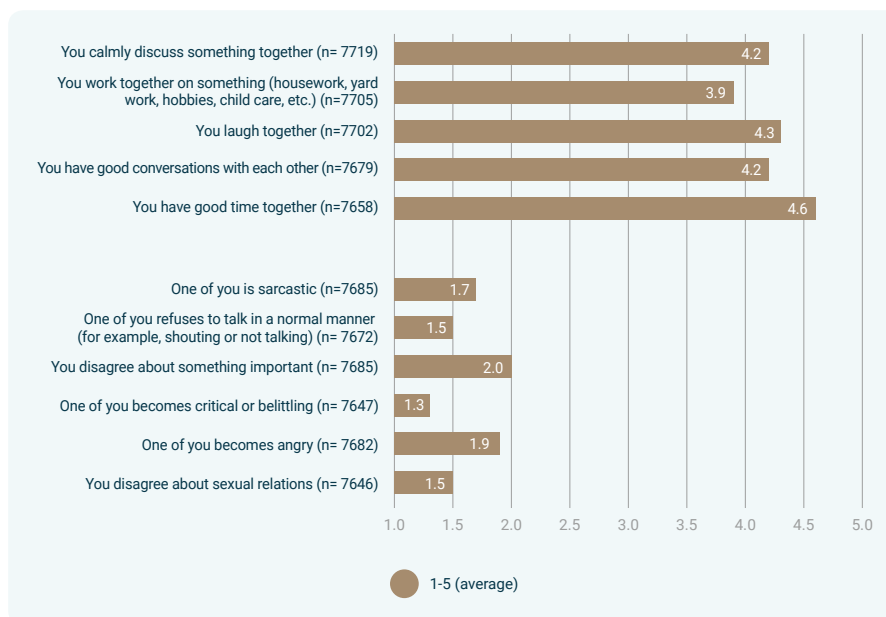
Adding together the scores on each question in the six-item questionnaire gives a total score of between 6 and 30, where 6 means that the woman did not agree with any of the statements, and 30 means that she agreed completely with all the statements. The average overall score on the questionnaire was 27.5, meaning that the women reported an overall high degree of satisfaction with and commitment to their relationships. This average score was highest among married women and lowest among women with visiting partners; and it was slightly lower for expectant mothers with several children already, for women who had been married for longer (in the case of married women), and for women with lower educational attainment and lower income.

FIGURE 32. SUBJECTIVE EVALUATION OF RELATIONSHIP, BY SOCIO-DEMOGRAPHIC GROUP - AMONG THOSE IN A RELATIONSHIP



Positive and negative relationship interactions were measured using five and six questions, respectively; the expectant women indicated the frequency of certain experiences with their partners on a five-point scale (1 = hardly ever, 2 = sometimes, 3 = fairly often, 4 = very often, 5 = always).²³ The mean incidence of positive interactions was 4.2, indicating that the frequency for each positive interaction was typically 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 mean incidence of negative interactions was 1.6, indicating that the frequency of each negative interaction was typically characterized by the 'sometimes' response.

FIGURE 33. MEAN SCORES OF ITEMS MEASURING THE FREQUENCY OF RELATIONSHIP INTERACTIONS - AMONG THOSE IN A RELATIONSHIP

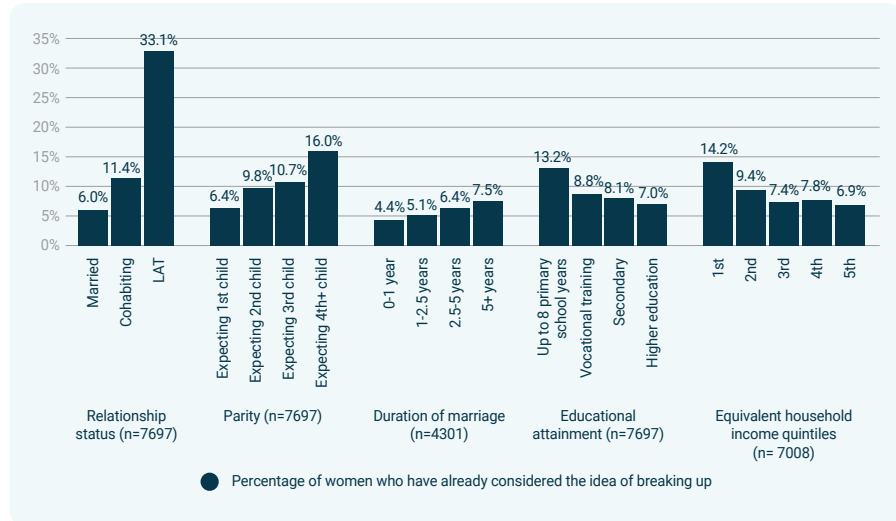


Finally, we asked our participants whether they had considered the possibility of divorce or a break-up during the past year. In all, only 8.7 per cent of the women reported that the idea of ending the relationship had already arisen: 6.2 per cent had considered it themselves; 2.1 per cent believed that both parties had thought about it; 0.4 per cent were seriously considering the possibility of divorce or separation; and in 0.1 per cent of cases, divorce proceedings had already been set in motion. Intention to break off the relationship was higher among those with cohabiting or visiting partners, among mothers with more than one child, in the case of longer marriages, and among those women with lower educational attainment and lower income; this is in line with the results on relationship satisfaction and commitment.

²³ The source of the questions is the Hungarian version of the Gilford-Bengtson Scale. References: (1) 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; (2) Silverstein, M. and Bengtson, V.L. (2008). Longitudinal Study of Generations, 1971, 1985, 1988, 1991, 1994, 1997, 2000, 2005, Interuniversity Consortium for Political and Social Research (ICPSR 22100); (3) Kopcsó, K. (2018). Scale adaptation. In: Zs. Veroszta (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, Hungarian Demographic Research Institute, Budapest, 24–29.

Some 8.7 per cent of the expectant women in a relationship had already considered breaking up.

FIGURE 34. THOUGHTS OF BREAKING OFF THE RELATIONSHIP, BY SOCIO-DEMOGRAPHIC GROUP, % - AMONG THOSE IN A RELATIONSHIP



2.9. Conclusion

The largest group of pregnant women in the Cohort '18 study were in the 30–34 age group. The women's partners were typically 3.5 years older. The vast majority were in a marital or cohabiting relationship, though a few were without a partner. Among both the women and their partners, the majority had at least a high-school diploma. One woman in 10 had no labour market experience; but of those who had worked at some stage, most had been employees, primarily in white-collar jobs or as skilled workers. The proportion of couples where neither the woman nor her partner was in work was low (2.3 per cent). The average monthly net income of those women who had been employed at some point was HUF 140,736, based on self-declaration.

Nearly half of all the women surveyed were expecting their first child, while a third were expecting their second. Only 6.7 per cent were expecting their fourth (or subsequent) child. Two fifths of the children who are born will not have a sibling at birth, and close to two fifths will have only 'traditional' siblings. The rest of the children will have half-siblings or a mix of traditional and half-siblings. Four fifths of the women surveyed were living in a single-family household based on marriage or cohabitation. If they were living in an extended household, they mainly shared it with older relatives.

On attitudes to gender roles, marriage and the family, the women mostly agreed that children suffer if their father is too preoccupied with his work. Our respondents clearly preferred the family-centred father role over the traditional breadwinner one. Almost two thirds of the expectant mothers took care of their existing children together with their partner, while the use of hired help around the house was quite rare. Those women who were in a relationship reported a high degree of relationship satisfaction and commitment, although getting on for 1 in 10 had considered breaking off the relationship.





3. Living Conditions

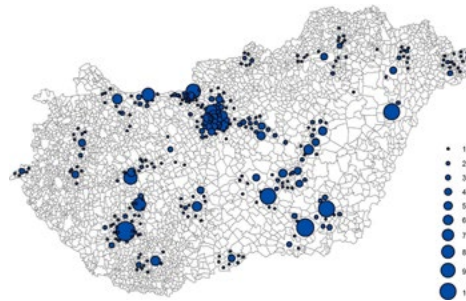
3.1. The place of residence

During the course of the study, we analysed the place of residence of families expecting a child, in terms of the size of the settlement and the services available within the settlement.

In what follows, we provide a general picture of differences in the places of residence of families that were expecting a child; with the exception of Budapest, individual settlements do not appear by name in our analysis or in the study database, thus ensuring anonymity of the study. Cohort '18 respondents lived in 473 different settlements across the country. The mothers interviewed during their pregnancy lived in a total of 608 nursing districts.

Cohort '18 respondents lived in 473 different settlements across the country.

FIGURE 35. LOCATION OF THE NURSING DISTRICTS INCLUDED IN THE SAMPLE



To examine the characteristics of the place of residence, we used settlement indicators linked to the address data of the expectant women. These indicators were assigned to the respondents' data at the settlement or district level, using statistical datasets.²⁴

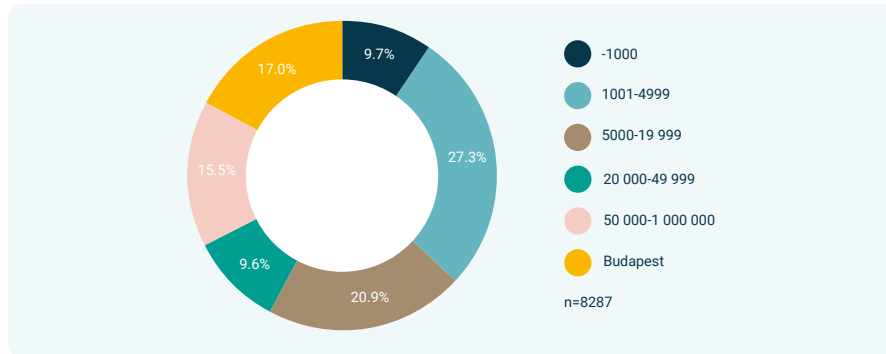
The distribution of the permanent residence of the pregnant women according to the size of the settlement was represented by a six-item categorization based on population size. The distribution of the population showed that most (27.3 per cent) lived in settlements of between 1,000 and 5,000 inhabitants, but that 20.9 per cent lived in settlements of between 5,000 and 20,000. The proportion

²⁴ The concatenation of the settlement-level data was done using the settlement identification number of the HCSO and/or the settlement name in the Hungarian Administrative Toponymy Book 2018 publication. The district-level data are linked using a 'district code', the classification being based on the HCSO settlement identification registration number.

of expectant women in Budapest was 17 per cent (in the sample). Some 9.7 per cent of respondents lived in the smallest category of settlements, with a population of less than 1,000.

Some 83 per cent of respondents lived in rural settlements.

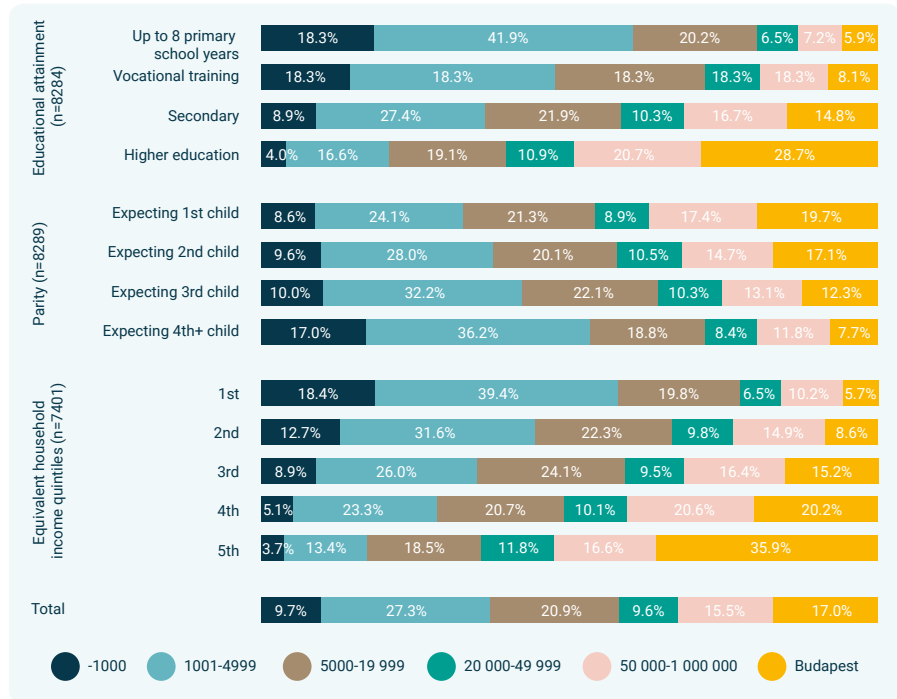
FIGURE 36. DISTRIBUTION OF RESPONDENTS, BY POPULATION OF THE SETTLEMENT, %



Looking at the socio-demographic differences between the women in terms of their educational attainment, number of children and income, we can see that these mirror the hierarchical settlement-level distribution. In other words, in the case of higher educational attainment, a smaller number of children and higher income, the distribution of respondents by place of residence shifts towards settlements with a larger population; in the case of a lower-status background, the trend is the opposite.

Distribution according to population size of the settlement was also reflected in other social background characteristics of the respondents (education, income).

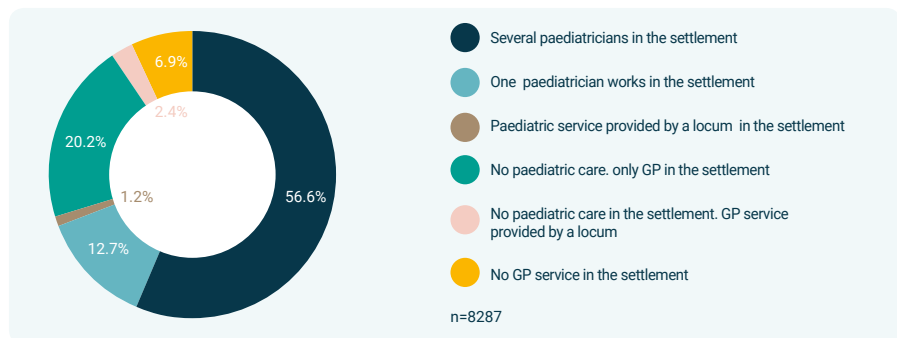
FIGURE 37. DISTRIBUTION OF EXPECTANT WOMEN, ACCORDING TO SETTLEMENT SIZE ALONG THE MAIN SOCIO-DEMOGRAPHIC BACKGROUND VARIABLES, %



By comparing settlement data, we can get an idea of what services are available at the place of residence. In terms of paediatric practitioners, 56.6 per cent of the women lived in a settlement where several paediatricians were available. For 12.7 per cent of the sample population, there was only one paediatrician in the settlement. Some 1.2 per cent had a paediatric service provided by a locum where they lived. A fifth of the women (20.2 per cent) only had a GP in the settlement, but no paediatric care; for another 2.4 per cent, only access to a locum was available; and a further 6.9 per cent could not access any GP care locally.

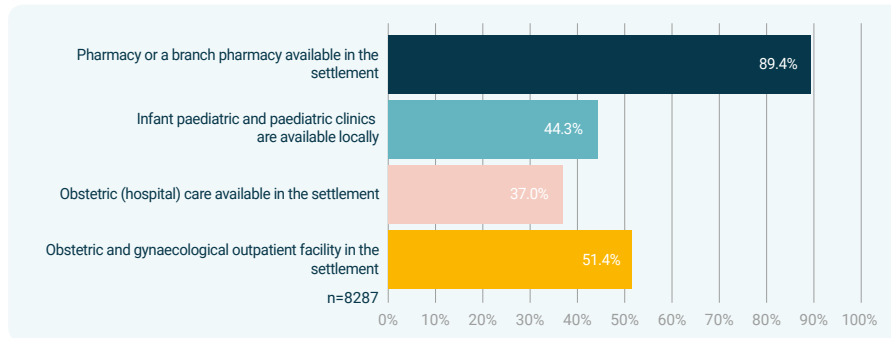
Some 6.9 per cent of the women could not access GP care at their place of residence.

FIGURE 38. MEDICAL PROVISIONS OF THE SETTLEMENT, %



Regarding other health services, the vast majority of the women – 89.4 per cent – lived in a settlement where there was a pharmacy or a branch pharmacy available. The availability of specialized clinics was much lower: infant paediatric and paediatric clinics were available to 44.3 per cent of respondents locally; 51.4 per cent could access an obstetric and gynaecological outpatient facility in their settlement, but obstetric (hospital) care could only be accessed locally by 37 per cent of the women.

FIGURE 39. HEALTH SERVICES OF THE SETTLEMENT, %



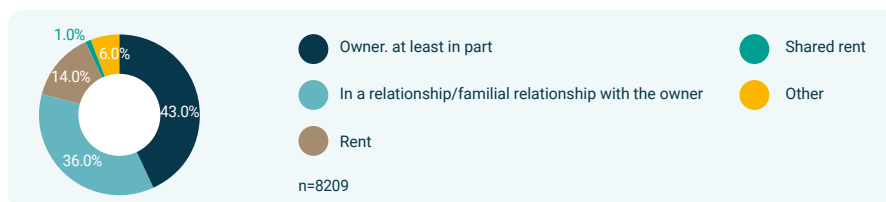
Housing conditions

3.2.

In examining the housing conditions of expectant mothers, we review the occupancy type and the value, size and equipment of the properties.

Home ownership was found to be quite common during pregnancy: 43 per cent of the women were living in properties that they owned (at least in part). In a significant proportion of cases (36 per cent), the mother was in a relationship or a familial relationship with the property owner; 14 per cent of the women were expecting a baby while living in a rented apartment or a shared rented apartment.

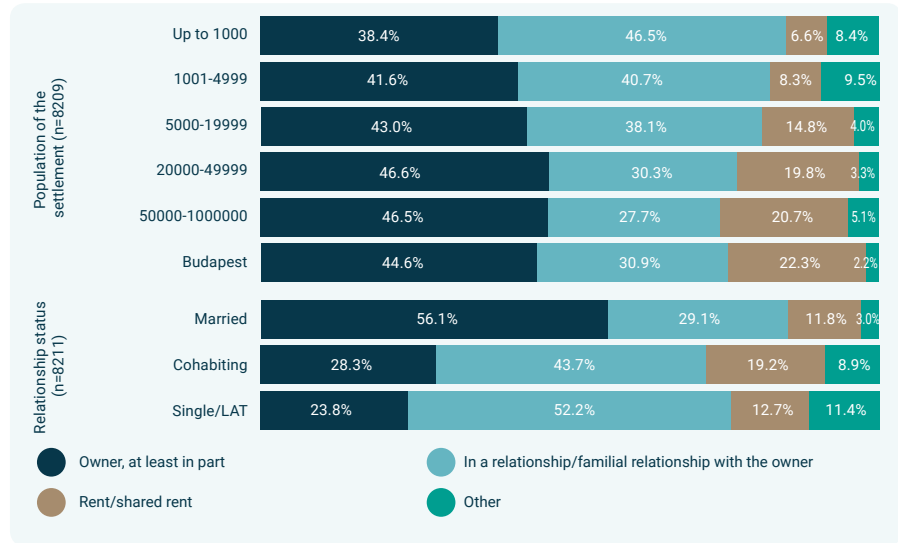
FIGURE 40. OCCUPANCY RIGHTS OF EXPECTANT WOMEN, %



Rental housing was found to be quite uncommon among those women living in settlements with a population of under 5,000, but its frequency increased as the population size of settlements grew: 20.7 per cent of those living in large provincial towns and 22.3 per cent of those living in Budapest were expecting their child while living in a rented property. This is true of an above-average proportion of the women living in a cohabiting relationship (19.2 per cent).

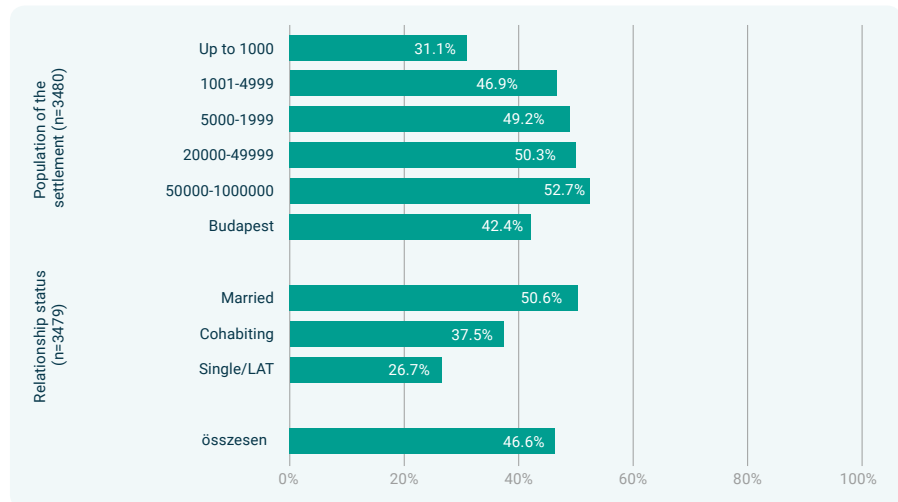
Some 15 per cent of the women were living in a rented apartment. Rental housing was more common among those women living in a cohabiting relationship than it was among married women.

FIGURE 41. OCCUPANCY TYPE, BY SETTLEMENT SIZE AND RELATIONSHIP STATUS, % - AMONG ALL RESPONDENTS



Almost half (46.6 per cent) of the 43.3 per cent of women who were living as owner (or part owner) occupiers had a loan taken out to pay for the property. Such property-based mortgage loans were prevalent among expectant women living in larger, rural settlements. Among homeowners, the proportion of expectant households with a mortgage was significantly lower in small settlements, and was also below average in Budapest (42.4 per cent). Property mortgages were also strongly linked to relationship status: 50.6 per cent of married couples, but only 37.5 per cent of cohabiting owners, were living in mortgaged properties at the time of the survey.

FIGURE 42. FREQUENCY OF PROPERTY-BASED MORTGAGES, % - AMONG HOMEOWNER EXPECTANT PARENTS



Property-based mortgages were mainly to be found among homeowners in larger rural towns.

On average, expectant homeowners estimated the current market value of their property (i.e. what the property would sell for at the time of the survey) at HUF 20 million, with a median value of HUF 16 million. The estimated value increased with the size of the settlement: in small settlements of fewer than 1,000 inhabitants, the average estimate was HUF 7.6 million, increasing to HUF 34.8 million in the capital.

In terms of apartment size (and also taking into account rental properties and the properties of partners or relatives used by the expectant mother), the trend was reversed: while the average apartment size was 87.6 square metres, the figure decreased as the size of the settlement increased – from an average of 95 square metres in small settlements to 72 square metres in the capital, Budapest. In terms of the number of children, mothers who were expecting their third child had the largest dwellings (92 square metres on average); the average both for those with fewer children and for those with more was only 86 square metres. The average number of rooms – making no distinction between ‘half rooms’ (up to 12 square metres) and full-sized rooms – was quite balanced: three rooms (2.96); only in the capital (2.7) and among those expecting their first child (2.8) was the average lower.

The average apartment size of expectant women was 87.6 square metres, which was inversely correlated to the size of the settlement.

