

Impact of the Digitalization of Employment on the Work–Family Balance: Russians’ Subjective Assessments



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Abstract. The development of digital technology causes rapid transformation in the sphere of work and the emergence of new forms and formats of employment. The ongoing changes bring to the fore the issue of work–family balance, because it is necessary to promote the well-being of employees with children. The aim of our research is to study the impact of the digitalization of employment on the work–children balance. The empirical base includes findings of a survey of working age women and men, with work experience, living in the territory of the Russian Federation, and raising children under the age of 14 (N = 954); the survey was conducted in May – June 2023. Based on the data obtained, we reveal differences in satisfaction ratings among respondents who intensively use information and communication technologies and do not intensively use/do not use them in their work; the latter have a higher average satisfaction rate concerning the time spent on parental responsibilities. This indicates the ambiguous impact of information and communication technologies on the satisfaction rate regarding the time spent on parenthood. Second, there is no direct relationship between the amount of time parents spend with their children and subjective satisfaction with the time spent on parenthood; this is in line with the results of other studies. Third, we reveal a contradiction between a high assessment of the expected positive effect of a hybrid work format on the time spent on children and low satisfaction regarding the time spent on children in women that work under a hybrid employment scheme. The revealed contradiction indicates difficulties in the practical implementation of this work format, which significantly reduce women’s satisfaction regarding the time spent on parenthood. The determinants of this effect require further verification with the use of qualitative techniques.

Key words: parenthood, time spent on children, family–work balance, employment, satisfaction, parental well-being.

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Introduction

Satisfaction concerning the time spent on parenthood is one of the determinants of parental well-being and reproductive behavior. The Concept of State Family Policy for the period up to 2025¹ reflects the idea that it is necessary and appropriate to create real conditions for combining family responsibilities with professional activities, including through the development of employment forms that promote a harmonious balance of parental and labor obligations.

The implementation of family policy to harmonize the family-work balance can contribute

to the growth of fertility rates and positively affect the economic efficiency of labor relations. Satisfaction regarding the work-family balance increases labor satisfaction (Nilawati et al., 2019) and removes barriers to productivity growth (Belekhova, Ivanovskaya, 2022).

Digitalization has become a catalyst for spreading flexible employment formats (remote, hybrid, platform, self-employment), which, according to some estimates, makes it possible to combine employment with family responsibilities more successfully (Abramov, Bykov, 2021).

However, experts’ opinions on the digitalization impact on employment are ambiguous. On the one hand, the large-scale introduction of technologies

¹ On Approval of the Concept of State Family Policy in the Russian Federation for the period up to 2025: RF Government Resolution 1618-r, dated August 25, 2014.

opens up limitless opportunities for professional self-actualization, career and personal growth, improving well-being and quality of life (Ganju et al., 2016; Zelenkov, Lashkevich, 2020), job creation, etc.². Digital technologies contribute to changing the working time structure (Pobiyanskaya et al., 2022), it becomes flexible and can be transformed depending on the desire of an employer and employee³. In the digital economy, there are opportunities to both reduce the duration of working time and extend it beyond the standard norm of working hours (Demina, Zayakina, 2020), conditions are created for poly-employment, which often allows not only obtaining additional financial income and stability, but also it helps to unlock employee's professional potential, increases their stability and confidence in the future (Kuchenkova, 2019).

On the other hand, researchers agree that digitalization contributes to growing work intensity and working hours. According to the Russian Longitudinal Monitoring Survey of the National Research University Higher School of Economics, about a third of the country's population (35%) have a working day longer than 9 hours⁴. The increase in the working day length is due to a number of reasons, including underemployment at the main workplace, low wages, rising inflation and declining real incomes, and labor market instability, which encourages workers to seek additional employment opportunities in their free time from the main job (Demina, Zayakina, 2020; Kuchenkova, 2019). We are witnessing such a phenomenon as over-employment (working week is over the standard 40 hours), which carries negative risks and consequences for the work-family balance.