Based on the responses, it would appear that the vast majority of respondents were expecting their child in adequate housing conditions. In terms of the level of comfort of the dwellings, 4–5 per cent of respondents reported serious shortcomings. From a series of connected questions, it becomes clear that 4.3 per cent of the women were living in an apartment without running water; 5 per cent did not have a flush toilet; and 4.4 per cent did not have a bathroom. The problem was most common in settlements of between 1,000 and 5,000 inhabitants, where lack of running water could be as high as 7 per cent.

Some 4 per cent of families expecting a child were living in a flat without running water.

In a green environment

Many of the pregnant women surveyed (74 per cent) were living in an apartment or house with a garden attached. Naturally, how common this is depends largely on the type of settlement: people in small settlements, almost without exception, were living in a house with a garden; but 46 per cent of pregnant women in Bu-

dapest also had access to a garden – in some cases a shared one. However, it was far more common for better-off families (based on household income status and the woman’s educational attainment) to have another property, or even a holiday home (18 per cent of respondents reported having one).

3.3. Facilities of households

Regarding the facilities/devices owned by households, we examined three aspects: info-communication devices, household appliances, and goods reflecting cultural consumption.

On the one hand, we considered the proportion of households and expectant mothers that had telecommunications equipment and other IT devices available to them. The equipment of households was uniformly high: 84.4 per cent of households expecting a child had a flat-screen television; 94.3 per cent had internet; 96.9 per cent had a smartphone; and 88.5 per cent had a computer. Meanwhile, 93.2 per cent had a credit or debit card.

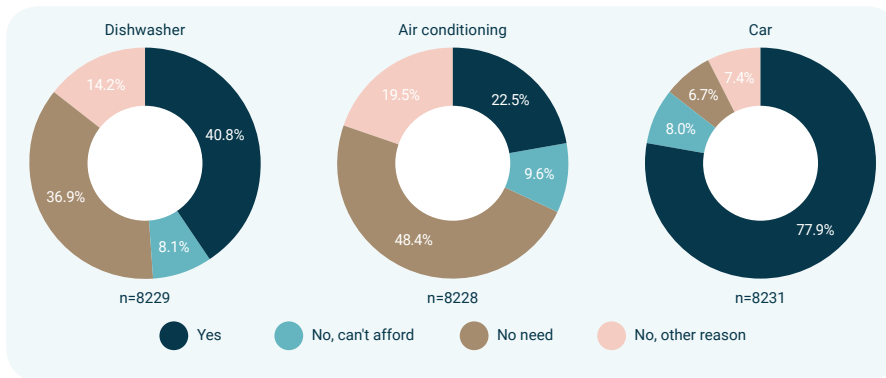
Almost every expectant mother had a smartphone.

Television in the household

While computer use increases according to the size of the settlement, the level of education and income level, the distribution of flat-screen televisions among households shows a slightly different trend: although such devices are to be found less among lower-status families, a better level of education, greater age and a larger number of children all increase the relative proportion of those who – while they could afford a flat-screen television – do not feel the need to buy one.

As regards household equipment, we examined certain other electrical devices available to the household and the use of cars. We looked at the availability of less-common devices, such as a dishwasher (40.8 per cent) and air conditioning (22.5 per cent). We also found that a car was available to 77.9 per cent of those families expecting a child.

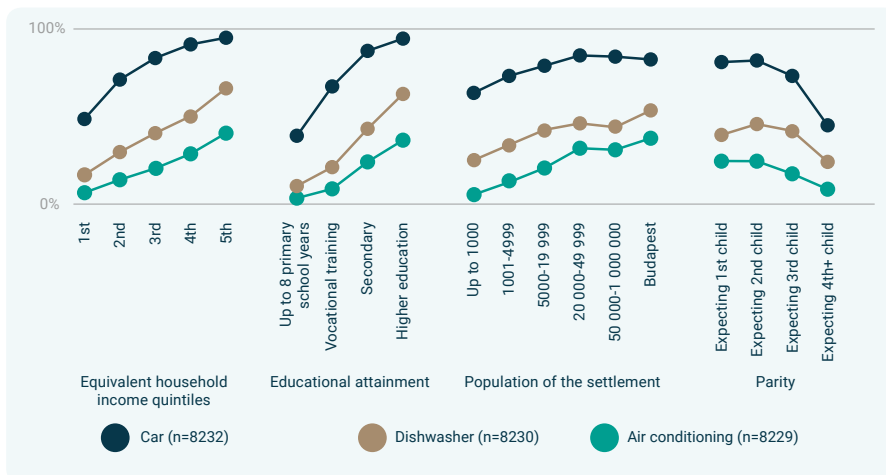
FIGURE 43. AVAILABILITY OF ELECTRICAL EQUIPMENT IN HOUSEHOLDS, %



The proportion of households with a car in the smallest settlements (of fewer than 1,000 inhabitants) was – at only 63 per cent – found to lag far behind the average, whereas in larger rural towns the figure exceeded 84.2 per cent. In Budapest, it was 82.6 per cent. The data showed that it was mainly families that were expecting their first or second child that kept a car (with an average frequency of 81–82 per cent); 73.2 per cent of those expecting their third child, but only 44.9 per cent of families that already had at least three children had a car. The increase in frequency went hand in hand with educational attainment and income. The same trend can be observed when we look at the two household electrical devices examined, the dishwasher and the air conditioner: as education, income and settlement size increased, so did ownership of such devices. In terms of the number of children, families expecting their first or second child had the highest average, and those with already three or more children had the lowest.

As the size of the settlement and the level of income increase, so the equipment of households improves.

FIGURE 44. AVAILABILITY OF CARS AND ELECTRICAL DEVICES IN HOUSEHOLDS, BY MAIN BACKGROUND VARIABLES, % - PERCENTAGE OF THOSE WITH EACH DEVICE

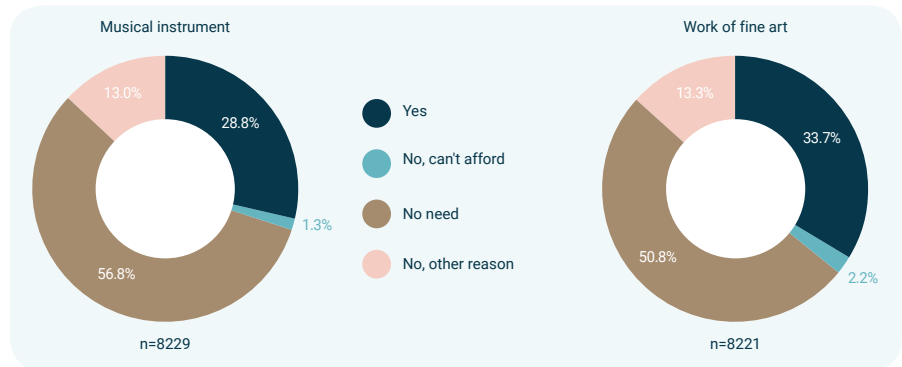


While examining the equipment of households, we also looked at the existence and

quantity of several objects representing cultural capital: 33.7 per cent of families owned a work of fine art (typically a painting); 2.2 per cent could not afford one, although they would like to; meanwhile, the majority (50.8 per cent) said they did not feel the need to buy a work of fine art for their home. Attitudes were similar in the case of musical instruments, although the differences were even greater: 28.8 per cent of respondents owned a musical instrument; 56.8 per cent did not feel the need to buy one, although they could afford to.

The majority of respondents did not intend to buy a work of fine art or a musical instrument for their apartment.

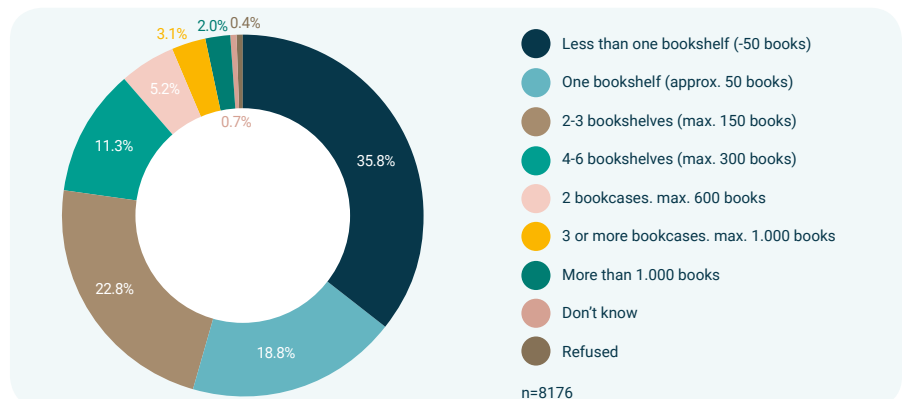
FIGURE 45. CULTURAL GOODS IN THE HOUSEHOLD, %



The number of books in the household was included in the study as a variable representing the cultural capital of the family. It can thus be included as an element in a potential social background index. Families were clearly differentiated by the number of books they had (estimated according to the number of bookshelves): 35.8 per cent of respondents had fewer than 50 books in the household (i.e. less than one shelf of books). Another 19 per cent had at most one shelf of books at home. The remaining 45 per cent or so of households had several bookshelves, and 2 per cent of families had more than 1,000 books.

More than half of the families had at most one bookshelf.

FIGURE 46. NUMBER OF BOOKS IN THE HOUSEHOLD, %



Given that the 'cultural goods' examined – musical instruments, works of fine art and the number of books – were included in the study as possible indicators of the family's cultural capital, their distribution according to hierarchical background variables is reviewed below. In the case of musical instruments and paintings, we show the incidence of possession of these objects; in the case of books, the proportion of households with more than one shelf of books is presented, broken down by income, education and settlement size.

The most marked hierarchical differences can be observed in the case of books. Here again, there is a strong – a striking – correlation between level of education and the number of books a family has. In this sense, the gap between respondents from the lowest educational category (completed primary) and from the highest (university graduate) was more than 60 percentage points. Education can also be seen to increase the frequency with which musical instruments and works of fine art are owned (the gap between those with the lowest and those with the highest level of education was around 20 percentage points). However, in the case of the background variable measuring income, the gap in ownership was much smaller, especially in the case of musical instruments. According to the size of settlement, the gap between the smallest settlements and Budapest was nearly 10 percentage points in terms of the frequency of ownership of an instrument or a painting.

The number of books and the level of education showed a very strong correlation.

FIGURE 47. FREQUENCY OF CULTURAL GOODS IN HOUSEHOLDS, BY MAIN BACKGROUND VARIABLES, %- PERCENTAGE OF THOSE WITH GIVEN CULTURAL GOODS



3.4. Family policy benefits

As many families that were expecting a child already had children, there were several sources of regular state subsidies available to the respondents, and these contributed to the income of the household.

The system of family policy benefits related to the birth and upbringing of children in Hungary includes payments received as individual entitlements, though there are also insurance-linked payments.

Individual entitlement-based benefits include childcare allowance (GYES). A parent or guardian is entitled to GYES: in the case of a parent, if his or her child does not have a separate guardian; or in the case of a minor parent who has reached the age of 16, if he/she is bringing up the child in a household separate from that of the child's guardian. The entitlement is available until the child turns 3; in the case of twins, until the end of compulsory schooling; and in the case of a chronically ill or severely disabled child, until the child's tenth birthday. The monthly amount of the benefit is the same as the current minimum amount of old-age pension (HUF 28,500 in 2018 and 2019), but a 10 per cent pension contribution is deducted from this amount. GYES can also be paid to a grandparent once the child reaches the age of 1, if the child is cared for in the parents' household and the parents give up GYES to benefit the grandparent. Experience has shown that, in the vast majority of cases, it is the mother who receives the childcare allowance.

Child-raising allowance (GYET) is available to a parent or guardian who is raising three or more minor children in their own household. The monthly amount of the child-raising allowance, regardless of the number of children, is the same as the current minimum amount of old-age pension (HUF 28,500).

An additional individual rights-based benefit is the family allowance, which includes two benefits: a (home) education allowance and a schooling allowance. The (home) education allowance is paid for children who are not yet in compulsory education, while the schooling allowance is paid for children who are of compulsory schooling age or who are no longer of compulsory schooling age but are studying at a public educational (secondary education) institution. Its amount in 2018 (unchanged since 2008) was HUF 12,200 net per month for a two-parent family with one child. In the case of a single parent, the amount was HUF 13,700. In the case of more children, the allowance per child was higher in both two-parent and single-parent families.

For a chronically ill or severely disabled child, an uplift to the family allowance is paid for as long as the illness persists or until the child reaches the age of 18. A child qualifies as permanently ill or severely disabled if the condition is one of those included in the 5/2003. (II.19.) ESZCSM decree and renders the child in need of constant or increased supervision and care.

An insurance-linked benefit is, for example, the infant care fee (CSED). A woman who has been insured for 365 days in the two years prior to giving birth is entitled to this fee. The infant care fee is paid for the period corresponding to maternity leave, up to a maximum of 168 days after the birth of the child. The amount of the infant care fee is 70 per cent of the calendar day-based salary.

An insured parent is entitled to parental leave benefit (GYED) if he or she has been insured for 365 days in the two years preceding the birth of the child. Parental leave benefit is paid, at the earliest, from the day after the expiry of the infant care fee or the corresponding period until the child reaches the age of 2. In the case of twins, parental leave benefit is payable from the day following the expiry of the infant care fee or the corresponding period until the children are 3 years old. The amount of parental leave benefit is 70 per cent of the calendar day-based wage, but may not exceed 70 per cent of twice the current monthly minimum wage of HUF 149,000 (in 2019) – i.e. a total of HUF 208,600. A 10 per cent pension contribution and a 15 per cent personal income tax advance are deducted from this amount. In the period during which parental leave benefit is received, employment activities may be pursued.

The purpose of establishing entitlement to the regular child protection discount is to ensure that the child is entitled to free or discounted institutional meals and holiday meals, in-kind support, free textbooks and other benefits based on the child's social circumstances. The regular child protection discount depends on the financial situation of the family: it usually attracts a monthly subsidy of HUF 6,000, but in the event of social disadvantage the amount is increased to HUF 6,500 a month.

Institutional meals (e.g. in schools) are provided free of charge or at a 50 per cent discount for children in foster care or who receive regular child protection discount; who are chronically ill or disabled; who live in a family with a chronically ill or disabled child or in a family with three or more children; or who live in a family where monthly per capita income does not exceed 130 per cent of the statutory minimum wage minus personal income tax, employee, health insurance and pension contributions.

In addition to the above, family policy benefits also include so-called care allowance. This is a financial subsidy given to an adult relative who provides home care for a severely disabled or chronically ill person under the age of 18 who needs permanent and long-term care. The basic rate of the care allowance is HUF 37,490 a month, but in the case of a severely disabled person who requires increased care, it is HUF 56,400. Since 1 January 2019, a new form of care allowance has been in place, intended for those caring for their chronically ill child at home: home care allowance for children (GYOD). The amount of this allowance is HUF 100,000 gross (rising to HUF 150,000 in the case of simultaneous care for more than one child), paid regardless of the child's age.

In the Cohort '18 study's pregnancy-wave survey, we asked about family policy benefits received by families, including: childcare allowance, parental leave benefit, child-raising allowance, infant care fee, family allowance for a chronically ill or disabled child, regular child protection allowance (and discount) and free or subsidized institutional meals; in addition, we asked about various benefits, subsidies (municipal and/or district subsidies;

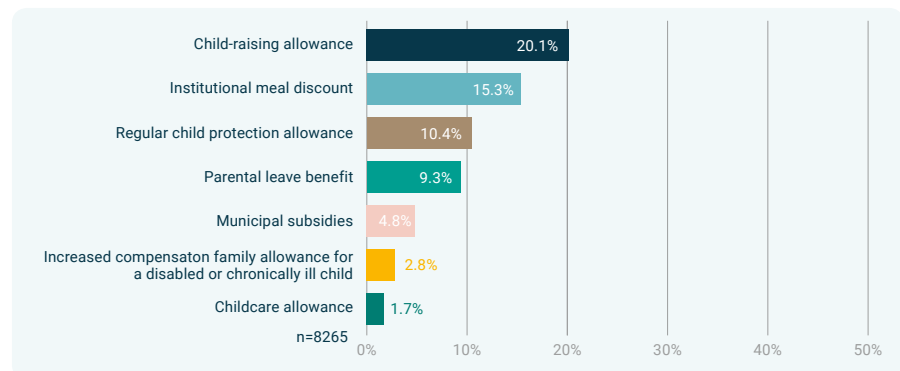
health impairment and childcare subsidies), care allowance, child support and alimony. Alimony is a slight anomaly, as it is not a state/municipal subsidy, but is one parent's payment to the other in the event of divorce. The reason why we still considered it important to include in the questions is that it can also be considered to be child-related income.

The survey naturally showed the benefits received for children that the expectant mothers already had. Within the Cohort '18 sample, more than half of the women (53.5 per cent) already had one or more children.

According to the results of the questionnaire, 1 woman in 5 (20.1 per cent) was receiving childcare allowance, and almost 1 in 10 parental leave benefit (9.3 per cent). Only 1.7 per cent of respondents were in receipt of child-raising allowance (conditional on having at least three children).

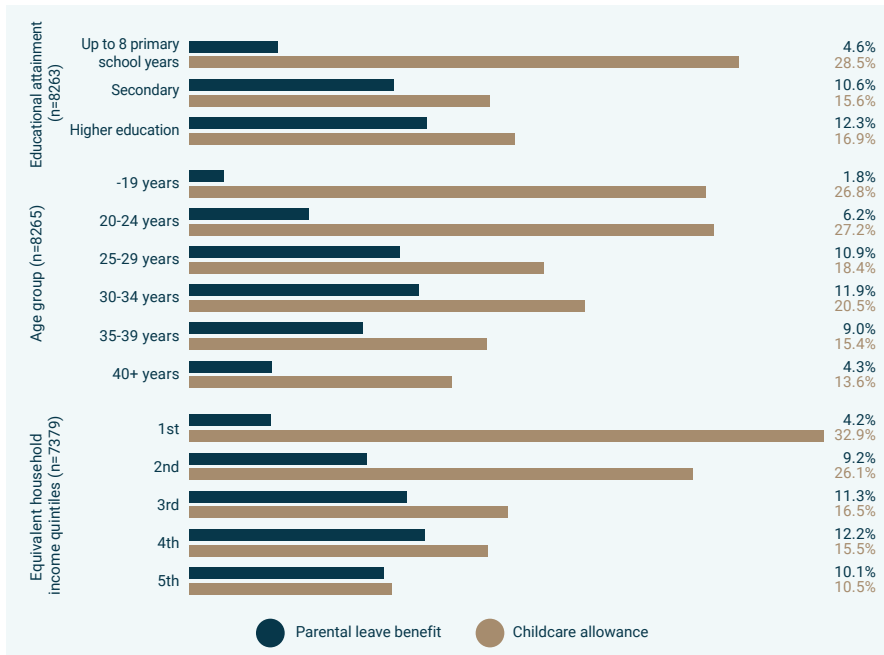
A tenth of the women (10.4 per cent) were receiving regular child protection allowance; 15.3 per cent had their existing children receiving subsidized or free institutional meals; and 4.8 per cent of the women received some form of municipal assistance. Family allowance for a chronically ill or disabled child was claimed by 2.8 per cent of respondents as a monthly source of income. A care allowance was received by only 0.7 per cent. Some 4.5 per cent of the pregnant mothers were in receipt of child support/alimony for children born from a previous relationship.

FIGURE 48. RECIPIENTS OF FAMILY POLICY BENEFITS AMONG ALL RESPONDENTS, %



If we examine which social groups more typically receive certain benefits, we can see that younger women, those with a lower level of education, those in a worse financial situation and those living in a smaller settlement were more likely to be in receipt of childcare allowance. No significant difference was observed according to marital status. Parental leave benefit, on the other hand, was claimed by a higher proportion of those with higher education, of middle age and in an average financial situation, and those living with their spouses.

FIGURE 49. THE PROPORTION OF MOTHERS RECEIVING PARENTAL LEAVE BENEFIT AND CHILDCARE ALLOWANCE, %



Benefit-type allowances (such as regular child protection allowance, settlement allowance or subsidized institutional meals for children) are most common among those living in smaller settlements, the lower-educated, young women, those with more than one child, and those living with a cohabiting partner or alone.

Some 38.6 per cent of women with children who had completed at most eight years of primary school received regular child protection benefits, compared with only 0.5 per cent of those with tertiary education.

Most child-related benefits are not exclusive; thus, families can receive a number of different allowances in parallel. Although their accumulation is not very significant, it can be seen that, aside from the 58 per cent that did not receive any support or alimony, 26.8 per cent of households received one form of support, 8.8 per cent got two types and 5.3 per cent had three types of state/municipal financial support, child support or alimony. The proportion of respondents who received four or more types of support was 2.2 per cent.

Some 7.5 per cent of the expectant women received at least three types of child-related benefits.

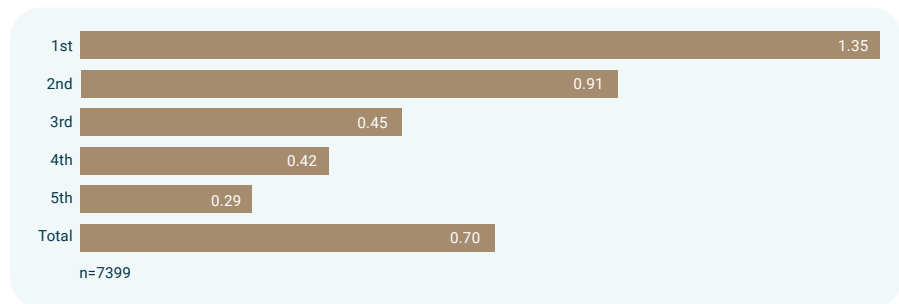
FIGURE 50. HOW MANY DIFFERENT FORMS OF CHILD-RELATED SUPPORT DID THE HOUSEHOLD RECEIVE? %



If the average number of forms of support per family is reviewed according to household income levels (presented in Section 2), a gradual tendency can clearly be perceived. The use of external subsidies/benefits steadily declines as we move up through the income quintiles in terms of per capita household income. The average number of forms of financial support per family (0.7) was 1.4 for families in the lowest household income quintile; at the same time, households in the upper brackets received an average of only 0.3 such benefits on a monthly basis.

The average number of benefits received for children was in line with the financial situation of the family.

FIGURE 51. AVERAGE NUMBER OF MONTHLY ALLOWANCES/BENEFITS RECEIVED BY A HOUSEHOLD, BY HOUSEHOLD INCOME QUINTILE



The family policy benefits received are closely linked to the mother's labour market situation. According to the survey (conducted during the seventh month of pregnancy), almost 1 woman in 5 was actively working, while slightly more than half of them (52.4 per cent) – although they had had a job – had stopped working and did not intend to continue until after they had given birth.

Of those women who were unemployed, only 40.7 per cent had adequate insured status (i.e. a total of at least one year of employment in the two years prior to the scheduled date of delivery), which would allow them to claim parental leave benefit later.

Financial situation of families

3.5.

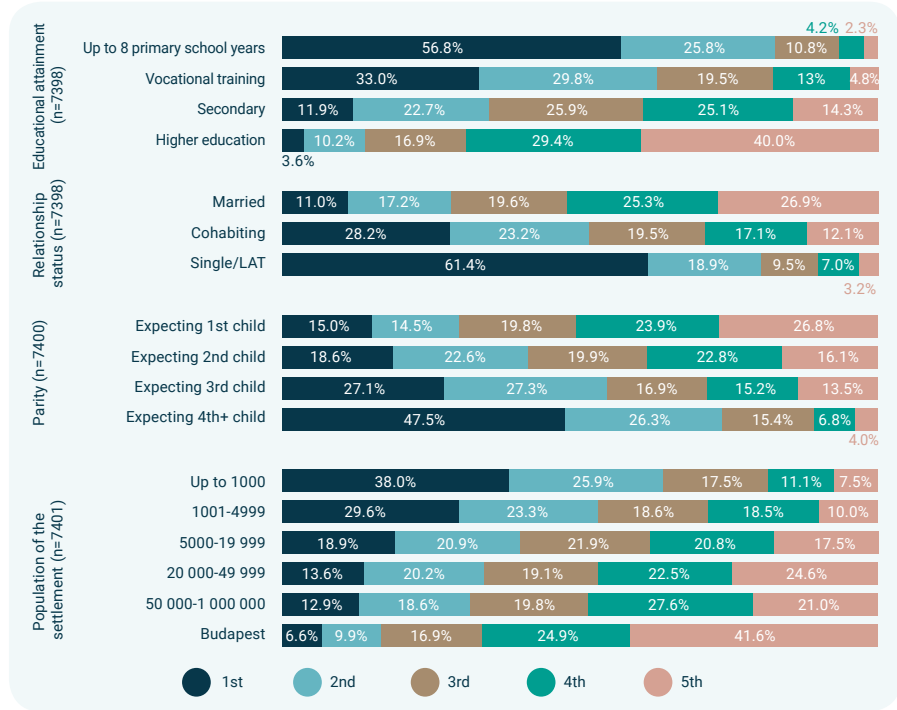
Both objective and subjective indicators were used to examine the financial situation of the families involved in the study.

As an objective indicator, the (household) income presented in Section 2 and the external, state/municipal subsidies/benefits received by the household were included in our study.

Households were grouped into five categories, based on their responses to open-ended and closed-ended questions regarding average monthly per capita income. These equivalent household income quintiles categorize respondents into equal categories (i.e. 20 per cent of the sample), making them well suited to show the material differences between families and their relationships in terms of other socio-demographic characteristics. Income differences between households are arranged hierarchically in terms of all background categories. In terms of settlement size, the proportion of households classified as being in the upper income groups gradually decreased as our focus moved from Budapest to smaller settlements, while the proportion in the lower quintiles increased. Unsurprisingly, according to the already existing number of children, the fewer the people in the family, the more favourable was the per capita income of the family: nearly half (47.5 per cent) of families with three or more children fell into the lowest income quintile; only 15 per cent of (still) childless families were in the lowest quintile. The income situation of married people was more favourable than that of cohabitantes: more than a quarter (26.9 per cent) of those living with a spouse belonged in the highest quintile in terms of household per capita income, whereas the same was true of only 12.1 per cent of those in a cohabiting relationship. The hierarchy of maternal educational attainment consistently followed levels of household income distribution: higher education led to higher household income levels, and vice versa.

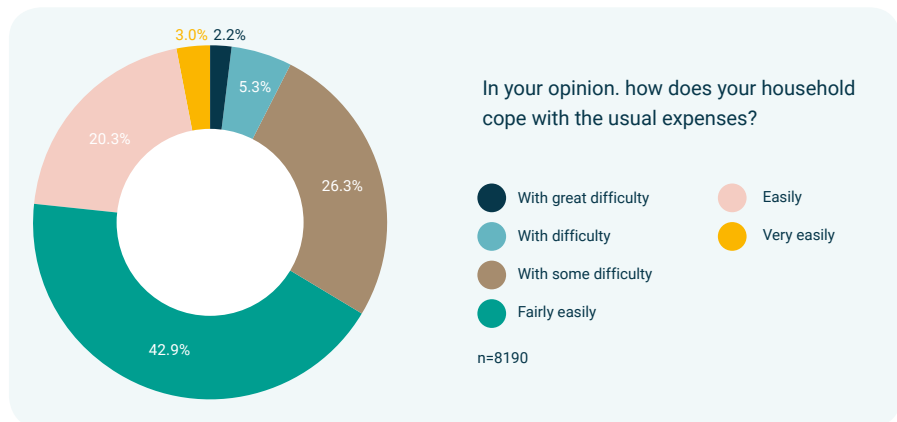
Income differences between households were reflected in the different socio-demographic characteristics of families and expectant women.

FIGURE 52. DISTRIBUTION OF HOUSEHOLD INCOME GROUPS ALONG THE MAIN SOCIO-DEMOGRAPHIC BACKGROUND VARIABLES, %



The majority of the women, when asked for a subjective financial assessment of their household, saw their financial situation in a positive light: 42.9 per cent found it relatively easy to cover their household expenses; another 20 per cent said it was easy; and 3 per cent considered it very easy. A third experienced some degree of difficulty in covering their usual household expenses: yet most of them (26.3 per cent) reported it as being only moderately difficult; for 5.3 per cent, it was a considerable burden and for 2.2 per cent, it was a heavy burden.

FIGURE 53. ASSESSING THE FINANCIAL SITUATION OF THE HOUSEHOLD, %



The incidence of really serious financial difficulties is around 5 per cent. Inadequate household income can lead to household debt and debt accumulation. We measured the frequency of some of these financing problems for the households

surveyed: in the year prior to the survey, 5.5 per cent of households had, at some point, been unable to pay one or more of their utility bills. Less frequently, 1.3 per cent had been unable to make the mortgage loan payments and 2.2 per cent had been unable to pay other loan arrears. The proportion of non-payment of housing costs (rent, common utilities) was 1.4 per cent in the previous year.

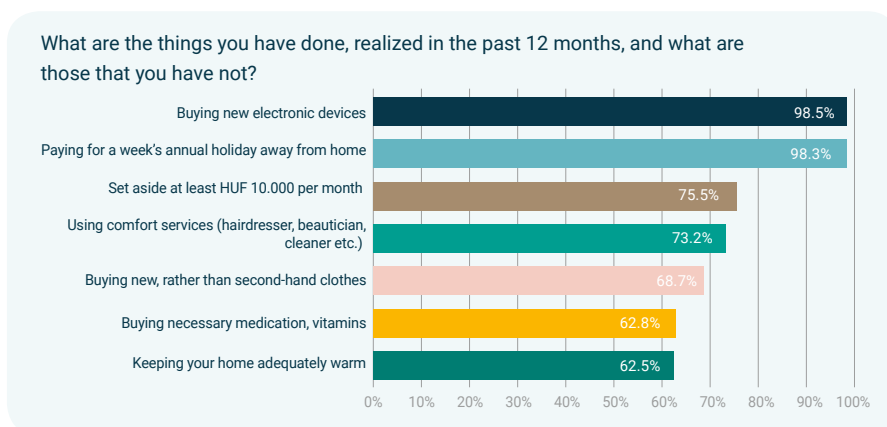
The proportion of households with serious financial problems was around 2 per cent.

Outside financial assistance

Around 85 per cent of the women surveyed indicated that if they were in need of money, they could ask friends or relatives for up to about HUF 100,000. This option, however, was much more characteristic of higher-income families. Only 64.6 per cent of those in the lowest household income quintile saw themselves as having such an opportunity; meanwhile, almost everyone in the highest quintile (97.7 per cent) felt they could count on outside financial assistance of this magnitude.

In addition to the difficulties, we also examined the financial opportunities of households in the past year. It would seem that, for the majority of the women, it caused no financial hardship to keep the apartment warm and to buy the necessary medicines and vitamins. In total, three quarters of households also had money to spend on new clothes (75.5 per cent) and on using 'comfort services' (e.g. hairdresser, cleaner) (73.2 per cent). At the same time, only 68.7 per cent of the respondents had succeeded in accumulating a financial reserve (i.e. had been able to set aside at least HUF 10,000 per month over the previous year). Some 62.8 per cent had been on vacation in the previous year. Rather fewer (62.5 per cent) had purchased a new electronic device; but here, the proportion of those who had not felt the need to do so was high, at 30 per cent.

The majority of the expectant women viewed their family's financial situation in a favourable light; covering basic expenses did not usually represent a serious problem for them.

FIGURE 54. THE FINANCIAL OPPORTUNITIES OF THE FAMILY, %

3.6. Satisfaction

Subjective aspects of life satisfaction play just as important role in individuals' quality of life as objective living conditions.

Over the past 50 years, a series of sociological, statistical and socio-political analyses has shown that subjective indicators are as important in understanding the well-being of individuals as objective (material) living conditions.²⁵ This is because they draw a picture of an individual's well-being, satisfaction and how individuals value their lives, certain components of them, and the life events that shape them as individuals.²⁶ In this overview, we show how satisfied those pregnant women involved in our study were with their lives and their financial situation around the seventh month of pregnancy, i.e. going through a very special life event. As satisfaction with both their relationship and their state of health are important components of the subjective well-being of pregnant women, we also briefly address these issues, in order to provide a fuller picture.

Overall life satisfaction is a key variable in the subjective well-being indicator system.²⁷ On an 11-point scale, average overall satisfaction was 8.1. The vast majority of the women were satisfied with their lives (88.6 per cent cited a score of over 5 for satisfaction, 5 being the mean of the scale); nearly three quarters were very satisfied (71.6 per cent gave a rating of 8, 9 or 10), including 29.1 per cent who gave the top score. Just 4.4 per cent of the women were dissatisfied with their lives (i.e. they selected a value below the mean of the scale, 5).

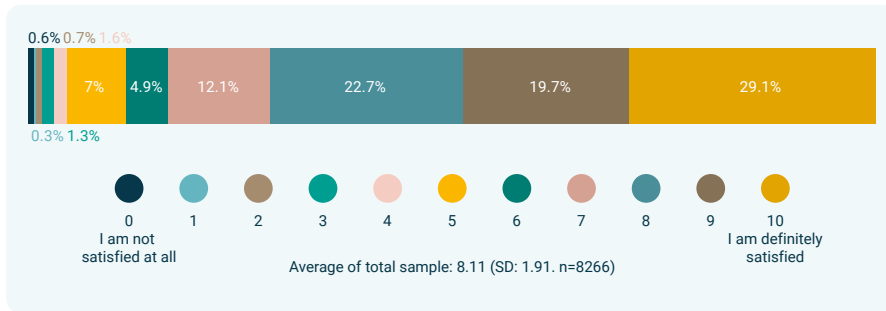
Some 29.1 per cent of the expectant women were 'definitely satisfied' with their lives.

²⁵ Stiglitz, J.E., Sen, A. and Fitoussi, J.P. (2009). Report by the Commission on the Measurement of Economic Performance and Social Progress; Sachs, J.D., Layard, R. and Helliwell, J.F. (2018). World Happiness Report 2018, Working Papers id: 12761, eSocialSciences; Veenhoven, R. (1995). World database of happiness, Social Indicators Research, 34(3), 299–313; HCSO (2016). Mikrocenzus 2016. 11. Szubjektív jóllét [Microcensus 2016. 11. Subjective well-being]. Budapest, HCSO, 2018.

²⁶ OECD (2013). OECD Guidelines on Measuring Subjective Well-being. Paris, OECD Publishing, DOI: <http://dx.doi.org/10.1787/9789264191655-en>

²⁷ The respondents could express their life satisfaction on an 11-point scale, where 0 meant 'not satisfied at all' and 10 meant 'completely satisfied'.

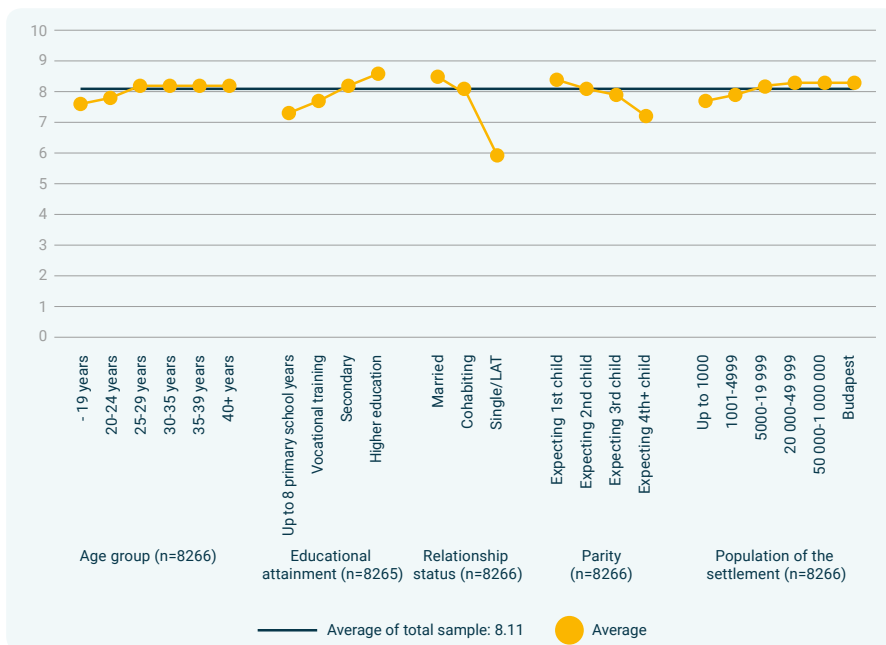
FIGURE 55. DISTRIBUTION (%) AND AVERAGE VALUE OF LIFE SATISFACTION



Life satisfaction depends largely on the life circumstances of the individual.²⁸ Among the pregnant women surveyed, those under 19 years of age, those without a high-school diploma, and those who had no partner (or who did not live with him) were less satisfied with their lives. This was also true of those who were expecting their fourth (or subsequent child) and those who lived in a settlement with fewer than 5,000 inhabitants. At 5.9 points, life satisfaction was lowest among those who did not have a partner (or did not live with him); it was highest among those with tertiary education (8.6 points).

Average life satisfaction was 8.5 among those living with their spouse; 7.9 among those with a cohabiting partner; and just 5.9 among those who either had no partner or did not live with him.

FIGURE 56. AVERAGE LIFE SATISFACTION, BY DEMOGRAPHIC CHARACTERISTICS

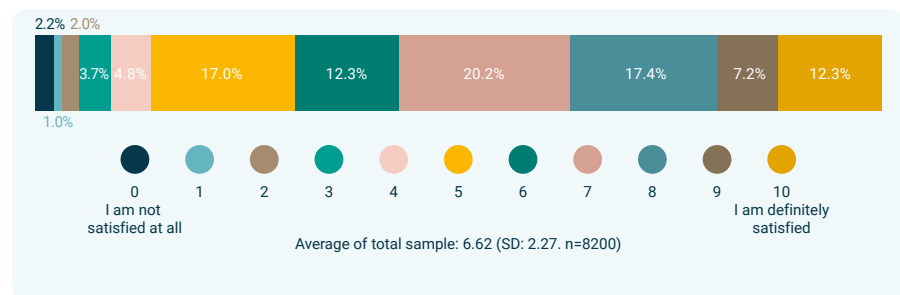


²⁸ It is not just individual life circumstances that have a powerful impact on subjective well-being, but also the individual's closer (family, neighbourhood) and wider (settlement, region, country) contexts; however, analysis of these factors goes beyond the scope of the present description. See Rojas, M. (2019). *The Economics of Happiness*. Cham, Springer.

Similarly, we examined the respondents' satisfaction with their financial situation. The women were less satisfied with their financial situation than with their lives in general: the average was 6.6 on a scale of 0–10, and the variance was also greater – that is, the differences between opinions were greater (2.27 versus 1.91 for life in general). A value above the middle of the scale (5) was chosen by 69.4 per cent of the women (meaning they were satisfied with their financial situation); 36.9 per cent were very satisfied (scores of 8–10) and 12.3 per cent chose the maximum score. By contrast, 13.7 per cent of the pregnant women were dissatisfied with their financial situation (choosing values below 5), and 2.2 per cent of respondents indicated that they were not at all satisfied with their financial situation.

In all, 13.7 per cent of the expectant women were to some extent dissatisfied with their financial situation and 69.4 per cent were to some extent satisfied.

FIGURE 57. DISTRIBUTION (%) AND AVERAGE VALUE OF SATISFACTION WITH ONE'S FINANCIAL SITUATION

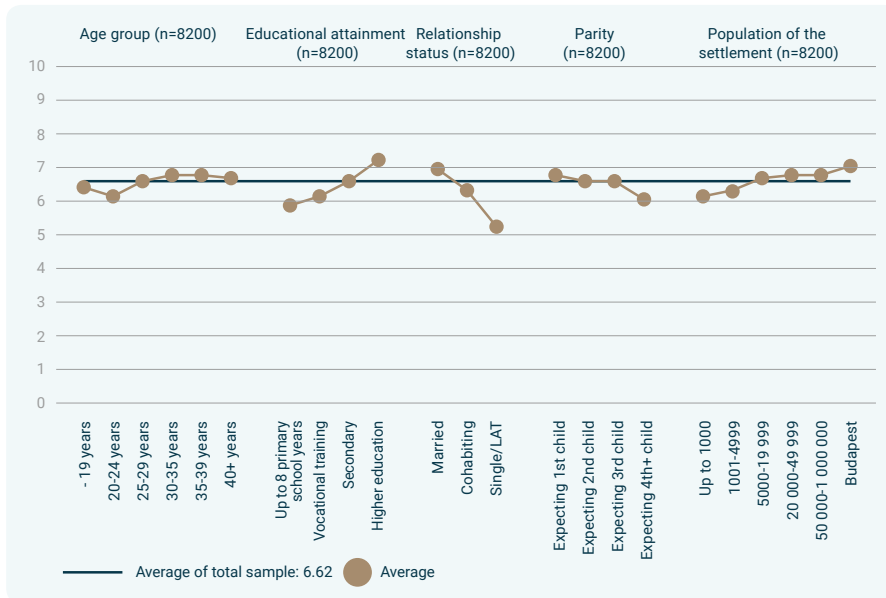


Although the women were less satisfied with their financial situation than with their lives in general, the opinions of the different demographic groups varied similarly: the same groups were dissatisfied (and satisfied) with their financial situation as were dissatisfied (and satisfied) with their lives.²⁹ That is, those women under the age of 25 (and especially those aged 20–24), those who did not have a high-school diploma and those who did not have a relationship (or were not living with their partner) had below-average satisfaction with their financial situation. This was also again true of those who were expecting their fourth (or subsequent) child and who lived in a settlement with a population of less than 5,000. As with the previous question, those who did not have a partner (or were not living with him) were the least satisfied with their financial situation (5.1 points), while those with higher education were the most satisfied (7.3).

Among those women with tertiary education, average satisfaction with their financial situation was 7.3 points, compared to only 5.8 among those who had completed at most eight years of primary education.

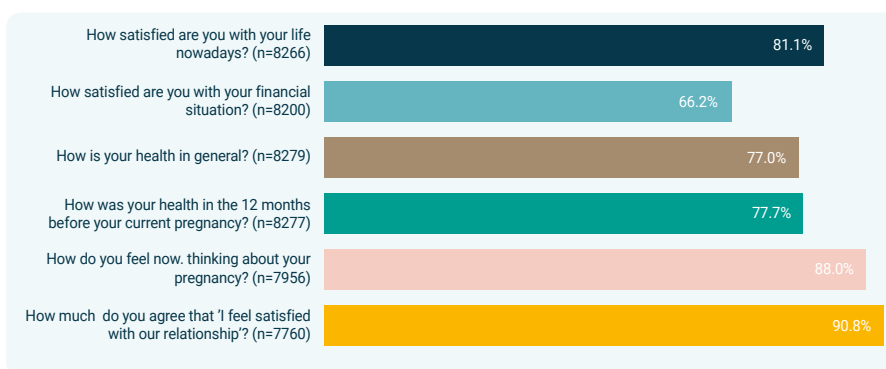
²⁹ Unsurprisingly, since the correlation between the two is very strong: the Pearson correlation coefficient indicates the closeness of the relationship to be 0.513, and significant on a 99 per cent level (n=8190).

FIGURE 58. AVERAGE SATISFACTION WITH FINANCIAL SITUATION, BY DEMOGRAPHIC CHARACTERISTICS



Satisfaction with her relationship, her subjective health status and her feelings about her pregnancy are all important additional components of an expectant woman’s subjective well-being.³⁰ Of all the elements covered, the pregnant women (with a partner) were most satisfied with their relationship (average of 90.8 on a scale of 0–100); they were also happy about their pregnancy (average of 88.0). They were satisfied with their lives overall, but that ranked only third (average of 81.1 points). Respondents were less satisfied with their current and pre-pregnancy health (averages of 77.0 and 77.7) and were least positive about their financial situation (average of 66.2).

FIGURE 59. SATISFACTION WITH GIVEN COMPONENTS OF SUBJECTIVE WELL-BEING (AVERAGE ON A SCALE OF 0–100)



³⁰ Satisfaction with life, financial situation and relationship was measured on a scale of 0-10, respectively 1-5 in the latter case. Subjective health status was measured at the time of the survey and one year before pregnancy (retrospectively), on a 5-point scale (1 – very good; 2 – good; 3 – satisfactory; 4 – bad; 5 – very bad), while the woman’s feelings about her pregnancy were also measured on a 5-point scale (1 – I am not happy at all; 2 – I am not happy; 3 – I have mixed feelings; 4 – I am happy; 5 – I am very happy). The scales were aligned and then transformed into a 0–100-point scale.

3.7. Conclusion

The survey covered more than 8,000 mothers-to-be, living in 473 different settlements. Expectant mothers living in small settlements with a population of under 1,000 accounted for less than 10 per cent of the sample, while those from Budapest made up 17 per cent. The settlement hierarchy based on population was also reflected in the distributions of pregnant women by educational attainment, household income and number of existing children. The size of the settlement of residence is also related to institutional provisions: 7 per cent of respondents lived in a settlement where there was no GP care; for another 20 per cent, a GP was available, but no paediatric care. The local availability of specialist services for expectant mothers and families with small children (e.g. paediatrician, infant paediatrician, obstetrician or gynaecologist) was 44 per cent.

Home ownership at the time of pregnancy was quite common: overall, only 15 per cent of the women were expecting their baby in a rented apartment, though this figure rose with the size of the settlement. Nearly half of those expectant mothers who were living in their own homes had a mortgage. Average apartment size was fairly large, at 87.6 square metres; however, the figure decreased as the size of the settlement increased. Some 4–5 per cent of respondents reported serious shortcomings in terms of the level of comfort of their dwellings; this particularly affected those living in settlements with 1,000–5,000 inhabitants. Households were very well equipped in terms of information and communications devices. Some 77.9 per cent of families expecting a child had access to a car; the figure was highest for those living in larger rural towns. The number of books (which is an indication of the cultural capital of a family) varied significantly: 35.8 per cent of respondents had fewer than 50 books in the house (i.e. less than one shelf of books). Regarding the number of books, the strong correlation with educational attainment is particularly striking. The average number of state/municipal benefits/allowances available to expectant mothers who already had children was 0.7 during pregnancy, which was inversely related to the financial situation of families. Income differences between households were hierarchically arranged along other social status variables. The proportion of people with serious financial difficulties was around 2 per cent. The vast majority of the women were happy with their lives in general: less than 5 per cent had an unfavourable perception. However, they were less satisfied with their financial situation, where the proportion of those dissatisfied was 13.7 per cent. This dissatisfaction was mainly determined by the following characteristics: being younger, already having several children, living in a smaller settlement and having a lower educational attainment.