² Value of connectivity: Economic and social benefits of expanding Internet access. Deloitte, 2014. Available at: https://www2.deloitte.com/content/dam/Deloitte/ie/Documents/TechnologyMediaCommunications/2014_uk_tmt_value_of_connectivity_deloitte_ireland.pdf

³ Kobzar' E.N. *Economic Analysis of the Causes of Over-Employment in Contemporary Russia*. Available at: <https://lirt.hse.ru/data/2011/05/29/1212611019/20110524-Kobzar.pdf>

⁴ Russia Longitudinal Monitoring Survey of HSE. Available at: <http://www.cpc.unc.edu/projects/rhms>

The problem of the work-life balance for working parents with preschool and school-age children is particularly relevant. There is a need for a deeper study of the benefits and risks of modern trends in employment for working parents in terms of planning the birth of children, the quantity and quality of time for their upbringing, and satisfaction with time spent on children. According to the researchers' estimates (Kalabikhina, 2019), digitalization has a positive impact on demographic trends, at the same time, there are concerns that the reproductive attitudes of citizens may conflict with the lifestyle and consumer opportunities within the digital economy. In this regard, special attention is paid to creating the necessary conditions in society for giving birth and raising children, popularizing the values of parenthood and childhood, and harmonizing working hours to improve the work-family balance (Shabunova, Leonidova, 2023).

At this stage, there is no deep understanding of how transformations in employment, in particular digital, flexible and hybrid forms of modern work organization, affect the work-family balance. In the Russian scientific literature, studies, aimed at examining the specifics of satisfaction with the time costs of parenthood among people of different types and modes of employment, are fragmentary. We aspire to fill the existing lacunas in this direction. Our hypothesis is based on the assumption that there is a relationship between the penetration of information and communication technologies (ICT) in employment and satisfaction with time spent on parenthood. The employment digitalization is reflected not only in an increase in the intensity of ICT use in work, but also in changes in work mode (flexible/hard), job format (remote/hybrid/stationary), and sectoral conditions of employment.

The object of the research is working-age women and men, with work experience, living in the Russian Federation and raising children under the age of 14.

The aim of the study is to examine the impact of employment digitalization on the work-child balance.

The key task is to assess the degree of satisfaction with time spent on parenthood depending on the following employment parameters: intensity of the ICT use in work; flexibility of work mode; workplace format (remote, hybrid, stationary); industry. In addition, we study the relationship of satisfaction concerning the time spent on parenthood with actual time spent on children and the age of children.

Subjective assessments of satisfaction regarding the time spent on parenting will reveal how successful working parents are at balancing work and time with children.

Literature review

Time spent on childcare and child rearing are important components of working parents' life (Razumova, Serpukhova, 2020). The assessment of psychological (satisfaction concerning involvement) and time expenditures (satisfaction regarding time allocation) on different life domains acts as one of the many approaches to measuring the work-family balance (Greenhaus et al., 2003). Satisfaction concerning the parenting time has a significant impact on the subjective well-being of fathers and mothers in the process of building a harmonious balance between parental and professional responsibilities.

The study of parents' time expenditure on child rearing is carried out by foreign (Nomaguchi et al., 2005; Gutiérrez-Domènech, 2010; Neilson, Stanfors, 2014; Zannella et al., 2020) and Russian (Bagirova, Shubat, 2011; Korolenko, Kalachikova, 2019; Korolenko, 2021) researchers. The work of Western scholars in recent decades has significantly expanded the understanding of the demographic and socio-economic determinants of parental satisfaction with time spent with children, which has contributed to a better understanding of this complex phenomenon (Nomaguchi et al., 2005; Monna, Gauthier, 2008; Gutiérrez-Domènech, 2010; Zannella et al., 2010; Kutrovátz, 2017).

The digital transformation of employment focuses on how changing working conditions affect parents' time with their children. Of particular interest is the study of the impact of different parameters and characteristics of employment (length of the working day, full-time and part-time employment, working hours per day/week, standard/non-standard work schedule) on the time of working parents with children (Hallberg, Klevmarken, 2003; Rapoport, Le Bourdais, 2008; Gutiérrez-Domènech, 2010; Bagirova, Blednova, 2021; Tonkikh, Chernykh, 2022). Evidence from empirical studies strongly suggests that working hours in the evening after 6 p.m. significantly reduces leisure time and socialization with children (Noonan et al., 2007; Rapoport, Bourdais, 2008). The possible negative impact of irregular work schedules on parental well-being has also been documented (Pollmann-Schult, Li, 2020).

A number of empirical studies have found positive effects of remote employment and flexible working hours on the harmonious reconciliation of parental and professional responsibilities (Bagirova, Blednova, 2019; Tonkikh, Chernykh, 2022). It is too early to draw conclusions about how the employment digitalization affects the well-being of working parents, including the expenditure of parental time on children. Empirical evidence (Yang et al., 2023) suggests a divergent effect of remote employment on the well-being of mothers and fathers. The sustained positive effect of remote employment on parental well-being is due to a number of factors, including the availability of necessary conditions for working from home.