4. The Period of Pregnancy

4. The Period of Pregnancy

4.1 Family planning

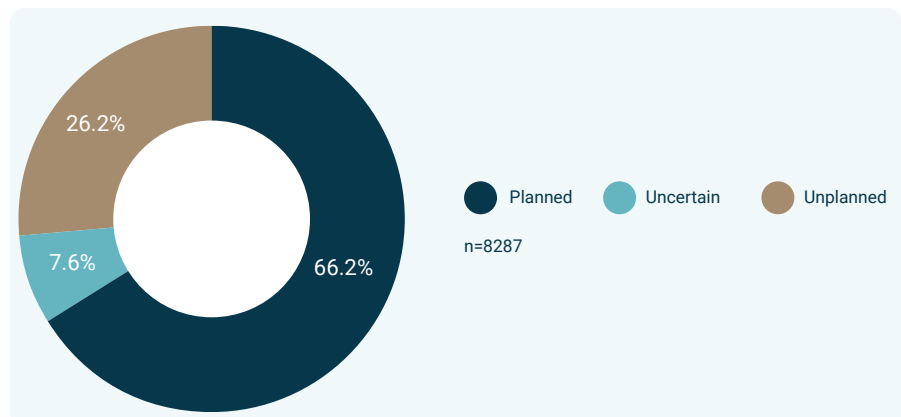
In the first phase of the Cohort '18 study, the expectant women were asked about their childbearing plans and their circumstances.

As it becomes more reliable (due to the widespread availability and use of contraceptives), family planning is increasingly becoming a matter of societal expectation, but the rate of conscious childbearing varies from country to country: around 60 per cent in the US, 57–65 per cent in the UK and 83 per cent in France.³¹ The dichotomous application of the concept of planned–unplanned pregnancy raises some problems, as there is also an intermediate zone between the two extremes: those who did not necessarily want (or at the time did not want) a child, but who intentionally did not take precautions and now accept the blessing of a child.³² Thus, in our questionnaire, in addition to the two options of 'planned' and 'unplanned', it was also possible to indicate 'uncertain' intentions.

Beside examining whether childbearing was planned or not, we also address the issue of reproductive health, congenital conditions, including any difficulties, and medical interventions utilized to become pregnant.

Our results show that two thirds of the pregnant women planned to have their cohort baby, but just over a quarter did not; meanwhile, 8 per cent chose the 'uncertain' option.

FIGURE 60. PLANNED CHILDBEARING AMONG ALL RESPONDENTS, %

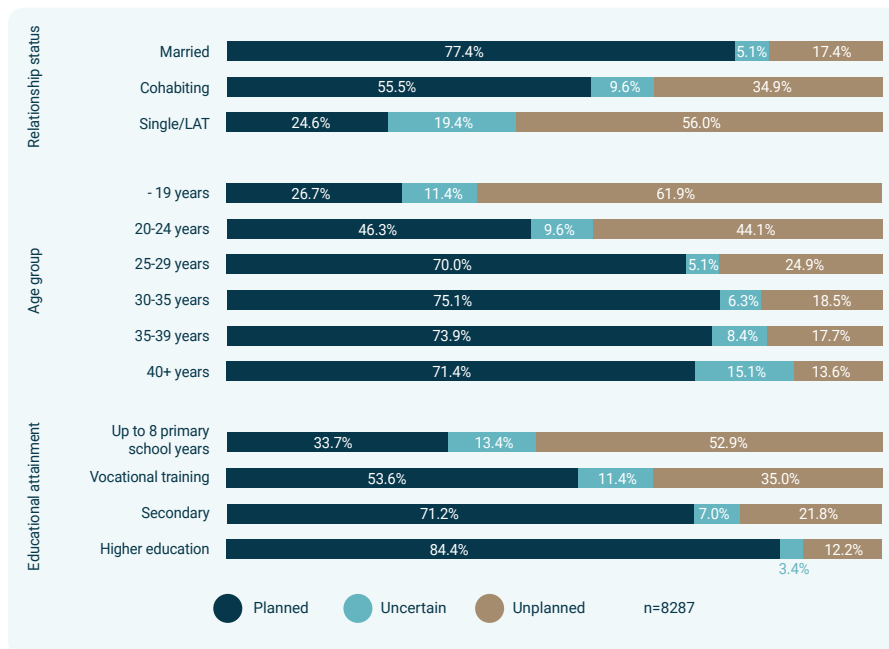


³¹ Stern, J., Salih Joelsson, L., Tydén T., et al. (2016). Is pregnancy planning associated with background characteristics and pregnancy-planning behavior? *Acta Obstetrica et Gynecologica Scandinavica*, 95(2), 182–189. doi:10.1111/aogs.12816

³² Arteaga, S., Caton, L. and Gomez A.M. (2019). Planned, unplanned and in-between: The meaning and context of pregnancy planning for young people, *Contraception*, 99(1), 16–21. doi:10.1016/j.contraception.2018.08.012

The rate of conscious childbearing was higher among married women and among mothers with higher levels of education. Older pregnant women also planned a higher proportion of pregnancies than did their younger counterparts. Consciousness (in childbearing intentions) also showed a correlation with financial situation: 82 per cent of those in the top income quintile had planned to become pregnant, but the figure was only 42 per cent of those worst off. There was also a difference in parity: almost three quarters (73.5 per cent) of those expecting their first child and just over a quarter (27.5 per cent) of those expecting their fourth (or subsequent) child stated that having a child had been a conscious decision.

FIGURE 61. CONSCIOUS PLANNING TO HAVE A CHILD, %



Some 66 per cent of the women had consciously planned to have a child. Planned pregnancies were most common among those expecting their first child.

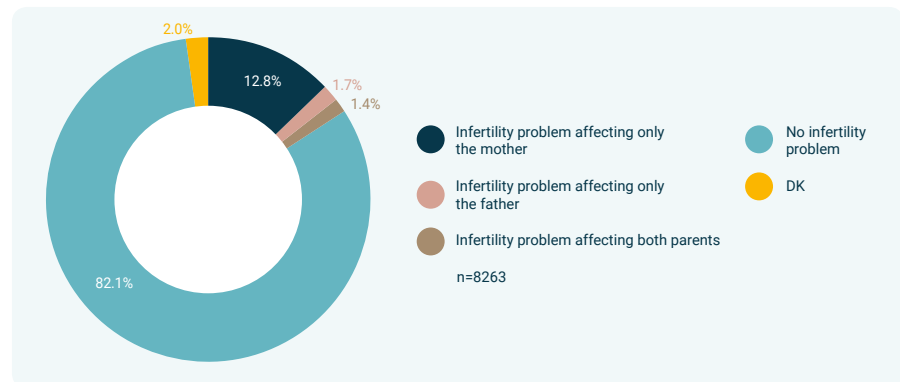
Regarding the timing of pregnancy, roughly half (52.2 per cent) of those who had wanted a child said they had fallen pregnant at the right time; 22.9 per cent reported that they had become pregnant earlier than planned; and 23.7 per cent said the pregnancy was later than they had initially planned.

As we have seen, more than a quarter of the pregnancies were unplanned, yet only a small proportion of those surveyed said they had used any means (contraceptives) of preventing pregnancy. Of those who claimed definitely not to have wanted a child before they became pregnant, only 21 per cent had used contraceptives. However, taking into account those who had been unsure or who had given no thought to whether they wanted a child, only 18.9 per cent had used some means to actually prevent conception (however, 5.9 per cent of those who had planned to have a child

also used some form of protection). Among those who had not wanted a child, the use of contraception was more common among women with higher levels of education: 31.1 per cent of university graduates had taken precautions, but the figure was only 18.4 per cent of those who had completed at most eight years of primary education and vocational school graduates. Examining the different age groups, we can see that those aged 20–24 and 25–29 used contraceptives least often, and those aged 30–34 most often. Of those women who were married, a much higher proportion (29.7 per cent) had not planned to have a child than was the case among those in a cohabiting relationship (18.1 per cent) or living without a partner (13.3 per cent).

Four fifths of the expectant mothers had not had any health barriers to pregnancy; however, 15.9 per cent had faced some problems that made it more difficult to conceive. According to the responses, the health problem mainly rested with the woman herself: 12.8 per cent said that only she had had a fertility problem; 1.4 per cent said that both partners had had problems; and 1.7 per cent said that the man had had the fertility problem. Thus, in 80.7 per cent of couples who had had difficulty in conceiving, the problem lay with the woman; in 10.6 per cent of cases, the problem lay with the man; and in 8.7 per cent of cases the problem had been with both parents. Naturally, we refer here to pregnancies that were successful in the study, despite the initial difficulties. The infertility problem itself, in terms of the way it affects men and women, closely matches the findings of existing literature.

FIGURE 62. INFERTILITY PROBLEMS, %



For 15.9 per cent of pregnant women, having children was hampered by infertility problems.

In order to conceive, 15.1 per cent of those surveyed (or their partners) had sought medical assistance: in about half of the cases, only the woman; in half the cases, both partners; and in a negligible number of cases, only the man. Most frequently, the visits had been to the gynaecologist (11.9 per cent of all pregnant women and 84.4 per cent of those who had sought help), to infertility clinics (4.1 per cent and 29 per cent), to general practitioners (1.1 per cent and 7.5 per cent), and to other specialists (1.9 per cent and 13.2 per cent).

FIGURE 63. SEEKING MEDICAL HELP IN CONCEIVING, %

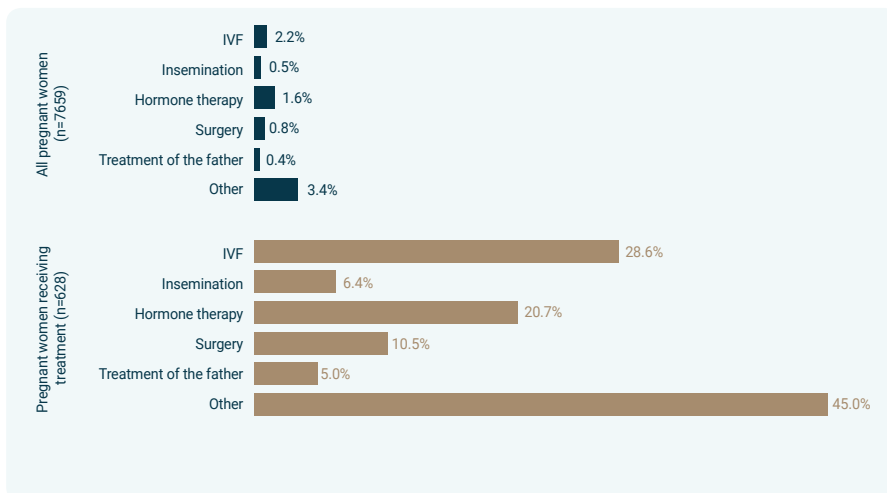


Slightly over half (53.8 per cent) of those who had seen a doctor actually conceived with medical help, while the rest of the pregnancies were spontaneous. Overall, 7.6 per cent of all expectant mothers became pregnant through medical intervention. Among those with higher education, higher income, older and married women, there was a higher proportion of those who were expecting a child after medical intervention.

Of the various possible interventions, the most common was in vitro fertilization (IVF): 2.2 per cent of all pregnancies and 28.6 per cent of those who had sought medical assistance fell pregnant through this procedure. Hormone therapy, artificial insemination and surgery were also common forms of assistance.

Some 7.6 per cent of pregnancies came about through medical assistance. This ratio increases with maternal education levels, age and income.

FIGURE 64. PROPORTION OF PREGNANCIES RESULTING FROM HEALTH INTERVENTIONS WITHIN ALL PREGNANCIES AND AMONG THOSE SEEKING MEDICAL HELP, %



Planned pregnancy: from decision to conception

Nearly three quarters (73.6 per cent) of planned pregnancies occurred within a year of the decision to try for a baby; less than 5 per cent of women had had to wait for at least three years to conceive – and in some extreme cases, for up to 20 years.

4.2. Pregnancy care

The Hungarian pregnancy care system is a comprehensive health service, based on the cooperation of several actors.

Pregnancy care begins when the obstetrician-gynaecologist determines the pregnancy and lasts until the baby is born. As well as the obstetrician, the health visitor, the GP and the midwife are all important actors in the process – not forgetting, of course, the pregnant woman herself, who is not only the subject of pregnancy care, but an active participant in it. All these people have prominent roles to play. The main goal of the care activity during pregnancy is to safeguard the health of the mother and the foetus; to this end, the actors in the care process constantly monitor the health of the woman and promote the development of her foetus, preparing the mother for childbirth and motherhood.

In order to protect foetal life, all pregnant women in Hungary are entitled to use the pregnancy care system. However, in addition to the services provided by the social security system, a significant proportion of expectant women also take advantage of private services during the pregnancy.

In the Cohort '18 study, we included those expectant women who figured in the health visitor care system; according to the experience of other studies, that represents the vast majority of all pregnant women (97 per cent).

The roots of the Hungarian District Health Visitor Service, which now operates as a national network, extend back to 1915, when the National Stefánia Association was founded to protect mothers and their babies. This was an initiative by József Madzsar and Vilmos Tauffer, under the auspices of Belgian Princess Stefania. Its main objective was to reduce infant mortality and increase the number of births, and it operated at the crossroads between the health and social public spheres. As pioneers in Europe, they broke with the notion that a person in need of assistance should visit whatever institution could provide help, instead believing that mothers should be visited at home and should receive care there. Members of the Green Cross Health Service may also be regarded as forerunners of today's health visitors. This service was established in 1927 on the initiative of Béla Johan, with the support of the Rockefeller Foundation. In addition to maternal and child protection, their responsibilities included school health services, the fight against sexually transmitted diseases and

tuberculosis, and the organization of home care for poorer patients, as well as social care. The Stefánia Association and the Green Cross Service operated in parallel until 1940, and they merged in 1941. From the late 1940s and early 1950s, health visitors came to be involved in physician care: nurses were assigned to all GPs. From the 1960s and 1970s, their responsibilities for school healthcare tasks grew.

Today's health visitors continue to play an important role in health promotion and disease prevention. As regional, school healthcare, hospital and family protection service nurses, they contribute to individual, family and community health development and well-being. Today, according to the Hungarian regulations, health visitors go about their professional business independently, but in cooperation with GPs and paediatrician GPs. Building on the social sensitivity, personal relationships and contextual knowledge of nurses, they are expected to report to child welfare services as pillars of the child protection alert system, should a vulnerable minor be found within a family.

According to data provided by the National Healthcare Service Centre,³³ there were 10,568 registered health visitors in 2018, but only 5,279 had valid operational permits. Of these, 105 had already reached the retirement age of 65, and a further 418 were coming up for retirement, as they had already reached the age of 60; thus, a relatively significant ageing of the profession is under way. College training for health visitors was introduced in 1975; at present, roughly 200 people graduate each year as health visitors (although some choose other professions), and 99.9 per cent of health visitors hold a specialized degree in this field.

In 2018, there were 5,305 health visitor positions in the country – but almost 400 of them were lying vacant. There were 4,018 district nurse positions in Hungary in 2018, of which 3,676 were actually occupied.³⁴ The shortage shows considerable regional differences: whereas in the best-staffed Csongrád county, the occupancy rate is 97.7 per cent, in Nógrád county it is only 69.9 per cent. In other words, a significant proportion of pregnant women and their children living there can only rely on the advice of stand-in health visitors. The regulations governing the work of health visitors stipulates that each district nurse should have at most 250 mothers to look after; in practice, however, this applies to only some districts – many have to try to serve significantly more families than the guidelines.

One of the most important target groups for health visitors is expectant mothers. According to 2018 data, the number of pregnant women registered by health visitors during the year was 90,462; more than four fifths of them saw a health visitor in the first three months of pregnancy (75.7 per cent in Hajdú-Bihar county and 94.5 per cent in Győr-Moson-Sopron county). The total number of women who gave birth during that year was 87,574; only a tiny proportion – less than 0.5 per cent – gave birth without having had contact with a health visitor. There are obvious administrative and financial reasons for this: the nurses issue a pregnancy booklet, which is then used by the obstetrician-gynaecologist during examinations; and

³³ <https://www.enkk.hu/hmr/index.php/hmr-beszamolok>

³⁴ HCISO (2019). Egészségügyi statisztikai évkönyv 2018 [Healthcare Statistical Yearbook 2018]. Budapest, HCISO.

at least four maternity-care visits are required if the mother is to receive maternity support after giving birth. Health visitors monitor pregnancy, provide lifestyle and other useful advice to expectant mothers, and monitor their social circumstances and health status. Health visitors may meet pregnant women at various locations: expectant mothers can show up for counselling, but the nurses themselves may also visit the homes of expectant parents. According to nursing records, a significant proportion of all pregnant women require heightened care for health and/or home environmental reasons. Not only expectant mothers require special attention, but also some children. The proportion is highest in Borsod-Abaúj-Zemplén county, where almost a quarter of children under 12 months require increased care, along with a fifth of those living in Szabolcs-Szatmár-Bereg county.

Health visitors in the study

In the pregnancy wave of the Cohort '18 study, the fieldwork was carried out with the help of the health visitor network. This cooperation included the management of health visitors and liaison with the head health visitors of the sampled districts, in order to organize the data collection and coordinate the various logistical tasks. The system of health visitors, including the districts covered in the study sample, is coordinated at a regional level, with each region supervised by a head health visitor. The study's sampling plan considered the territorial nursing districts as the basic unit for the purposes of this research. The study was rolled out in 608 nursing districts. Prior to the start of data collection, 566 health visitors were trained in person at 36 different sites to conduct interviews based on the questionnaires. Because of the relatively high turnover of nurses during the study period (several retired or had children, or even changed careers) and the mobility of expectant mothers (709 families moved in this period), in the course of the first and the second waves of the study (the second wave coming when the infants were aged 6 months) we worked with a total of 721 health visitors and 64 head health visitors.

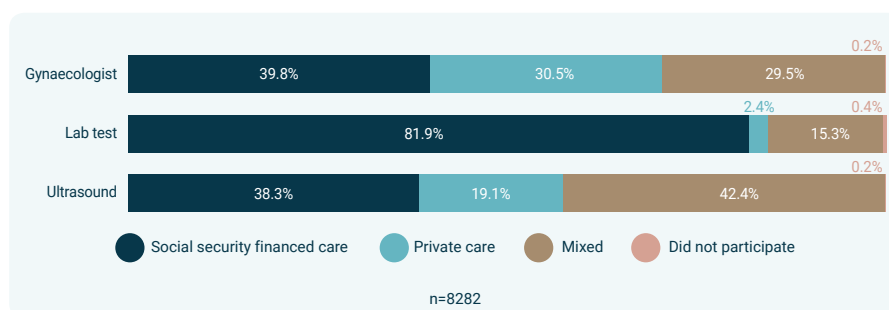
From the questions asked in the first study wave, we can get a good idea of the proportion of pregnant women who were using state and private medical services. Just as we can also learn what socio-demographic factors overshadow the differences in use.

In the case of the three core examinations (gynaecologist, laboratory tests, ultrasound), the proportion of women who failed to participate in any of them was minimal: between 0.2 per cent and 0.4 per cent, depending on the type of care received. With regard to gynaecological examinations, slightly over a third of the women (39.8 per cent) only received treatment financed by the state social security; the remainder were more or less evenly split between those who underwent both private and public examinations (29.5 per cent) and those who only had private care (30.5 per cent). In the case of laboratory testing, the state system is much

more popular: 81.9 per cent of expectant mothers considered it sufficient, while the proportion of those who relied solely on private medicine in this regard was negligible (2.4 per cent).

As for ultrasound examination, the proportion of women who received care financed exclusively through social security (38.3 per cent) was roughly the same as in the case of gynaecological examination; however, the proportion of those who used both state and private providers was much higher (42.4 per cent).

FIGURE 65. PRIVATE AND SOCIAL SECURITY-BASED CARE RECEIVED BY EXPECTANT WOMEN, %



Some 31 per cent of the expectant women received only pregnancy care funded through social security, while 16 per cent used only private providers, with the rest receiving mixed care.

In all three types of pregnancy care, those who were living in a smaller settlement, were younger, less educated, were living with a cohabiting partner (or without a partner), were in a less favourable financial situation, were having a second (or subsequent) child or who had not planned to have a child relied mainly on social security-based care. The frequency measured along each characteristic differed slightly from one care type to another.

In the case of gynaecological examinations, for example, almost two thirds (62.1 per cent) of those women living in a small settlement with fewer than 1,000 inhabitants used state-provided care without further private examinations; meanwhile in settlements with at least 50,000 inhabitants, the proportion was 29 per cent. By contrast, the proportion of those who only consulted a private doctor was only 14.4 per cent in the smallest settlements, but 45 per cent in Budapest. If we look at the differences in maternal age, we can see that the vast majority (88.2 per cent) of the youngest age group (19 years and younger) went exclusively for social security-funded medical examinations, while in the case of women aged 35–39, the figure was just over a quarter (27.6 per cent). Within this latter age group, the proportion that only had private care was higher (38.8 per cent) than the proportion that relied exclusively on publicly funded check-ups.

Some 45 per cent of expectant women in Budapest only had private gynaecological consultations during their pregnancy.

The difference in terms of the educational attainment of the expectant mothers was also significant: just 4.6 per cent of those who had completed at most eight years of primary school went exclusively to a private doctor; 85.3 per cent used only state-financed healthcare. In the case of women with vocational qualifications, however, this latter figure was already down to 57.8 per cent, falling further to 31.4 per cent for high-school graduates and only 15.3 per cent for university graduates.

About a third of those expecting their first child did not go to a private doctor; that figure was slightly higher for those expecting their second child (37.8 per cent). However, the really significant difference came with those expecting their third child (47.5 per cent) and those expecting their fourth or subsequent child (76.4 per cent).

Unsurprisingly, financial situation is also related to the type of medical care: almost three quarters of those in the lowest income quintile (73.9 per cent) relied solely on the state system, but only 15.1 per cent of the most affluent.

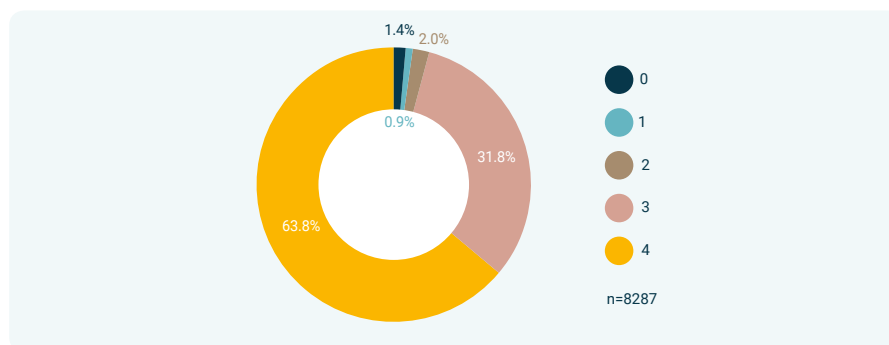
In the case of ultrasound examinations, slightly more than a third (38.3 per cent) of the women relied solely on state care. Overall, the relationship in terms of socio-economic background variables was very similar to that found for gynaecological examinations, as the two services are in many cases linked. On the other hand, the proportion of those who underwent ultrasound examination exclusively in private care was much lower than the figure for those who visited only private gynaecologists; thus, it would seem that some private physicians refer their patients to public care for certain examinations.