Research is underway to examine gender differences in the impact of time spent with children (time-to-children) and experienced lack of time with children on parental well-being in families where both adults work. Findings (Milkie et al., 2004; Zannella et al., 2020) indicate that most fathers desire to spend more time with their children, while a greater proportion of mothers show satisfaction concerning the time spent with their children. The studies also note that only for

mothers, lack of time with children and spouse is associated with lower well-being (Nomaguchi et al., 2005). It is also important to say that changes in mothers' work hours have a smaller effect on the time parents spend with their children than changes in fathers' work hours (Hallberg, Klevmar, 2003).

In the context of our study, the works of Western scholars on the impact of the family-work balance and family-work conflict on parental well-being are of particular interest (Baxter et al., 2007; Cooklin et al., 2015; Gatrell et al., 2014). According to (Meier et al., 2016) there is no negative relationship between employment and mothers' subjective perceptions of time spent with their children. Male parental well-being, on the contrary, is significantly related to the type of job and working conditions (Cooklin et al., 2015). Certain job features are directly associated with increased work-family conflict (long working hours, inflexible work schedules, night shifts, job insecurity, lack of autonomy) and they consequently lead to a decrease in fathers' well-being (Cooklin et al., 2015).

The researchers have found that existing family-friendly workplace strategies are mainly aimed at mothers. Traditional gender role views of organizational leaders often prevent fathers from optimally combining work and childcare (Gatrell et al., 2014), which has a negative impact on time spent on children and parental well-being in general.

The review of studies by Russian and foreign authors demonstrates the diversity of approaches to the determinants that define the subjective perception of working parents' satisfaction regarding the time with their children. The digitalization penetration into the sphere of labor actualizes the research of ICT influence on work-children balance.

Materials and methods

We used methods of sociological research (online survey), methods of statistical and mathematical processing of information, comparative and contrasting analysis. At the stage

of research design formation, we studied the works of Russian and foreign authors concerning the problem of combining work with fulfillment of family-parental responsibilities.

Foreign scientists consider the work-family-children balance in the context of the negative impact of non-standard employment parameters on the health of parents and children, on well-being and relationship satisfaction, using such measurement/evaluation indicators as non-standard work schedule, duration of working hours, length of commute (Pollmann-Schult, Li, 2020); parents' demographic characteristics (gender, age, marital status); parental socio-economic characteristics (employment status, financial income, profession, etc.); parents' social and economic characteristics (employment status, financial income, occupational status, etc.). Some authors use an indicator of time spent with children to assess working parents' well-being (Milkie et al., 2004; Zannella et al., 2020).

“Time” as an evaluative metric of the optimality of the family-work balance and the success of combining work and parenthood is central to both foreign and Russian research projects. In the system of indicators of the family-work balance, the works of T.O. Razumova and M.A. Serpukhova (Razumova, Serpukhova, 2020) use the indicator of satisfaction regarding the distribution of time, which provides individual fulfillment of both work and family functions. The work (Bagirova, Blednova, 2021) studies the influence of employment parameters on the combination of parental and professional responsibilities using an index method of assessing barriers, including depending on the length of the working day and work schedule.

The analysis did not reveal any studies devoted to the problem of the impact of digitalization of labor content on the work-family balance. Our research design and tools were developed based on the approaches of the authors (Milkie et al., 2004), who used grouping of respondents in terms of employment profiles (underemployment; full-time work; overemployment) and presence/age of children. We chose the indicator “satisfaction

regarding the ability to devote sufficient time to children” as an evaluation metric of the optimality of the work-child balance. We refined the respondents’ employment profiles to fit the research aims and objectives. The questionnaire contained a key question on satisfaction with time for children, a standard socio-demographic block, a block on children’s age and questions on employment parameters. We used closed-ended wording; the total number of questions was 25.

To address the key objective of the study – to assess the degree of satisfaction with time spent on parenthood depending on the digitalization penetration in the sphere of work, the “Employment” block included questions to identify and group respondents according to such employment parameters as:

- ICT use (intensive use of ICT in work /non-intensive use of ICT or no use of them in work);
- work mode (flexible/rigid);
- workplace format (remote/hybrid/stationary);
- industry affiliation with the IT sector being singled out.

To address an additional research objective, the questionnaire includes questions on the actual time spent on child/children care and education in a typical working day; the number of children and their ages.