In contrast to these two types of check-up, the expectant mothers relied most on the state system for laboratory tests: 4 out of 5 used only social security-funded services. Differences between pregnant women can also be observed here, but the extent of the differences is slightly smaller than in the case of gynaecologists or ultrasound. The youngest women (under the age of 20) almost exclusively (97 per cent) had state-provided tests, but this figure decreased with age, to reach 72.7 per cent of women over the age of 40. Similarly, while 9 out of 10 of those women living in the smallest settlements only had state-financed tests, the figure was just 70.4 per cent for pregnant women in Budapest. Less than two thirds (65.1 per cent) of those in the highest income quintile underwent exclusively state-provided laboratory testing, but this was the case for almost all of those in the worst financial situation (92.4 per cent). According to their relationship situation, married people were the most likely to visit private laboratories, whereas those with a cohabiting partner or without a partner were more likely to go for social security-funded screenings.

In the Cohort '18 survey, we also asked whether the screening tests prescribed for pregnant women were implemented at the correct time. The women were asked about four different tests: a blood and urine laboratory test, an ultrasound, a blood-sugar test (with stress testing) and a dental examination.

Overall, the vast majority of the women (96–98 per cent) participated in the first three examinations on time. However, there was already a significant gap in terms of dental examinations, as more than a third of mothers had not had this screening. Thus, if we examine the four screening tests together, we can see that only 63.8 per cent underwent all the screenings in accordance with the regulations.

FIGURE 66. NUMBER OF TIMELY SCREENINGS UNDERGONE (LABORATORY EXAMINATION, ULTRASOUND, STRESS-BLOOD-SUGAR EXAMINATION, DENTAL EXAMINATION) BY THE EXPECTANT WOMEN, %



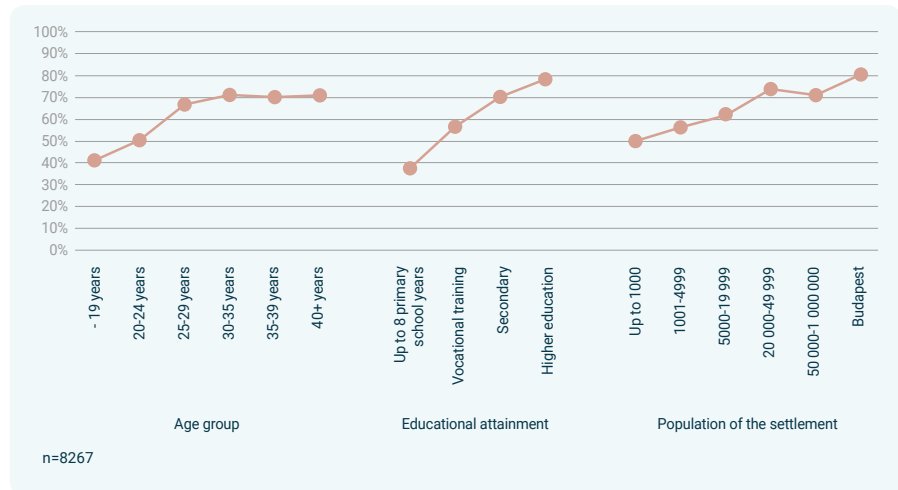
As the dental screening reveals the most considerable shortfall, it is worth looking more closely at this type of examination in terms of each social group. Older women, those with higher education and those living in larger settlements were more likely to have had a dental examination on time.

Of the screenings during pregnancy, failure to have a dental check-up was the most common among the expectant women.

While only half of those women living in settlements with fewer than 1,000 inhabitants had gone to a dentist during pregnancy, four fifths of the pregnant women in the capital had done so. This may be related to the available services, as the number of vacant dental practices is increasing, according to the National Healthcare Service Centre; that could affect the dental healthcare provision of 850,000 patients. The youngest group of pregnant women reported twice as many missed dental examinations as the oldest. There was an even bigger gap between those with the lowest and the highest levels of education: almost two thirds of those who had completed at most eight years of primary school missed this check-up, whereas among those with tertiary education 'only' around a fifth missed it.

Also, a much higher proportion of those expecting their first child (73.5 per cent) had had a dental check-up than the proportion of women who already had a child. Only roughly a third (35.9 per cent) of those who were pregnant with at least their fourth child had been to a dentist.

FIGURE 67. PROPORTION OF THE EXPECTANT WOMEN UNDERGOING A DENTAL EXAMINATION DURING PREGNANCY CARE, %

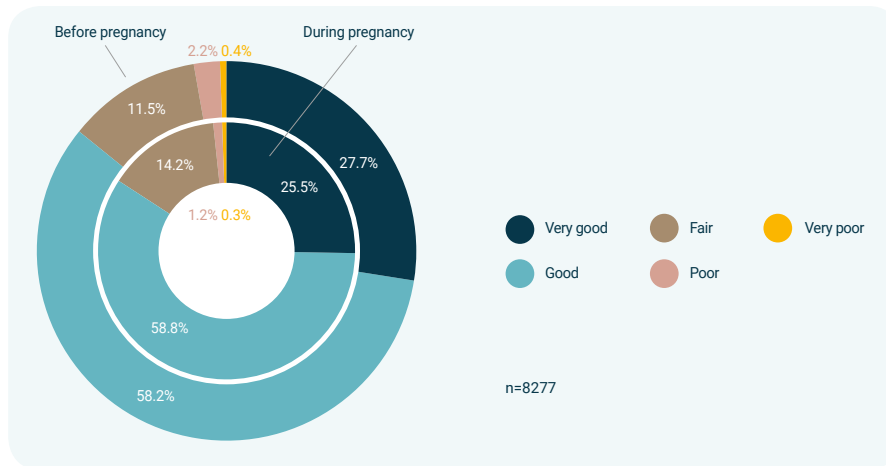


4.3. Health status of the expectant women

The health and development of the unborn child can depend greatly on the mother's state of health. Among the health issues, we examined the women's subjective health, chronic disease/illness and symptoms specifically related to pregnancy.

Perceived health is based on an individual's self-assessment, not a medical diagnosis. That said, it is widely accepted in the literature that this is a good indicator of real health status, and it is a tool regularly used in surveys that measure health. Perceived health was measured on a five-point scale, ranging from 'very good' to 'very bad'. According to our results, the vast majority of the women surveyed considered their health to be either good or very good; only a very small proportion rated their health bad or very bad. This is true both for their health at the time of the interview (i.e. the seventh month of pregnancy) and in the 12 months preceding the pregnancy.

FIGURE 68. SUBJECTIVE HEALTH STATUS OF EXPECTANT WOMEN IN THE 12 MONTHS BEFORE PREGNANCY (OUTER CIRCLE) AND IN THE SEVENTH MONTH OF PREGNANCY (INNER CIRCLE), %

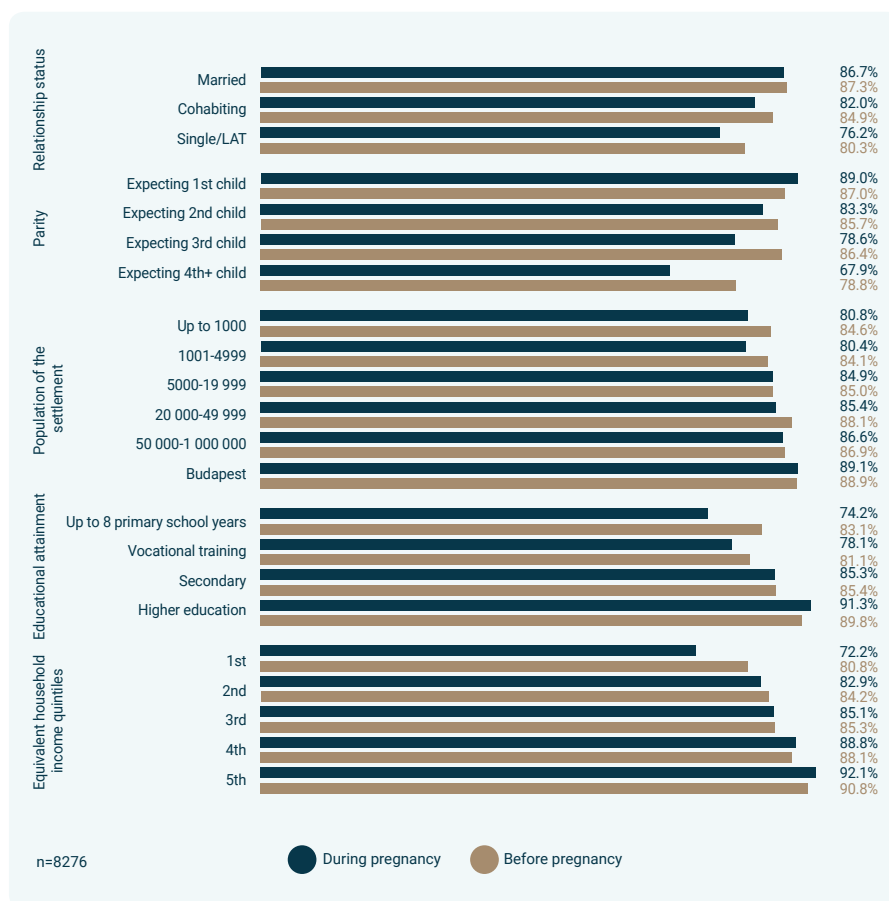


Good and very good perceived health was slightly higher among those with higher levels of education, living in a larger settlement or in a better financial situation, married women and those expecting their first child; but overall, there were no significant differences in subjective health between the groups.

Deterioration in health during pregnancy

There is a substantial difference between perceived health pre-pregnancy and health during pregnancy among those who had completed at most eight years of primary education, those in the worst income situation and those expecting at least their third child: for those groups, pregnancy was associated with a higher degree of deterioration in general health.

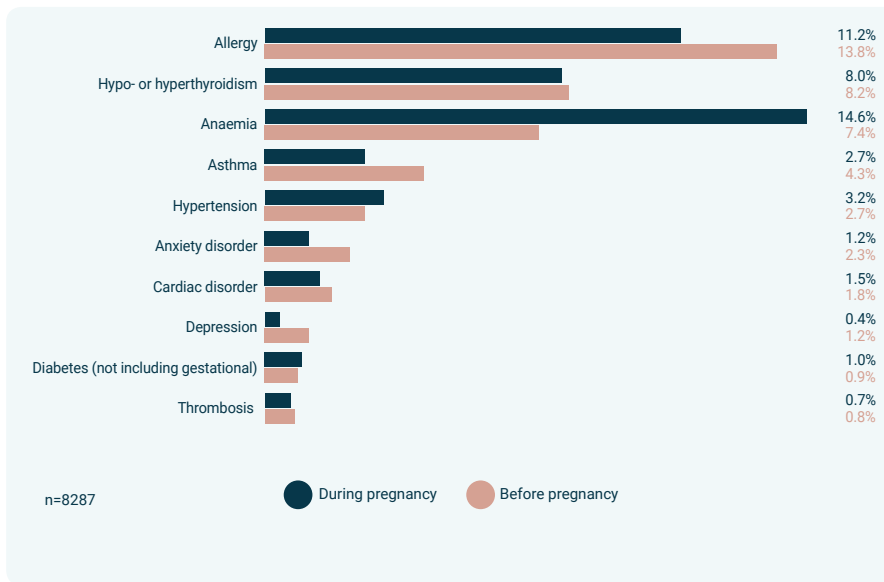
FIGURE 69. PROPORTION OF THE WOMEN IN GOOD OR VERY GOOD HEALTH, %



More than a fifth (21.6 per cent) of the women said they had a chronic illness or health problem that had lasted – or is expected to last – for at least six months. However, in terms of some diseases, we specifically asked whether they had affected the women either before or during the pregnancy. Based on the list of diseases (provided for the interview), a slightly higher proportion of women mentioned at least one chronic illness than in the initial general question: 33.9 per cent had experienced at least one such illness before the pregnancy and 35.9 per cent during the pregnancy. The proportion of those who had suffered more than one (chronic) illness was 7.7 per cent before the pregnancy and 7.2 per cent during the pregnancy.

Of those medical conditions studied, allergy (13.8 per cent), thyroid disorders (8.2 per cent) and anaemia (7.4 per cent) were the most common before pregnancy. These three also remained the most prevalent during pregnancy, but the incidence of anaemia doubled, affecting 1 woman in 7 (14.6 per cent).

FIGURE 70. PREVALENCE OF CHRONIC DISEASES, %



A quarter of the women (25.3 per cent) were also taking medication for a disease during pregnancy.

The most common condition for which the women were receiving medication was anaemia: 13.6 per cent of all the pregnant women and 37.3 per cent of those with anaemia took medication. Also important was medication prescribed for problems associated with thyroid dysfunction: 7.1 per cent of all the pregnant women and 19.6 per cent of those with a condition took medication for thyroid dysfunction. For the other diseases examined, the rate of medication use was very low: for example, only 7.5 per cent of those with hypertension took medication during pregnancy, while only 0.4 per cent of those with depression did so.

Health visitors' data on pregnancy

In our analysis, in addition to the Cohort '18 survey, we also had the opportunity to tap into certain data from the maternity care book kept by health visitors. This allowed us to minimize the burden on the respondents, as we did not ask unnecessarily for information available from other sources. Naturally, this data was handled in full compliance with data protection rules, and the pregnant women gave their written consent to use of their data.

According to the health visitors, the proportion of women with health problems was even higher than indicated above: two fifths (41 per cent) of the pregnant women required increased care for health reasons. It should be pointed out that the health visitors interpreted this category rather more broadly, and not simply in terms of dis-

ease/illness. For example, as well as pre-existing chronic illness or pregnancy-related illness, they also considered related disabilities or hereditary genetic diseases (in some cases through genetic testing prior to the current pregnancy), as well as those women struggling with pregnancy-related depression that required increased care. This group with health problems was more likely to include those with lower levels of income (44.4 per cent of those in the lowest household income quintile, but 37.9 per cent of those with the best financial conditions), older women (31.8 per cent of those aged 20–24, 53.3 per cent of women aged up to 39 and 74.5 per cent of those over 40), those who were expecting a child on their own (45.8 per cent, compared with 40.9 per cent of those with spouses and 40.6 per cent of those with a cohabiting partner) and those who already had a child (36 per cent of those expecting their first child, but 58.4 per cent of those expecting at least their fourth child).

A significant proportion of the pregnant women had health problems: more than a fifth reported some form of chronic illness. And according to the health visitors' records, a total of 41 per cent required increased care for given health reasons.

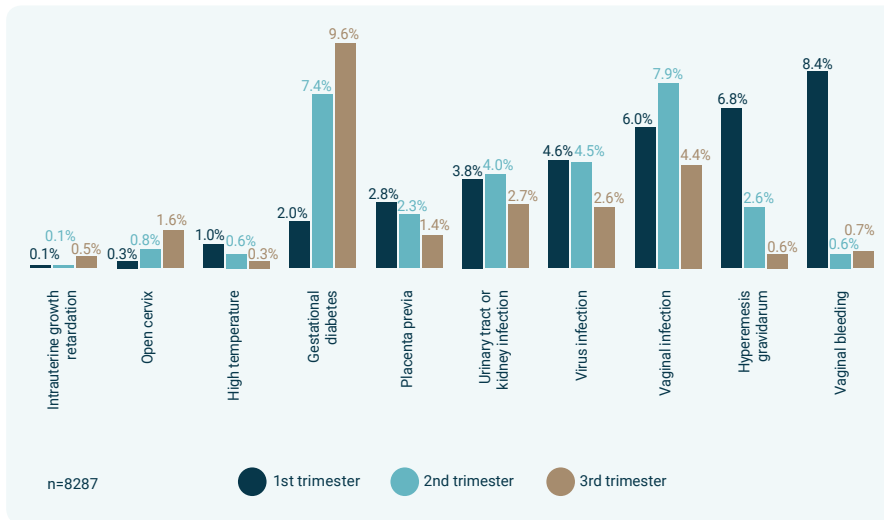
The questionnaire also included health problems specifically related to pregnancy, examined on a trimester basis. It should be noted that the vast majority of the interviews took place in the seventh month of pregnancy, and thus we do not have a complete picture of the last trimester. However, it is conceivable that there were symptoms in the period remaining before childbirth that the mother was not in a position to report at the time of the interview. The questions only covered more severe symptoms, thus milder symptoms (such as hyperemesis gravidarum or gestational vomiting) were not listed.

Overall, almost half of all the pregnant women (46.5 per cent) faced some specific problem at some stage of their pregnancy. If we examine each trimester of pregnancy separately, we can see that 28.5 per cent of the women in the first trimester, 27.6 per cent in the second trimester and 21.9 per cent in the third (incomplete) trimester had experienced some discomfort. The proportion of those who had faced some form of health problem in two of the trimesters was 14.8 per cent, while those who had experienced discomfort at all three stages of pregnancy was 7.4 per cent.

By the end of the seventh month of pregnancy, nearly half of the expectant mothers had experienced a pregnancy-related health problem.

The most common problem was gestational diabetes, but vaginal infection, vaginal bleeding and hyperemesis gravidarum also affected many. Of course, the incidence of each symptom varied significantly at each stage of pregnancy: while vaginal bleeding and hyperemesis gravidarum tend to occur in early stages of pregnancy, gestational diabetes is more concentrated in the later stages.

FIGURE 71. OCCURRENCE OF PREGNANCY-RELATED HEALTH PROBLEMS, %



The lifestyle of expectant women

4.4.

The health behaviour and lifestyle of an expectant woman has a significant effect not only on the development of the foetus, but also on the health and later way of life of her child.

Examining the health consciousness of the pregnant women, it would seem that almost all the women thought they could do a lot for their own health. Only a negligible minority believed that they could do little (4.5 per cent) or even very little (0.4 per cent). Some 62 per cent felt that they could do a very great deal, and 33 per cent felt they could do a lot in this regard.

There were very high levels of health consciousness among the expectant women.

Among the lifestyle factors in the pregnancy-wave survey, we covered nutrition, the use of vitamins, minerals and exercise (risky behaviours, such as smoking, alcohol consumption and drug use, will be discussed in the next section).

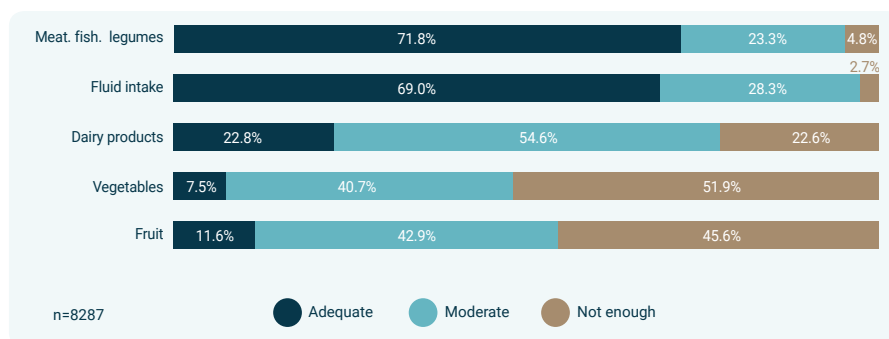
Questions on nutrition were included in the self-administered questionnaire of the pregnancy-wave survey. The questions were aimed at mapping the frequency with which the women consumed certain healthy or specifically unhealthy foods. For nine different foods or food groups (drawing on the recommendations of dietitians), respondents indicated on a three-point scale the frequency with which they consumed a particular food or drink. The two extreme values on the scale indicated the recommended amount and the amount that is particularly harmful (depending on the type of food, this could be too much or too little), and the mean value indicated the in-between frequency.

The general principles of a healthy diet include adequate consumption of fruit and vegetables, protein (meat, fish, legumes) and fluid intake. In the case of pregnancy, these need to be given special attention, and the consumption of milk and dairy products also plays an increasingly important role during the period of pregnancy.

The responses showed that the protein and fluid intake of the majority of expectant mothers was completely adequate (69 per cent and 71.8 per cent, respectively); however, the proportion who consumed the recommended daily amount of dairy products, fruit and vegetables was very low. Just over a fifth (22.8 per cent) consumed at least half a litre of dairy products a day; 7.5 per cent ate five portions of vegetables a day; and 11.6 per cent ate that amount of fruit.

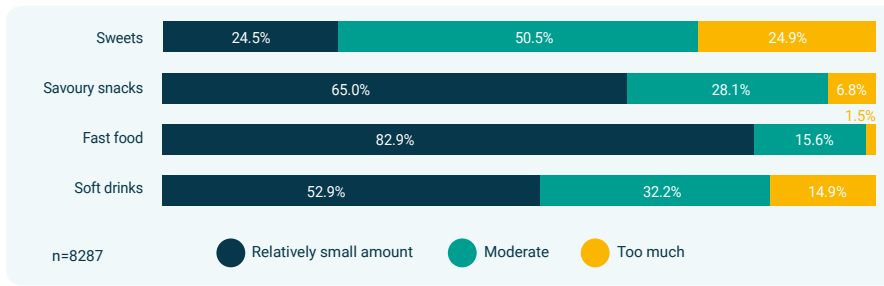
The majority of the pregnant women consumed an adequate amount of fluids and protein; however, the consumption of fruit, vegetables and milk was significantly lower than recommended. Additionally, the consumption of unhealthy foods and beverages – such as sugary soft drinks, salty snacks and sweets – was higher than desirable.

FIGURE 72. THE AMOUNT OF HEALTHY FOOD CONSUMPTION DURING PREGNANCY, %



While they may count as fluids, one should generally avoid consuming carbonated soft drinks, cordials/fruit squash and sugary tea. According to our results, however, almost half of all the women were consuming such drinks on a daily basis, and 14.9 per cent of them were drinking a harmful amount (i.e. at least three glasses a day). Among the other unhealthy foods we examined, the consumption of sweets also stood out: less than a quarter of the women (24.5 per cent) said they consumed sweets or candy less than once a week, but approximately the same proportion (24.9 per cent) consumed sweets at least four times a week. The consumption of fast foods was slightly less common, but still 17.1 per cent of the women ate them at least once a week, and 1.5 per cent at least four times a week, which is already explicitly unhealthy.

FIGURE 73. UNHEALTHY FOODS CONSUMED DURING PREGNANCY BY RESPONDENTS, %



Significant differences in the consumption habits of the women could be observed between the different social groups. Healthy fruit and vegetable consumption appeared to be more prevalent among younger women (under the age of 20), those living in a small settlement, those with lower educational attainment and those in worse financial circumstances. For example, whereas 21 per cent of those aged 19 and below consumed at least five portions of fruit a day, that was true of only 9.1 per cent of mothers aged 35–39; and while 20.4 per cent of those who had completed at most eight years of primary school did so, the figure was only 8.2 per cent among those with tertiary education. In the case of milk and dairy products, young, low-educated people living in smaller settlements were also those most likely to consume the recommended half a litre of milk per day (although those who consumed very little of these products also came from the same groups). Those living in larger settlements and those with higher educational attainment tended to fall into the mid-category (less than recommended, but on average more than 100 millilitres per day).