The empirical basis of the study was the results of a sociological survey we conducted from May 25 to June 4, 2023. When distributing the link to the questionnaire, we used the “snowball” method, the questionnaire was distributed using online technologies through digital communication platforms: placement on the HH.ru platform, personal offices of HH.ru job seekers, online mailings among job seekers and partners of the HH.ru online platform. The survey was conducted with the help of the digital tool “Survey Designer”, the obtained data were uploaded into Excel program for further calculations and comparative analysis of descriptive statistics.

We received 1,449 responses. To solve the research task of identifying the relationship between satisfaction with the opportunity to devote time to children and employment parameters, the total number of respondents (N = 1,449) was excluded from the total number of respondents with no children, as well as those with children under 15 years old. Thus, the final sample consisted of **954** respondents.

At the first stage, we conducted a comparative analysis of descriptive statistics of satisfaction with time spent on children. In accordance with the logic of the study, respondents were grouped by key employment parameters (intensity of ICT use in work; flexibility of work mode; workplace format; industry) and additional parameters (actual time spent on children; age of children). In each selected group, an average time satisfaction score was calculated based on the results of answers to the question “Will you rate how you are satisfied with your ability to devote sufficient time to your children?”. The assessment was made on a scale from 1 to 10, where “1” means that the respondent is absolutely not satisfied, “5” – it is difficult to assess, “10” – the respondent is fully satisfied.

The second stage assessed statistically significant differences in the parameters of employment, average number of children and having children under 6 years old in the groups of respondents with extreme average satisfaction ratings regarding the time for children – highly satisfied and extremely dissatisfied:

- 1) the most satisfied respondents were those who gave 9–10 points when answering the question “How satisfied are you with the opportunity to devote enough time to your children?”;
- 2) parents with 1–3 points are classified as dissatisfied.

We used the statistical criterion χ^2 to test the hypothesis of equality between the shares of a feature in the general populations on the basis of two independent samples. To compare the shares of indicators in two independent groups of

interviewees satisfied and dissatisfied with time spent on childcare, a contiguity table was filled in. We note that the expected frequency values for each cell of the contiguity table have values of at least 5, which is an important condition for the application of the χ^2 criterion.

The null hypothesis of the criterion χ^2 states that there are no statistically significant differences between the compared groups. In the study, differences in fractions were considered statistically significant at the $p < 0.05$ level. Values of $p > 0.05$ allow rejecting the null hypothesis in favor of the alternative hypothesis that there are statistically significant differences between the fractions of the trait in the compared groups.

We should note that the conducted sociological survey has limitations in terms of the

quality of the sample population. Since the sociological survey was conducted on the HH.ru platform, the number of respondents included certain categories of citizens, namely parents with children under 14 years old, who are users of the HH.ru platform, who at the time of the survey either had a job but were thinking about changing it or looking for additional work / part-time work, or those who at the time of the survey did not have a job and were looking for one. It means that the sample is skewed toward those who are “discontented”/“dissatisfied” with their jobs and looking for them. The sample did not include parents with stable employment that suits them.

Table 1 presents characteristics of the respondents' composition.

Table 1. Characteristics and composition of respondents, %

Indicator	Value
Total number of respondents, people	1,449
Including	
Female	56.5
Male	43.8
Employment structure of respondents	
has only a full-time job	41.9
is not working, looking for a job, but not registered with the employment service	32.0
has a permanent job and additional part-time work	12.8
has only a temporary job	5.9
is not working, registered as unemployed in the employment service	3.7
is on maternity leave	2.3
is not working or looking for work	1.4
Marital status structure of respondents	
married (registered marriage, civilian registry office)	52.9
single (is not dating anyone)	25.3
living with a partner (civil marriage), consider ourselves husband and wife	9.1
Has a partner, we are dating, but not living together (not married)	6.0
living with a partner, but do not consider ourselves husband and wife	3.4
officially registered, but we live apart	0.9
other	2.4
Structure of respondents by presence of children	
do not have children	31.8
have children	68.2
Total number of respondents with children under 14 years old, people	954
Structure of respondents raising children under 14 years of age	
women	60.3
men	39.7
Source: own compilation based on sociological research data.	

The age group from 25 to 34 years prevails – 35.9% of the total number of respondents. The geography of respondents includes all eight federal districts.

The respondents are dominated by “line specialists” (40.8%), “managers” (25.8%), “employees” (8.3%), with the majority of respondents being salaried employees (86.2%), the share of self-employed amounted to 6.7%, individual entrepreneurs – 2.3%, freelancers – 2.2%.

Among respondents raising children under 14 years old, the percentage of parents with children under 3 years old was 20.3%, 4–6 years old – 24.8%; 7–10 years old – 29.8%; 11–14 years old – 25.1%.

Results and discussion

Analysis of the distribution structure of answers to the question “Will you estimate how are you satisfied with the possibility to devote enough time to children?” has shown that the highest share of women satisfied with the time spent on parenting amounted to 19.4%, the share of fully satisfied male

respondents – 17.3%. The share of women least satisfied with the actual time spent on children is equal to 5.3%, the share of men is 1.8 p.p. higher (Tab. 2).

The obtained data allow tracing the correlation between the average satisfaction rating with parenting time and the intensity of ICT use/non-use in work (Tab. 3). It is noteworthy that in the group of “intensive use of ICT in work”, the average satisfaction rating concerning the parenting time is lower, with the lowest rating among male respondents (5.9). The statistically higher mean score of satisfaction concerning the parenting time is demonstrated by the group of “do not intensively use ICT or do not use them in work” (6.5).

Table 4 presents the average satisfaction rating regarding the ability to devote sufficient time to children by gender, depending on the intensity of the ICT use and the presence of children of different ages up to 14 years old.

Table 2. Satisfaction rating concerning the time for parenthood among all respondents and by gender, %

Satisfaction rating	Total	Male	Female
1	6.2	7.1	5.3
2	2.6	2.6	2.7
3	9.1	8.9	9.3
4	8.3	8.1	8.2
5	14.7	14.1	14.9
6	9.4	9.9	9.5
7	15.5	17.0	14.8
8	10.6	10.7	10.5
9	4.9	4.2	5.3
10	18.7	17.3	19.4
Average rating, units	6.3	6.2	6.3

Source: own compilation based on sociological research data.

Table 3. Average satisfaction rating concerning parenting time depending on the ICT use in work

Category of employed	Total		Male		Female	
	Share of employed, %	Mean score, units	Share of employed, %	Mean score, units	Share of employed, %	Mean score, units
Intensive use of ICT in work	45.2	6.1	46.1	5.9	46.0	6.1
Little or no use of ICTs in their work	54.8	6.5	53.9	6.4	54.0	6.5
TOTAL	100.0	–	100.0	–	100.0	–

Source: own compilation based on sociological research data.

Table 4. Average satisfaction rating concerning parenting time by gender, depending on the ICT use in work and the presence of children under 14 years old, units

Children age, years	Male		Female	
	Intensive use of ICT in work	Non-intensive use of ICT or no use of ICT in work	Intensive use of ICT in work	Non-intensive use of ICT or no use of ICT in work
From 0 to 3	5.9	6.1	6.1	7.3
From 4 to 6	5.6	6.1	5.3	6.1
From 7 to 10	5.6	5.6	5.6	6.2
From 11 to 14	5.9	6.6	6.2	6.1

Source: own compilation based on sociological research data.

We can see differences in satisfaction concerning parenting time between the groups “intensive use of ICT in work” and “non-intensive use of ICT or no use of ICT in work”. Among women, the highest mean scores for satisfaction with parenting time are found in the category of employed people who raise children under three years of age and “non-intensive use or no use of ICT in work”. In a similar employment category, men with children 11–14 years old have the highest mean score of satisfaction with parenting time.

We can assume that gender differences in satisfaction with time for raising younger and adolescent children are related to the fact that men are more interested in joint activities with older children (checking homework, visiting hobby clubs, doing sports together, hiking, etc.), which has a positive effect on satisfaction with time for fatherhood.

Table 5 presents the structure of time spent on child/children care (feeding, washing, supervision,

checking homework, etc.) in a typical working day. In the group of respondents whose time spent on parenting exceeds 7 hours in a typical working day, 73.7% are women, 26.3% are men. High time spent on parenting is conditioned by the number and age of children. For instance, 60.7% of respondent mothers bring up one child, 32.1% – two children, while 32.2% of the interviewed women have children under three years of age, 27.9% – under 6 years old; 70.0% of respondent fathers bring up one child, 20.0% – two children, while 22.2% of fathers have children under three years old, 22.2% – under 6 years old. In this group of respondents the structure by employment status is as follows: 39.3% of female respondents are searching for a job, 25.0% are on maternity leave, the rest of respondents (35.7%) are working, of which: on permanent work – 17.9%, on temporary work – 3.6%, on permanent and temporary work – 14.3%, at that 70.0% of working moms are employed on flexible work schedule, and working time does not exceed 40 hours per week.