Unhealthy consumption and social background

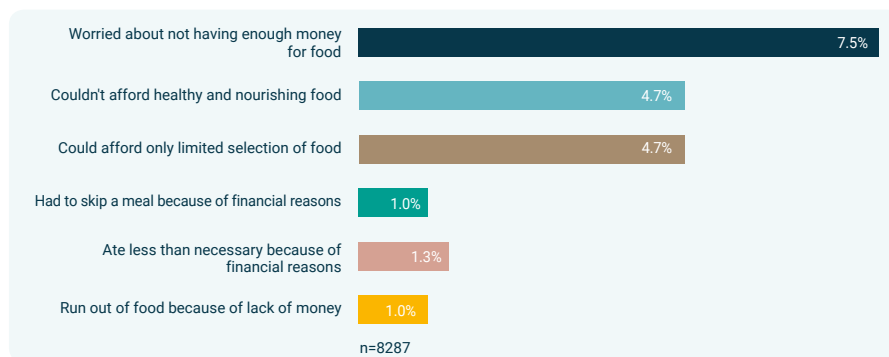
As for the consumption of explicitly unhealthy foods (fast food, carbonated, sugary drinks, sweets, savoury snacks), these clearly featured more on the regular menus of members of disadvantaged groups. For example, while 40.2 per cent of those who had completed at most eight years of primary school consumed sweets at least four times a week, the same was true of only 22.4 per cent of those with tertiary education; while 47.3 per cent of those under 20 years of age did so, the figure was only 16.8 per cent of those over 40; and while 29.3 per cent of people living in settlements with fewer than 1,000 inhabitants had a sweet tooth, that figure was only 24 per cent of those living in a settlement with at least 5,000 inhabitants.

The picture is similar in the case of soft drinks: while 36.6 per cent of the youngest group of pregnant women drank at least three glasses of carbonated, sugary drinks a day, that was true of only 7 per cent of the oldest women; while 34.1 per cent of those who had completed at most eight years of primary school did so, the figure was only 5.4 per cent of university graduates; and while 23 per cent of those living in the smallest settlements consumed that quantity, only 7.3 per cent of Budapest women did so.

Interestingly, even the consumption of fast foods – which is typically associated with urban life – was more common among the pregnant women living in small settlements: whereas 1 in 5 of those living in a settlement with up to 1,000 inhabitants ate fast food at least once a week, in Budapest the figure was only 1 in 7.

Regarding food consumption, we also assessed the extent to which the expectant women were affected by the problem of not having access to an adequate quantity (or quality) of food for financial reasons. We asked six questions about this, using the self-administered questionnaire on account of the sensitivity of the issue. Overall, 1 expectant mother in 10 experienced some degree of food insecurity (i.e. they answered 'yes' to at least one of the six questions). The most common concern (7.5 per cent) was that the woman would not have enough money to buy food. A quality constraint due to lack of money (i.e. unable to eat healthy, nutritious food, or able to eat only a few types of food) was reported by 4.7 per cent of the women. Actual starvation (i.e. skipping meals for financial reasons, consuming less food than necessary, or simply running out of food) affected roughly 1 expectant woman in 100.

FIGURE 74. PREVALENCE OF FOOD INSECURITY AMONG EXPECTANT WOMEN, %



Supplementary vitamins and minerals can be of particular importance for the healthy development of the foetus. In our questionnaire, we asked about the consumption of two vitamins (folic acid (i.e. vitamin B9) and vitamin D) and three minerals (iron, zinc and magnesium) in different periods: namely, in the pre-pregnancy period, in the first three months of pregnancy and from the fourth month of pregnancy up to the time of the survey (seventh month of pregnancy). Naturally, these vitamins are also found in some foods; but it is recommended that expectant mothers also take vitamin supplements during pregnancy, or even before conception.

From the answers, it was clear that in the period before conception it was folic acid that was mainly taken: almost a third of the expectant women (30.9 per cent) took it before conception. In the first trimester of pregnancy, folic acid continued to play the leading role (74.6 per cent), but magnesium was also taken by a relatively large proportion of the women (70.6 per cent). However, from the fourth month of pregnancy, folic acid took something of a back seat: although 60.4 per cent of respondents still took it, magnesium (77.5 per cent) and iron (70.2 per cent) were the main supplements consumed.

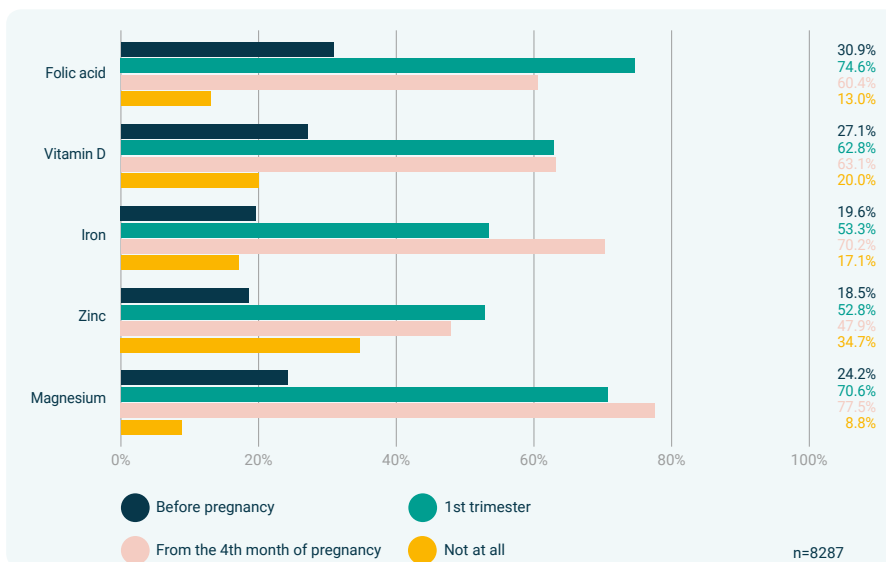
In the first trimester of pregnancy, three quarters of mothers took the recommended high dose of folic acid in the various forms available.

Thanks to the complex vitamin preparations available, 58.7 per cent of the women took all five types of vitamins and minerals at some point; but 3.6 per cent did not take any of the recommended vitamins at any point before or during pregnancy.

The youngest cohort, the least educated, those women in the worst financial situation, those living in smaller settlements and those who were expecting a child without having a partner were the most likely not to have taken supplements. A third of the women under the age of 20 had not taken folic acid at all; meanwhile during their pregnancy, 41.3 per cent had not taken vitamin D, 26.5 per cent had not taken iron, 49.9 per cent had not taken zinc and 21.8 per cent had not taken magnesium (in the form of supplements). Whereas 9 per cent of those who had completed at most eight years of primary school had not taken folic acid and 42 per cent had not take vitamin D, that was true of only 3.1 per cent and 8.9 per cent, respectively, of those with tertiary education. While 29.5 per cent of those in the lowest household income quintile had not taken folic acid, only 3 per cent of the most affluent had failed to do so.

There were clear socio-economic differences behind the women’s failure to take supplements: the youngest, those with the lowest levels of education, those in the worst financial situation, those living in smaller settlements and those who were expecting a child without a partner were more likely to miss out altogether on taking vitamins.

FIGURE 75. VITAMIN AND MINERAL INTAKE AMONG EXPECTANT WOMEN, %

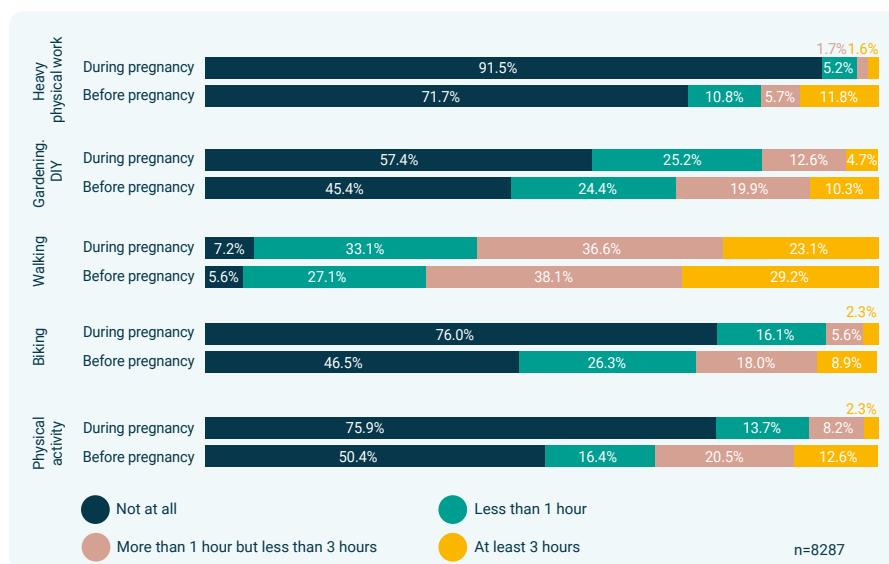


Alongside nutrition, exercise is also extremely important in terms of the health of both the mother and the unborn child. Thus, we asked the women how often

they had performed different physical activities before their pregnancy and how this had changed during their pregnancy. By physical activities we meant not only sports, but also, for example, moving around (walking, cycling), as well as lighter and heavy physical labour.

It should be said that the expectant mothers cannot be considered to have been particularly active even before their pregnancy: according to their own statements, half of them had not engaged in any sporting activities before pregnancy. During pregnancy, the 'passivity' rate continued to rise, with three quarters (75.9 per cent) not taking any exercise, such as swimming, running, aerobics or tennis. Walking, on the other hand, was common both before and during pregnancy: 9 out of 10 of the women walked, although a third of them walked for less than an hour a week before/during pregnancy. Cycling (including both commuting and leisure) prior to pregnancy was common among just over half of the respondents. Some 46.5 per cent had not used a bicycle at all before conception, and this figure had increased significantly during pregnancy, so that 76 per cent had not cycled. Finally, with regard to physical work, we can say that heavy physical labour was not typical of our respondents: nearly three quarters of them said they had not performed such activity before pregnancy, and this rate rose to 91.5 per cent during pregnancy. At the other extreme, however, were the 1.6 per cent of pregnant women who, even while pregnant, did more than three hours of hard physical labour a week (before pregnancy, that rate was 11.8 per cent). Lighter physical work (such as gardening or DIY) was common before pregnancy among slightly over half of the respondents (54.6 per cent). However, while 10 per cent had previously undertaken such activities for at least three hours a week, that figure fell to only 4.7 per cent once pregnancy had started.

FIGURE 76. THE WEEKLY TIME SPENT BY EXPECTANT WOMEN ON VARIOUS FORMS OF PHYSICAL ACTIVITY, %



Sport, both before and during pregnancy, was less common among the youngest expectant mothers, the less well educated, those living in smaller settlements, the less well-off,

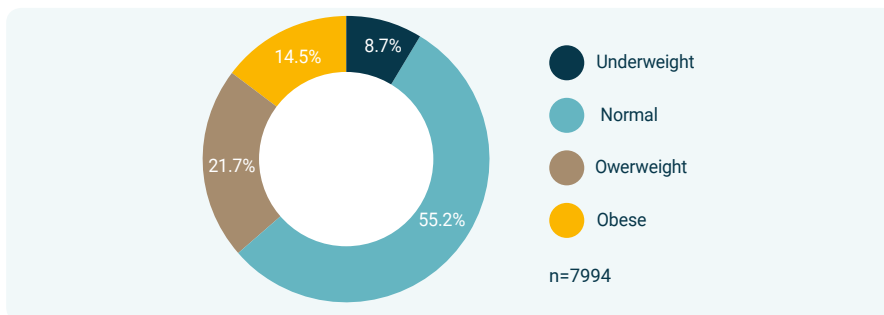
and those who were not in a relationship. For example, while 79 per cent of women who had completed at most eight years of primary school had not done any sport before pregnancy, that was the case for only 28 per cent of the women with tertiary education (during pregnancy, the figures were 91.2 per cent and 61.3 per cent). Cycling is highly related to settlement type: of those living in the capital, two thirds (65.6 per cent) had not cycled before pregnancy and nine tenths did not cycle during it; and yet it was not a rarity in smaller settlements for the women to cycle for at least three hours a week.

It was fairly uncommon for expectant women to participate in sports. Cycling is highly settlement dependent; but the frequency of doing other forms of sport – both before and during pregnancy – rises with the level of educational attainment.

In addition to genetic predisposition, lifestyle, eating habits and exercise (as detailed above) all have a significant effect on the nutritional status of mothers-to-be – i.e. on whether they are, for example, underweight or overweight. To measure nutritional status, we used the widely applied Body Mass Index (BMI), which is a person's weight in kilograms, divided by the square of her height in metres. According to the World Health Organization (WHO) classification, we can talk of underweight (BMI <18.5), normal body weight (18.5–24.9), overweight (25.0–29.9) and obesity (BMI ≥30.0). All of these categories, of course, refer to normal life circumstances, i.e. during pregnancy, these intervals cannot be clearly matched to a given BMI category.

From the answers to the survey questions, it was clear that more than half of the respondents had been of normal weight before pregnancy; slightly over a third had been overweight or obese; and 8.7 per cent had been underweight. It should be noted that the data are based on self-reporting, rather than standard instrumental measurement, but this is a common practice in the case of surveys.

FIGURE 77. PRE-PREGNANCY BMI CATEGORIES AMONG RESPONDENTS, %



Those women who were not expecting their first child, had graduated from vocational or high school, came from relatively small (but not the smallest) settlements (i.e. between 1,000 and 5,000 inhabitants), had a medium income, lived in a partnership or were not in the youngest age group were more likely to belong to the obese category.

Prior to pregnancy, more than a third of the women had been overweight. This rate was higher among those not expecting their first child. By the seventh month of pregnancy, the average weight gain was 9.3 kg.

The mean height was 165 cm and the mean pre-pregnancy body weight was 66.4 kg. On the basis of these figures, average BMI was 24.3 which is close to the upper limit of the normal category. During the seventh month of pregnancy, when the survey took place, the women's average body weight had increased to 75.7 kg, meaning they had gained an average of 9.3 kg.

Weight gain during pregnancy

Weight gain during pregnancy is a natural physiological process: about 10–12 kg is accounted for by changes involving the amniotic fluid, placenta, uterus, blood plasma, muscle mass, fat layer and mammary glands. However, it matters what the initial weight was before pregnancy, because health recommendations formulate different values for those in different BMI categories. For those who were underweight before pregnancy, a weight gain of 12.5–18 kg is recommended until delivery; for those with a normal body weight, 11.5–16 kg is recommended; for those who were overweight 7–11.5 kg; and for those who were obese, only 5–9 kg. The average weight gain we measured up to and including the seventh month of pregnancy included significant differences: there was even a handful of women who – far from gaining weight during pregnancy – actually lost it (2.6 per cent).

4.5. Addictions

In addition to lifestyle factors, we also examined the frequency of risky behaviours and various addictions during pregnancy. Within this, we measured the smoking, alcohol and drug-abuse habits of expectant women in more detail.

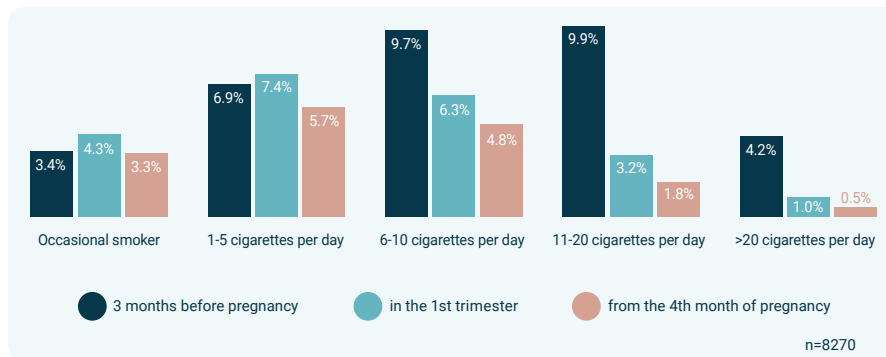
Smoking during pregnancy affects foetal development, the birth outcome and the subsequent development of the child. Adverse effects include an increased risk of miscarriage, preterm birth, stillbirth, low birth weight or even birth defects, and later the risk of cot death. As well as the risk of childhood asthma and obesity, it may also be associated with behavioural and learning difficulties at later stages of development.

More than half of those women surveyed (53.2 per cent) had smoked at some point in their lives, and the vast majority had done so for more than a year. The women in the survey had become addicted to smoking at an average age of 17 years, and more than a third (34.4 per cent) had been smokers three

months prior to the pregnancy. The proportion of smokers decreased somewhat during pregnancy, but was still high: more than a fifth (22.6 per cent) of the expectant mothers had smoked in the first trimester of their pregnancy, and 16.3 per cent had continued even after the fourth month. A small percentage of the smokers (3–4 per cent) were only occasional smokers, while the rest smoked cigarettes on a daily basis. The number of cigarettes smoked per day had decreased slightly during pregnancy: while 14.1 per cent of the women had smoked more than 10 cigarettes a day before they became pregnant, only 4.3 per cent did so in the first three months of pregnancy and 2.3 per cent from the fourth month onwards. The proportion of particularly heavy smokers (i.e. those who smoked more than 20 cigarettes a day) had fallen from 4.2 per cent before pregnancy to 0.5 per cent in the second trimester.

In the first trimester of pregnancy, more than a fifth (22.6 per cent) of expectant mothers had smoked.

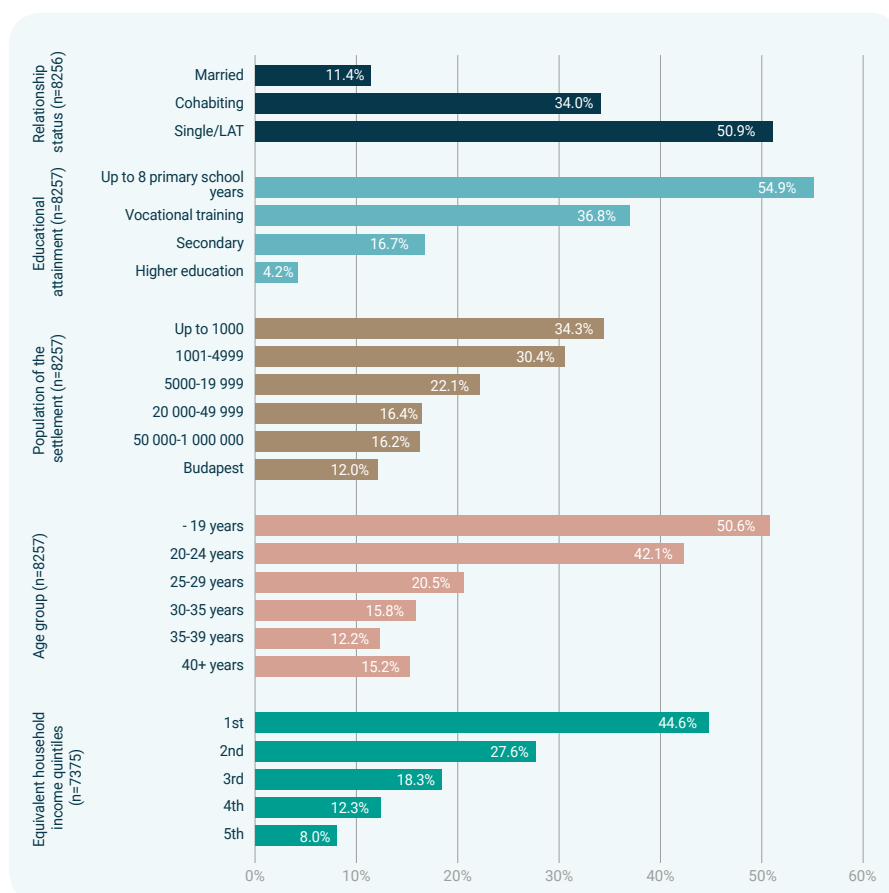
FIGURE 78. SMOKING BEFORE AND DURING PREGNANCY AMONG ALL RESPONDENTS, %



The incidence of smoking immediately before and during pregnancy varied significantly from one socio-economic group to another. In general, those who smoked most were younger, lower-educated, disadvantaged, unmarried women who lived in smaller settlements. If we look at who was most likely to have smoked in the first trimester of pregnancy, we can see that whereas only 4.2 per cent of university graduates had smoked during this period, the figure rose to 54.9 per cent among those who had completed at most eight years of primary school. More than five times as many of the poorest women (44.6 per cent) smoked as women in the best financial position (8 per cent). Half of those under the age of 20 had smoked during pregnancy, compared to just 20.5 per cent in the age group 25–29; and this proportion continues to decline among the older age groups. There are also significant differences according to place of residence: 1 in 8 (12 per cent) of expectant women living in the capital smoked, whereas the figure was 1 in 3 (34.3 per cent) among those in small settlements of up to 1,000 inhabitants. Finally, we should mention the differences based on the relationship status of expectant mothers: those women who were cohabiting with their partner were three times

as likely to smoke as married women (34 per cent vs. 11.4 per cent) and almost five times as likely as those who were without a partner (50.9 per cent).

FIGURE 79. PREVALENCE OF SMOKING IN THE FIRST THREE MONTHS OF PREGNANCY, %



Passive smoking by expectant mother

As well as the mother-to-be herself smoking, passive smoking can affect a child's development. Only 6 out of 10 of the women said that nobody had smoked in their presence at home or at work during their pregnancy, while almost a quarter (24.1 per cent) had had to inhale someone else's tobacco smoke on a daily basis; of these, 10.9 per cent inhaled smoke for more than an hour a day. From a societal point of view, passive smoking shows a similar pattern as maternal smoking: it is more common among younger, lower-educated, unmarried women living in smaller settlements and on lower incomes.

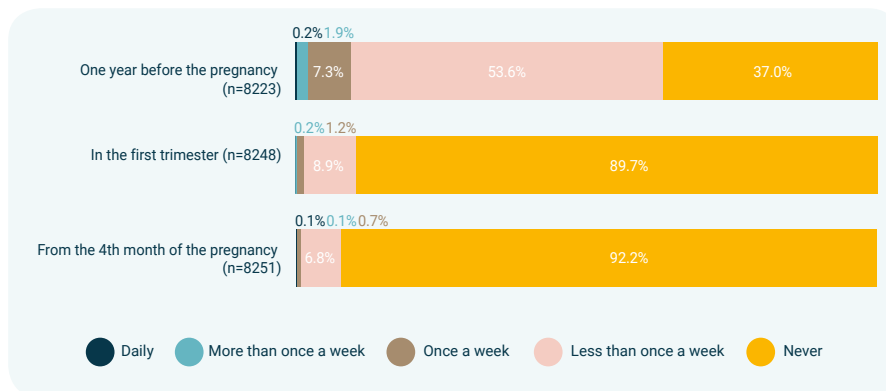
Aside from smoking, alcohol consumption during pregnancy is a significant risk

factor in terms of the development of the foetus. Like smoking, it increases the risk of miscarriage, low birth weight and stillbirth, and the chances of foetal alcohol syndrome are also not negligible. This latter is associated with growth retardation, skull and facial deformities, damage to the nervous system and cardiac malformation. As a result of maternal alcohol consumption, the child's development – both in movement and speech – may be slower than average, and behavioural and learning disorders may also emerge.

In the pregnancy-wave survey, we asked about the frequency of alcohol consumption in the year prior to the pregnancy, in the first trimester of pregnancy and from the fourth month onwards. It should be pointed out that self-declaration on this topic certainly underestimates the actual extent of alcohol consumption, since the questions were asked by the health visitors, part of whose job it is to draw the attention of expectant mothers to the harmful effects of alcohol.

According to the results, more than a third (37 per cent) of the pregnant women had abstained for a year prior to conception; 89.7 per cent had not touched alcohol in the first trimester of pregnancy; and 92.2 per cent had not had a drink from the fourth month onwards. While almost a tenth of respondents had consumed some form of alcoholic beverage at least weekly before pregnancy, in the first and second trimesters this was typical of only a tiny minority (1.4 per cent and 0.9 per cent, respectively). Daily alcohol consumption among them was practically non-existent (0.1–0.2 per cent).

FIGURE 80. FREQUENCY OF ALCOHOL CONSUMPTION, %



Looked at another way, despite the general recommendation that no alcohol should be consumed during pregnancy, 1 expectant mother in 10 had drunk at least some alcohol in the first three months of pregnancy, and 7.8 per cent had done so in the second trimester.

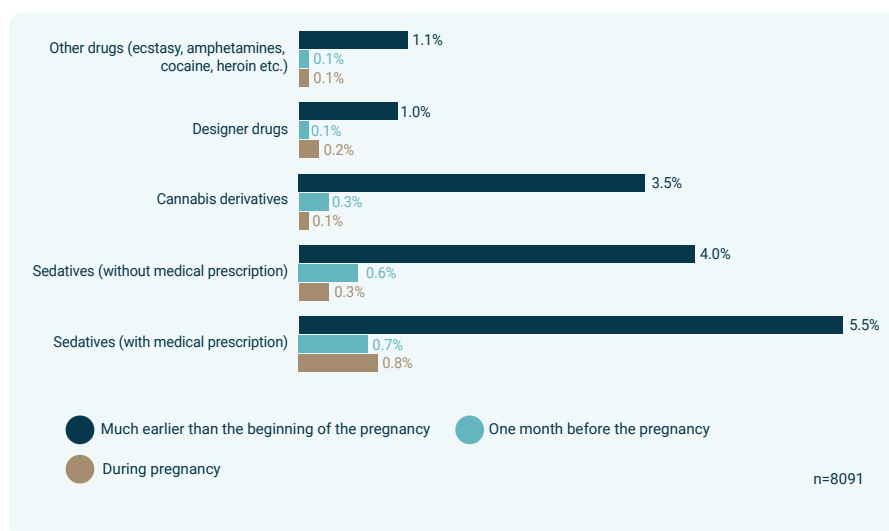
If we consider alcohol consumption in the various groups of society, we find a very different pattern from our observations of smoking habits: at least according to the women's own admissions, it was the better-educated, metropolitan, older, better-off, married women who were more likely to consume alcohol both before and during pregnancy.

Women with higher social status were more likely to consume alcohol during pregnancy.

In terms of the type of alcohol mainly consumed, wine was the most popular. Naturally, by the first three months of pregnancy the amount consumed had decreased significantly, but nevertheless 6.9 per cent of expectant mothers had drunk wine, 2.3 per cent had drunk beer and 2 per cent had drunk some kind of spirit. These figures had fallen somewhat by the next trimester of pregnancy, but wine continued to maintain its primacy (6.1 per cent, 1.3 per cent and 0.6 per cent, respectively).

Finally, we examined drug (ab)use as the last addiction category. On account of the considerable sensitivity of the issue, questions related to this topic were included in the self-administered questionnaire. Overall, the data showed that 12.6 per cent of the pregnant women had taken drugs at some time; however, this figure includes those who had taken a medically prescribed sedative or sleeping pill at some point in their lives. If we subtract them, the figure is only 8 per cent. And if we are specifically interested in illegal drugs, we can remove from the calculations those who had used sedatives or sleeping pills without a medical prescription. That leaves only those who had taken cannabis derivatives, designer drugs or other illegal drugs. In that case, we can talk of a 4.2 per cent rate of drug use prior to pregnancy. During pregnancy, a tiny proportion of women – just 0.2 per cent – resorted to illicit drugs.

FIGURE 81. DRUG (AB)USE AMONG ALL RESPONDENTS, %



Psychological characteristics

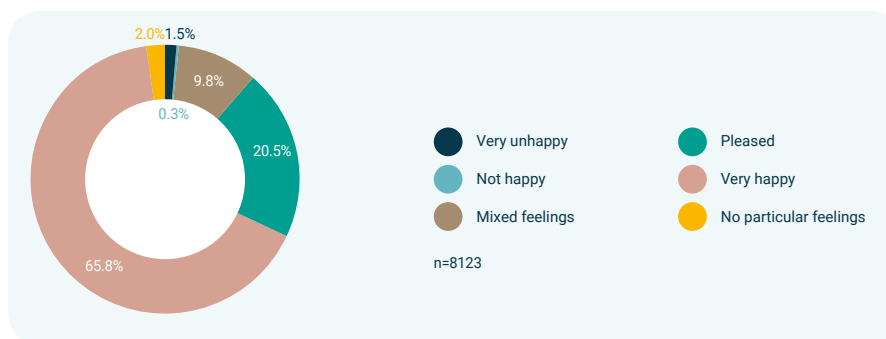
4.6.

In order to explore the psychological characteristics of the expectant women, we examined their general feelings about their pregnancy, their attachment to their foetus, the extent of their general and pregnancy-related anxiety and depressive symptoms, and the extent to which they felt they were in control of their own lives.

At the time of the survey, 86.3 per cent of the pregnant women were very happy or pleased when they thought about their pregnancy, while 9.8 per cent said they had mixed feelings. The remaining 3.9 per cent reported having negative emotions or a lack of emotion in relation to the pregnancy.

Some 86.3 per cent of mothers reported having positive feelings about their pregnancy.

FIGURE 82. DISTRIBUTION OF FEELINGS ABOUT PREGNANCY, %



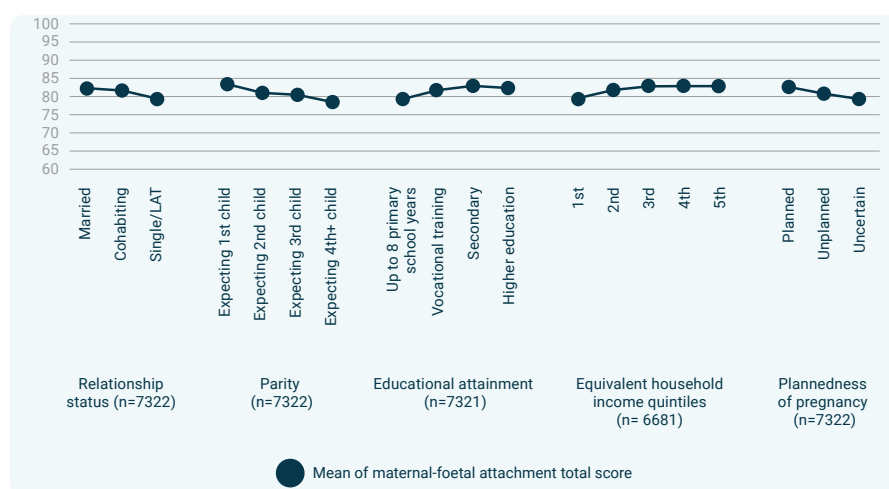
The women's relationship with their cohort baby was measured by means of a maternal-foetal attachment questionnaire, which contained 20 items;³⁵ the respondents indicated to what extent they thought/did the given items on a five-point scale (1 = definitely no, 5 = definitely yes). The questionnaire contained statements about maternal role-taking, interactions with the foetus and how the women sacrificed some of their own needs for the sake of the baby. The mean score of the responses to each item ranged from 3.3 to 4.8. The three statements that the women most agreed with were: 'I am really looking forward to seeing what the baby looks like' (average score: 4.8); 'I can hardly wait to hold the baby' (average score: 4.8); and 'I feel all the trouble of being pregnant is worth it' (average score: 4.6). Adding together the scores of the answers to the statements gives a value of between 20 and 100 points, with a higher value indicating a more intense attachment to the foetus. The overall average score was 81.9, which can be considered high.

³⁵The questions were selected from the Hungarian version of the Maternal – Fetal Attachment Scale. References: (1) Cranley, M.S. (1981). Development of a tool for the measurement of maternal attachment during pregnancy, *Nursing Research*, 30(5), 281–284; (2) Andrek, A., Hadházi, É. and Kekecs, Z. (2016). Az anya–magzat kötődést mérő Maternal–Fetal Attachment Scale kérdőív magyar nyelvű adaptálása és felhasználásának lehetőségei az ultrahang-kommunikációs vizsgálatok során [The Hungarian adaptation and potential use of the Mother Fetus Attachment Scale questionnaire measuring mother-to-fetus attachment during ultrasound communication examinations], *Orvosi Hetilap*, 157(20), 789–795.

The expectant women reported intense attachment to their foetus.

A somewhat stronger maternal-foetal attachment was reported by those women who were living with their spouse or cohabiting partner, who were expecting their first child, who had an educational attainment greater than eight completed years of primary school, whose income was in the top three quintiles, and who had planned to become pregnant. However, the differences observed across the socio-demographic groups were relatively small, and the mean total score on the 100-point scale was 78.5 for the group with the lowest average value (mothers expecting their fourth or subsequent child), i.e. only 3.4 points less than the mean score of the overall sample.

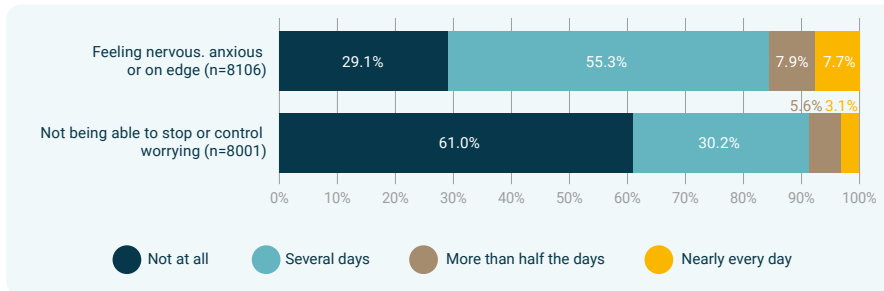
FIGURE 83. INTENSITY OF MATERNAL-FOETAL ATTACHMENT, BY SOCIO-DEMOGRAPHIC GROUP



Respondents' general anxiety was measured by two statements that inquired into how often they had experienced symptoms of anxiety in the two weeks prior to the survey.³⁶ The majority of the women had experienced anxiety of up to a few days, but 15.6 per cent reported feeling nervous, anxious or on the edge more than half of the time, and 8.7 per cent reported relentless worrying for more than half of the time.

³⁶ The scale applied was the Hungarian version of the GAD-2 questionnaire (<http://www.phqscreener.com>). Reference: 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.

FIGURE 84. FREQUENCY OF EXPERIENCING SYMPTOMS OF GENERALIZED ANXIETY, %



It may be an indication of an anxiety disorder if a pregnant woman experiences at least one of these symptoms most of the time (and one other for at least a few days), or if she experiences one of the symptoms almost every day. Based on this, overall, 15.7 per cent of the women in the survey suffered significant anxiety symptoms.

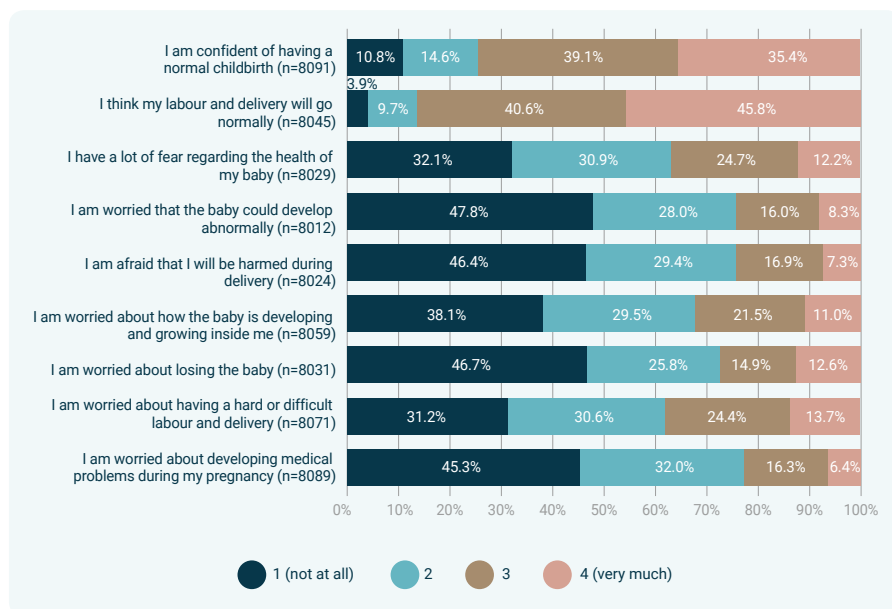
The incidence of anxiety symptoms was significantly higher than that overall average among those women who did not live with a partner (30.1 per cent), who were expecting their fourth or subsequent child (30.4 per cent), whose household income was in the lowest quintile (27.3 per cent), who were under the age of 20 (26.4 per cent) or aged 20–24 (23.3 per cent), who had completed at most eight years of primary school (29.3 per cent) and who had either not planned their pregnancy or had planned it for later (25.3 per cent).

Some 15.7 per cent of the pregnant women reported having significant anxiety symptoms.

In addition to generalized anxiety, respondents' pregnancy-related anxiety was also assessed, using a nine-item questionnaire;³⁷ the women indicated the degree to which they considered certain items to be applicable to them on a four-point scale (1 = not at all, 4 = to a great extent). The questionnaire is suitable for assessing concerns and anxiety related to foetal health and foetal loss, maternal health, childbirth, childcare and control. From the answers, it can be stated that the women generally had low levels of concern and fear related to their pregnancy. In terms of the three most common concerns, 38.2 per cent were to some extent worried about having a hard or difficult labour and delivery; 37 per cent were worried about their baby's health; and 32.4 per cent were worried about their baby's intrauterine growth and development.

³⁷ The scale applied was the Hungarian version of the Pregnancy Related Anxiety scale. References: (1) Rini, C.K., Dunkel-Schetter, C., Wadhwa, P.D. and Sandman, C.A. (1999). Psychological adaptation and birth outcomes: The role of personal resources, stress, and socio-cultural context in pregnancy, *Health Psychology*, 18(4), 333–345; (2) Kopcsó, K. (2018). Scale adaptation. In: Zs. Veroszta (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, Hungarian Demographic Research Institute, Budapest, 24–29.

FIGURE 85. DISTRIBUTIONS OF ANSWERS ON THE PREGNANCY-RELATED THOUGHTS QUESTIONNAIRE, %

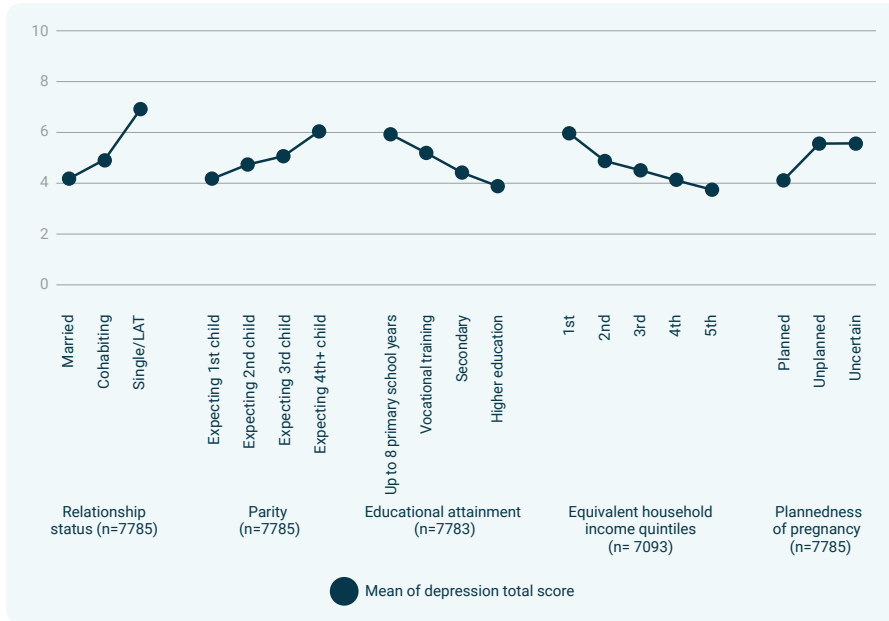


The incidence of depression-related symptoms was assessed using an eight-item questionnaire.³⁸ The women indicated on a four-point scale how often they had experienced certain feelings or behaviours in the week prior to the interview (0 = None or almost none of the time – i.e. for less than one day, 3 = All or almost all of the time – i.e. from five to seven days). By summing the scores given for each answer (taking into account the positive statements as reverse-coded), we get a total score of between 0 and 24, with a higher value indicating a greater incidence of depressive symptoms. The mean score of the questionnaire was 4.6, indicating that the average pregnant woman had rarely experienced symptoms of depression.

Depressive symptoms during pregnancy were less common among those who were married, were expecting their first child, who had higher levels of education and higher income, and who had planned their pregnancy.

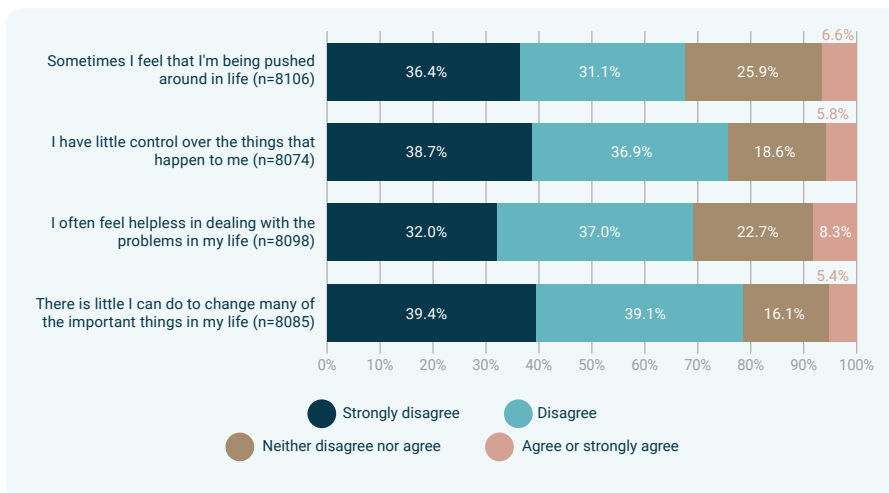
³⁸ The questions were selected from the Hungarian translation of the Center for Epidemiologic Studies – Depression questionnaire. References: (1) Radloff, L.S. (1977). The CES-D Scale: A self-report depression scale for research in the general population, *Applied Psychological Measurement*, 1(3), 385–401; (2) Szeifert, L. (2010). *Depresszió és életminőség krónikus veseelégtelenségben szenvedő betegek körében* [Depression and quality of life in patients with chronic kidney disease]. Budapest, doctoral dissertation.

FIGURE 86. INCIDENCE OF DEPRESSIVE SYMPTOMS, BY SOCIO-DEMOGRAPHIC GROUP



Finally, we asked our respondents four questions to assess the control they felt over their own lives. On the basis of their answers, it can be concluded that the majority had so-called internal locus of control and believed that they had influence over what happens to them. Only 5–8 per cent felt that they were more likely to drift in life and that they were powerless in the things that were important to them, the problems that affected them. A significant proportion – about 16–26 per cent – would seem from their responses (neither agree nor disagree) to feel that while they had some control, they were also subject to external influences, meaning that they thought that the course of their lives depended on both themselves and external factors.

FIGURE 87. DISTRIBUTIONS OF ANSWERS REFERRING TO CONTROL, %



4.7. Expectations

The expectant mothers formulated their preliminary ideas and expectations about the conditions of childbirth, breastfeeding, their nursery plans, and the planned time and way of returning to the labour market.

In terms of the planned circumstances of childbirth, the proportion of the women in our survey who wanted to give birth at a private hospital or clinic (2.2 per cent) was very low, while the proportion who wanted to give birth at home (0.4 per cent) was vanishingly small. The vast majority (97.4 per cent) planned to give birth in a state-run (public) hospital or clinic. A more nuanced picture emerges in response to the questions about obstetricians and midwives: in the seventh month of pregnancy, more than a third of the women had chosen neither an obstetrician nor a midwife, but 26.1 per cent had already selected both; 35 per cent had selected an obstetrician (but not a midwife) and 5.2 per cent had chosen a midwife (but not an obstetrician). The results suggest that many are willing to pay for perinatal services, and that public provision is only relevant in terms of the facilities and the premises where the birth will take place.

In the seventh month of pregnancy, nearly 18 per cent of the expectant mothers either planned to give birth alone or had not yet decided whether they wanted any of their relatives or acquaintances to be present. However, most of them had a consistent idea of who they wanted to have next to them during childbirth: 72.5 per cent planned to have the child's father present at the birth, and 8.8 per cent had nominated another family member.

Regarding the course of childbirth, the majority of the respondents were optimistic, with 86.4 per cent believing that everything would be fine regarding the labour and birth.

Some 72.5 per cent of the pregnant women wanted their child's father to be with them at the birth.

Turning to the women's plans for breastfeeding, the vast majority (91.8 per cent) planned to nourish their new-born baby exclusively through breastfeeding. The second-highest proportion (5.9 per cent) mentioned a combination of breastfeeding and formula feeding right from the outset. Regarding the planned duration of breastfeeding, 43.2 per cent did not rule out breastfeeding their child past their first birthday; 36.2 per cent planned to breastfeed up to the age of 1; and 16.8 per cent intended to breastfeed up to the age of 6 months. Nearly two thirds of the respondents would start weaning their child at 6 months, but 17.1 per cent would start their child on solids from 4 months.

The vast majority of mothers planned to breastfeed their new-born, and 43.2 per cent would not rule out breastfeeding beyond the infant's first birthday.

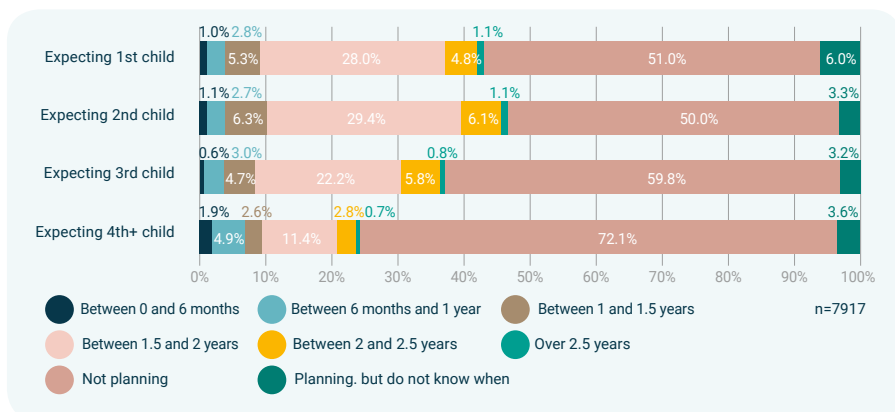
More than half of the respondents (53.3 per cent) did not plan to enrol their child in nursery, while 4.6 per cent did plan to do so, but had not yet decided when. Leaving aside those who were not planning to send their child to nursery and who were uncertain, the majority of the women who wanted to put their child in a nursery (63 per cent) indicated that they would like to start when their infant is aged between 18 months and 2 years (average age 22–23 months); 2.4 per cent planned to enrol their child in nursery before the age of 6 months; 7 per cent between the age of 6 months and 1 year; 12.7 per cent between the age of 1 year and 18 months; 12.4 per cent between the age of 2 and 2.5; and 2.4 per cent of respondents planned to send their child to nursery only once they had reached the age of 2.5 years.

The women surveyed generally planned to enrol their child in a nursery at around the age of 2 years; but half of those surveyed did not want to use a nursery at all.

In the case of nursery-related plans, the number of children that the woman already has plays a prominent role. While 51 per cent of those women expecting their first child did not plan to place their child in a nursery, the figure for those expecting their fourth (or subsequent) child was 72.1 per cent. Fifty per cent of those expecting their second child and 59.8 per cent of those expecting their third were of a similar opinion. The highest proportion (6 per cent) of those who had not yet decided by the seventh month of their pregnancy whether they would place their child in a nursery was to be found among women expecting their first child. Those respondents whose plans did involve a nursery most frequently (regardless of the number of existing children) wanted to start using this form of childcare when their child was aged between 18 months and 2 years. While 28 per cent of those expecting their first child and 29.4 per cent of those expecting their second child planned to send their child to nursery at this age, the proportion was 22.2 per cent of those expecting their third child and 11.4 per cent of those expecting their fourth (or subsequent) child.

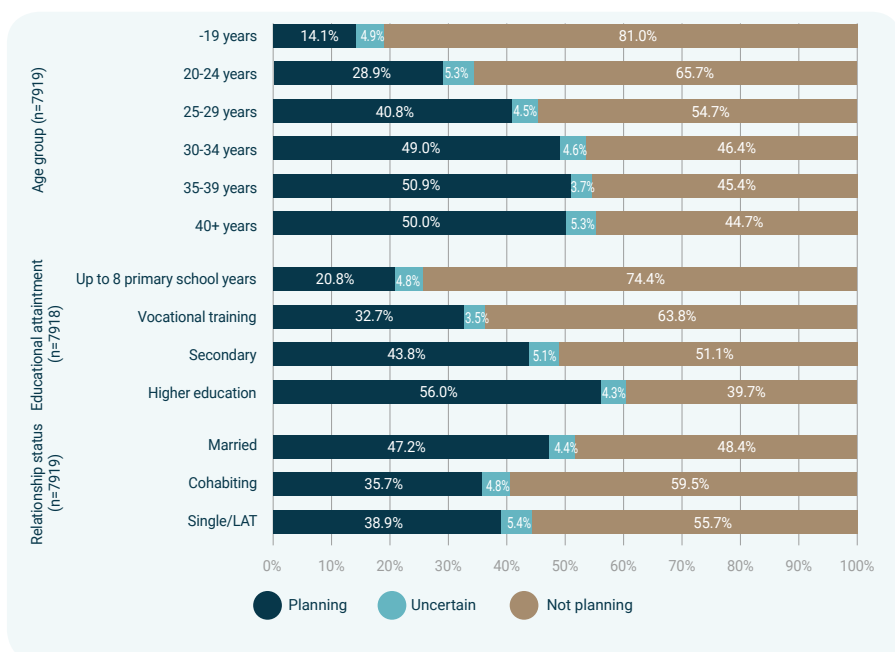
Those women with several children already (i.e. who were expecting at least their fourth child) were the most likely to have no plans to send their new child to a nursery.

FIGURE 88. PLANNED START OF USING NURSERY SERVICES, BY NUMBER OF CHILDREN, % - THE CHILD'S AGE WHEN ENTERING NURSERY



In terms of maternal age, the proportion of those who wanted to enrol their child in a nursery increased for the defined age groups up to the age of 39, after which the proportion decreased slightly: 14.1 per cent of the expectant mothers aged 19 or under wanted to send their child to a nursery, while the proportion was 50.9 per cent among those aged 35–39 and 50 per cent among respondents aged 40 or over. In terms of education, a higher proportion of those with higher educational attainment planned to rely on a nursery: while 20.8 per cent of those who had completed a maximum of eight years of primary school planned to send their child to nursery, the figure for respondents with tertiary education was 56 per cent. Regarding relationship status, married people were those most likely to be planning to use nursery services (47.2 per cent). They were followed by women who either did not have a partner or were in a visiting relationship (38.9 per cent), while only 35.7 per cent of those living with a cohabiting partner intended to use a nursery.

FIGURE 89. CHARACTERISTICS OF MOTHERS PLANNING TO USE NURSERY SERVICES, %



If we look at the expectant mothers' nursery plans according to their place of residence, we can see that in settlements without any traditional nursery services or family day care, workplace or mini nursery, 71.4 per cent of the respondents did not plan to send their child to nursery. However, in settlements where such services were available, the figure fell to 41.7 per cent.

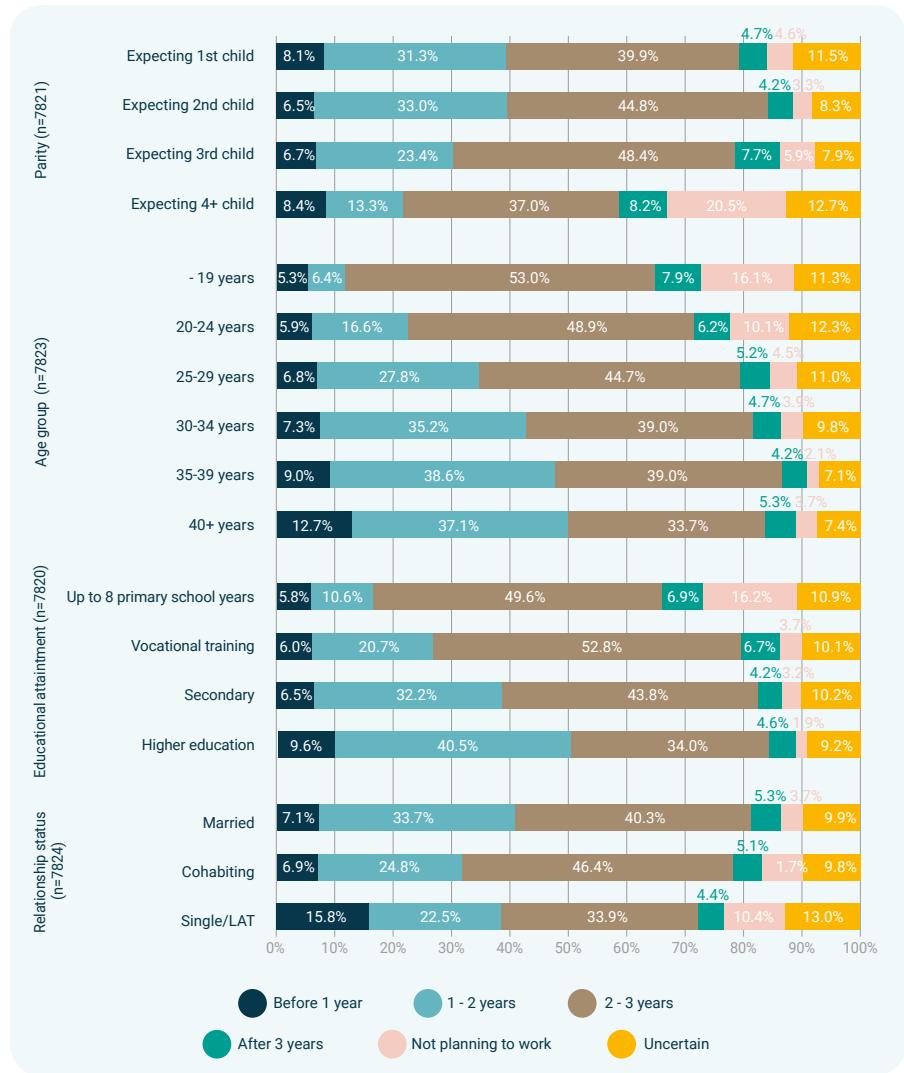
Of the women surveyed, 42.5 per cent were planning to go back to work once their child was aged between 2 and 3 years (an average of 29–30 months). Some 3.2 per cent would like to go back to work before their child was 6 months; 4.2 per cent intended to do so when the infant was between 6 months and 1 year; 29.6 per cent when the child was 1–2 years; and 5.2 per cent after the child's third birthday. Some 5.4 per cent of the respondents said they would no longer work after the birth of their child; 10 per cent were uncertain.

Some 42.5 per cent of those women surveyed planned to return to work when their child was aged between 2 and 3 years.

As with the nursery plans, the number of children a woman already has plays a key role in the planned timing of her re-entry onto the labour market. Here, the proportion of those who were not planning to go back to work was highest among those who were expecting their fourth or subsequent child (20.5 per cent); that group also had the highest proportion of women (8.4 per cent) who were planning to return to work early (before their child turns 1). Otherwise, 4.6 per cent of those expecting their first child, 3.3 per cent of those expecting their second and 5.9 per cent of those expecting their third thought, in the seventh month of pregnancy, that they would not go back to work after the birth. While 31.3 per cent of women expecting their first child and 33 per cent of those expecting their second would work once their child was 1–2 years old, the figure for those expecting their third child was 23.4 per cent and for those expecting their fourth (or subsequent) child it was 13.3 per cent.

The older the expectant mother, the greater the proportion who wanted to resume working a) before their child turned 1, and b) when their child was aged between 1 and 2 years: 37.1 per cent of the women over 40 were planning to work once their child was aged between 1 and 2 years, compared to 6.4 per cent of mothers-to-be aged under 20. With regard to education, the proportion of those who planned to go back to work sooner was higher among those expectant women with higher educational attainment: 50.1 per cent of those with tertiary education wanted to go back to work before their child turned 2, compared to just 16.4 per cent of respondents who had completed at most eight years of primary school. Based on relationship status, 40.8 per cent of those living with their spouse and 31.7 per cent of those living with a cohabiting partner wanted to go back to work before their cohort baby turned 2.

FIGURE 90. PLANNED TIME TO RETURN TO THE LABOUR MARKET, %



Labour market reintegration

If we look at the planned date of return to employment in association with previous labour market status (before pregnancy), we can see that 28.2 per cent of those women who had never had a paid job before they fell pregnant did not plan to take a job after childbirth. The figure was 1.6 per cent among those women who were still working during the seventh month of their pregnancy (i.e. at the time of the survey).

More than half of the women who were planning to resume work would like to work full time, while 44.5 per cent would prefer part-time employment. As for the nature and location of the work, the responses were more homogeneous: 93.5 per cent of those respondents who planned to go back to work would prefer regular employ-

ment, and 84.6 per cent would like to go out to work. We get a slightly more diverse picture when we observe the nature of the work schedule: 41.5 per cent of the women would return to the labour market to work fixed hours, while 58.5 per cent would prefer a job that offered flexitime. A similar trend can be observed when we look at the employment plans of women with different numbers of children: 42.3 per cent of those expecting their first child were planning to work part time; the corresponding figures were 44 per cent of those expecting their second child, 50.8 per cent of those expecting their third and 49.7 per cent of those expecting their fourth (or subsequent) child. Although the majority would prefer regular employment, regardless of the number of children, some 6.1 per cent of those expecting their first child and 12.1 per cent of those expecting their fourth (or subsequent) child would take casual work, if the opportunity arose. As for the nature of the work schedule, the biggest difference was between women expecting their first child and those expecting their second: 60.6 per cent of those expecting their first child said they would like flexitime, but just 56 per cent of those expecting their second child. As for the location of the work, those expecting their fourth (or subsequent) child were the most likely to indicate that they would rather work from home (21.6 per cent).

Of those respondents who said the family could only cover its usual household expenses with difficulty, 7.1 per cent planned to take employment before their child turned 1; 20.4 per cent would wait until their child was between 1 and 2 years of age; 38.7 per cent – when the infant was aged between 2 and 3; and 6.2 per cent planned to take a job once their child turned 3. In households where expenditure is easily covered, 10 per cent of respondents planned to go back to work before their child turned 1; 32.2 per cent when the child was aged between 1 and 2; 39 per cent when the infant was aged between 2 and 3; and 4.9 per cent once the child turned 3. In all, 12.4 per cent of those living in more straitened financial circumstances did not plan to take a job at all after the birth, compared to 4.8 per cent of those in the best financial position.

Working during pregnancy

4.8.

The results of the study show that in Hungary more than half of those expectant women surveyed in the seventh month of pregnancy were not working at the time.

Some 52.4 per cent of the women were employed at the time of the survey, but were already working from home, or else were on sick leave or other benefits. Overall, only 19.7 per cent of them were actively working; 18.7 per cent, although they had previously worked, had no employment at the time of the inquiry; and 9.2 per cent had never had a paid job.

In all, 73.3 per cent of those who had a job but were no longer working were on sick leave, and 16.4 per cent were on GYES (childcare allowance), GYED (infant care fee) or GYET (child-raising allowance) during the seventh month of pregnancy. Some 37.9 per cent of expectant women went on sick leave during weeks 1–12 of the pregnancy; 33.6

per cent in weeks 13–24; and 28.5 per cent in the third trimester. Observing the employment hierarchy of the respondents who had a job but were not working in the seventh month of pregnancy, it can be stated that the vast majority (86.8 per cent) worked as employees on an indefinite contract. They were followed by women who were employees on a fixed-term contract (6.4 per cent). Some 3.5 per cent were self-employed and 1.2 per cent were engaged in public works. Regarding the sector in which the respondents worked, the majority (60 per cent) worked in fully privately owned companies, while 29.4 per cent worked for a fully state or municipally owned/funded employer.

Some 37.9 per cent of those women who were employed but were no longer working had gone on sick leave in the first trimester of pregnancy and 28.5 per cent in the third trimester.

The majority of the respondents who had previously worked but currently did not have a job (62.3 per cent) had already resigned before becoming pregnant, while 37.7 per cent had resigned during their pregnancy. Nearly a third of the respondents (32.4 per cent) were receiving GYES, GYED or GYET; 30.4 per cent were unemployed; 18.8 per cent were housewives; and 2.8 per cent were students. When asked why their most recent employment had been terminated, 37.3 per cent of the women responded that the termination had been by mutual agreement; 30.8 per cent said that their fixed-term employment contract had expired; and 7.5 per cent said they had been let go during/after a probationary period.

The majority of those who were still actively working (72.8 per cent) had an indefinite employment contract, although 9 per cent had a fixed-term employment contract; 8.3 per cent were self-employed; and 4.5 per cent were engaged in public works. Some 87.1 per cent of those employees still working were working full time and 12.9 per cent part time (less than 40 hours a week). In terms of the type of sector, most (58.3 per cent) were employed by fully private companies; 31.6 per cent by a state or municipally owned/financed employer; 2.9 per cent by a partly state-owned and partly private company; and 1.7 per cent by a non-profit organization or foundation.

Some 72.8 per cent of respondents who were still actively working in the seventh month of their pregnancy were employed on an indefinite contract, and most were working full time.

The majority (43.7 per cent) of those women expecting their third child went on sick leave during the first trimester. They were followed by those women expecting their first or second child. The largest share of women expecting their fourth (or subsequent) child (37 per cent) went on sick leave in the second trimester. Among those expecting their first child, some (31.2 per cent) were even working for a while during their third trimester; the proportion of mothers expecting their fourth (or subsequent) child who worked in the third trimester was also high (28.4 per cent).

Women expecting their first child were those who most commonly worked into the third trimester of pregnancy.

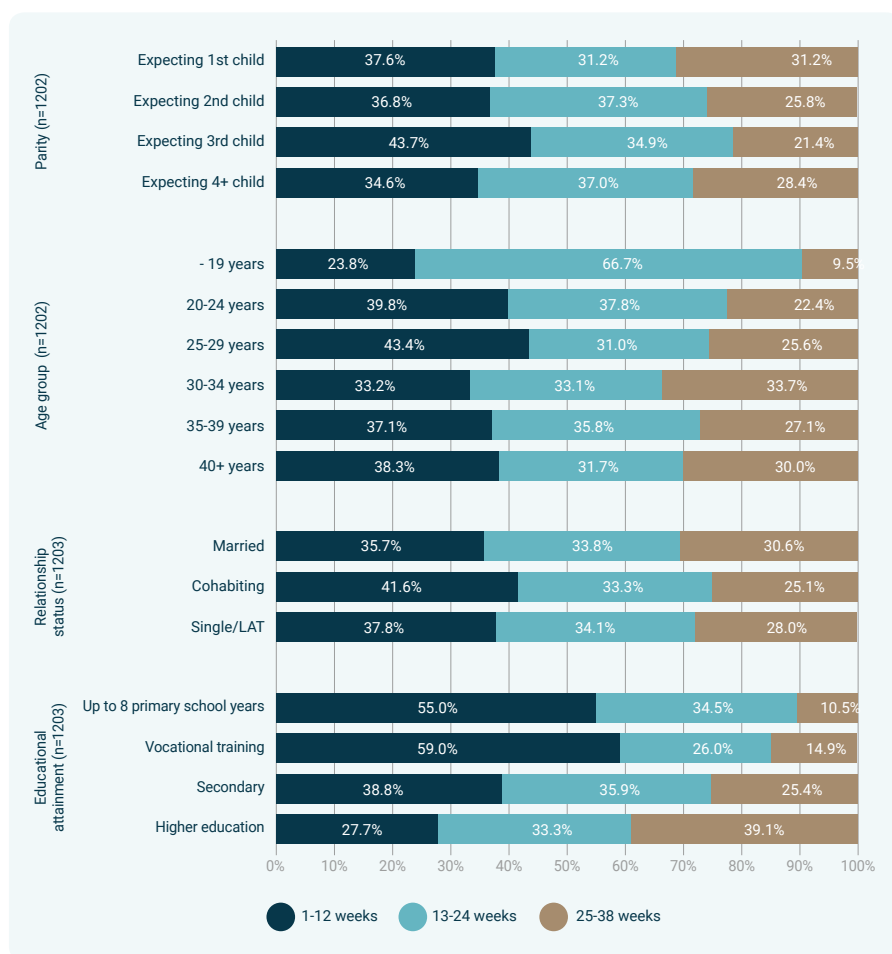
In terms of the transition to sick leave among the various age groups, in the under-20 age group, most women (66.7 per cent) had stopped working in their second trimester. The highest proportion of women who continued working into the third trimester was to be found among 30–34-year-olds (33.7 per cent). Meanwhile, the highest proportion of those who went on sick leave in the first trimester was among 25–29-year-olds (43.4 per cent).

Irrespective of relationship status, the expectant women had tended to stop work during the first trimester: 35.7 per cent of married women, 41.6 per cent of those living with a cohabiting partner and 37.8 per cent of those in a visiting relationship or without a partner. It was among married women that we could observe the highest proportion who worked into the third trimester (30.6 per cent).

With regards to education, the proportion of women who worked into the third trimester increased in line with educational attainment. Whereas 10.5 per cent of those who had completed at most eight years of primary school waited until the third trimester to transition to sick leave, this was true of 39.1 per cent of those with tertiary education. The highest proportion (59 per cent) of women who stopped work during the first trimester was among those with vocational training.

Older women and those with higher educational attainment stopped work later in pregnancy.

FIGURE 91. TIMING OF THE TRANSITION FROM ACTIVE WORK, %- INACTIVE MOTHERS IN THEIR SEVENTH MONTH OF PREGNANCY, WHO HAD PREVIOUSLY WORKED



On average, the women surveyed had gone on sick leave during weeks 18–19 of their pregnancy.

Income and continued work

Whether the women continued working during pregnancy was also related to their income situation. Among those who had previously worked but were now inactive (in the seventh month of pregnancy), it was those women with higher levels of household income who tended to continue to work for longer. Of those pregnant women in the lowest quintile of equivalent household income, 49.7 per cent had stopped working in the first trimester; 34.6 per cent in the second; and 15.8 per cent in the third trimester. The date on which women stopped working became increasingly later as we moved upwards through the quintiles. Of those in the top quintile, only 26.3 per cent had signed up for sick leave in the first trimester, and the proportion of those who had done so only in the third trimester was 44 per cent.

Conclusion

4.9.

Of all the pregnant women surveyed, 66 per cent had consciously planned to have the child they were expecting. Planned pregnancies were most common among those expecting their first child. In 15.9 per cent of cases, the onset of pregnancy was complicated by a health problem. Some 7.6 per cent of all expectant mothers had become pregnant thanks to medical intervention. In all, 73.6 per cent of planned pregnancies occurred within one year of the decision to try for a baby.

Although the vast majority of the women considered their health to be good or very good, a significant proportion had some kind of health problem: more than a fifth reported having had some form of chronic illness. Overall, according to the district nurse records, 41 per cent of the expectant mothers required enhanced pregnancy care for various health reasons. By the end of the seventh month of pregnancy, nearly half of all the women faced health problems specifically related to the pregnancy. The most common problem was gestational diabetes, but vaginal infection, vaginal bleeding and hyperemesis gravidarum also affected many.

In all, 31 per cent of the expectant women only visited state health service doctors, while 16 per cent only had private care; the rest were receiving mixed care. Some 45 per cent of the women in Budapest had had only private gynaecological consultations during their pregnancy. Most recommended screenings had been attended by nearly all the women during pregnancy, but the failure to attend dental check-ups was significant.

More than 90 per cent of the women planned to give birth in a state-run hospital or clinic. In the seventh month of pregnancy, more than a third of the expectant mothers had neither chosen an obstetrician nor appointed a midwife, but 26.1 per cent already had both lined up. Some 72.5 per cent of the women wanted their child's father to be present at childbirth.

The vast majority of the mothers-to-be planned to breastfeed their new-born, and 43.2 per cent did not rule out continuing with breastfeeding past their baby's first birthday.

The women had a high level of health awareness, but their lifestyles often contradicted this. Prior to pregnancy, more than a third of the women had been overweight. By the seventh month of pregnancy, the average weight gain was 9.3 kg. The majority of the women were consuming adequate amounts of fluids and protein; however, their consumption of fruit, vegetables and milk was significantly lower than recommended. Meanwhile, their consumption of unhealthy foods and beverages – such as sugary soft drinks, salty snacks and sweets – was higher than desirable. Pre-pregnancy sporting activity was quite low, and it decreased further during pregnancy. In the first trimester of pregnancy, 22.6 per cent of expectant mothers had smoked, while two fifths had been affected by passive smoking. Prior to becoming pregnant, 37 per cent of mothers had abstained from alcohol, rising to 89.7 per cent in the first three months of pregnancy and 92.2 per cent from

the fourth month onwards. A tiny proportion (just 0.2 per cent) reported having used illegal drugs during pregnancy.

Some 86.3 per cent of mothers reported positive feelings concerning their pregnancy. Intense attachment to the foetus was also a common characteristic. The majority of the women experienced at most a few days of anxiety, while 15.7 per cent reported having had significant anxiety symptoms.

More than half of all the women were no longer working during the seventh month of pregnancy. Older women, those with higher levels of education and those expecting their first child tended to give up work later in their pregnancy. The women were usually planning to enrol their child in a nursery at around the age of 2, but half of those surveyed did not plan to use such services at all.