Table 5. Time spent on parenthood among all respondents and by gender, %

Time spent on parenthood, children upbringing	Total	Male	Female
Up to 1 hour	6.4	9.7	4.3
1–2 hour(s)	24.6	28.0	22.7
3–4 hours	26.6	24.6	28.5
5–6 hours	9.8	4.5	13.1
7–10 hours	2.0	1.8	2.2
11 hours and more	2.1	0.8	2.6
It depends	18.3	15.4	20.3
I do not take care of a baby	10.1	15.2	6.4
Total	100.0	100.0	100.0

Source: own compilation based on sociological research data.

Among male respondents, 60.0% are searching for a job, 40.0% are employed: of which, 20.0% are employed in permanent jobs, 10.0% in temporary jobs, 10.0% in permanent and temporary jobs, with all respondents employed under flexible working conditions and working hours not exceeding 40 hours per week.

About half of the respondents (51.2%) spend from one to four hours per working day on child/children care. Gender differences in time spent on children can also be traced. About a third of women devote 3–4 hours daily (28.5%) to a child, while about the same proportion of male respondents most often spend 1–2 hours (28.0%). Twice as many men as women are not engaged in child/childcare (15.2 and 6.4% respectively).

The obtained data reveal gender differences in satisfaction with parenting time depending on the

actual time spent on raising children and depending on the format of employment – with intensive use of ICT in work, or non-intensive use or no use of ICT (Tab. 6). There is a common trend for men and women: higher mean scores of satisfaction concerning parenting time are recorded in the category of employment with non-intensive use or no use of ICT in work.

The analysis shows that the predominant majority of respondents have a rigid work regime, the hours of work start and end, breaks are set by an employer and do not change. In this group of respondents, the lowest average satisfaction rating regarding time for parenthood (5.6) is observed, including gender differences. Gender differences are not statistically significant, the average satisfaction ratings of men and women in this group of respondents are 5.5 and 5.6 respectively (Tab. 7).

Table 6. Average satisfaction rating concerning parenting time by gender, depending on the use of ICT in work and actual time spent on parenting, units

Group by time spent on raising children	Male		Female	
	Intensive use of ICT in work	Non-intensive use or no use of ICT in work	Intensive use of ICT in work	Non-intensive use or no use of ICT in work
Up to 1 hour	5.9	6.8	6.1	8.3
1–2 hour(s)	5.9	6.3	5.6	5.8
3–4 hours	6.0	6.1	5.9	6.1
5–6 hours	5.4	6.8	5.7	6.3
7–10 hours	6.2	6.0	6.3	7.2
11 hours and more	7.0	7.0	7.0	6.9
It depends	5.5	6.8	6.7	6.6
I do not take care of a baby	6.7	6.1	8.8	8.4

Source: own compilation based on sociological research data.

Table 7. Average satisfaction rating concerning parenting time among all respondents and by gender by mode of operation

Working time pattern	Total		Male		Female	
	% of employed	Mean score, units	% of employed	Mean score, units	% of employed	Mean score, units
Flexible working hours on my own initiative (I independently regulate start, break and end times)	25.6	6.4	27.1	6.5	24.3	6.4
Flexible working hours set by the employer (start, break and end times)	22.8	6.6	24.5	6.5	21.7	6.7
Rigid regime, working hours are set by an employer and do not change	51.6	5.6	48.4	5.5	54.0	5.6
TOTAL	100.0	–	100.0	–	100.0	–

Source: own compilation based on sociological research data.

Respondents from the groups with flexible working hours on average estimated their satisfaction with time spent on children higher, with the highest average rating in the group “flexible working hours set by an employer” (6.6). Female respondents from this group on average rated their satisfaction with time spent on parenting higher (6.7) than male respondents and women from other groups. In the female group who use ICT intensively in their work, those who do not take care of children (24.4%), those who devote 3–4 hours to child-rearing (22.0%), and those who devote different amounts of time to child-rearing (“whenever”; 22.0%) are most satisfied with their parenting time, with 77.8% of women in this group raising one child and 22.2% raising two children. In the female group who do not intensively use or do not use ICT in their work, the most satisfied with parenting time are those who devote varying amounts of time to raising children (25.7%), those who devote 1–2 hours (20.0%), and those who do not take care of children (20.0%), with 57.1% of women in this category raising one child and 42.9% raising two children.

In the group of male respondents who intensively use ICT in work, those who do not spend time on childcare (37.5%) and those who spend 1–2 hours on parenting (20.8%) are the most satisfied with parenting time, with 60.0% of fathers in this

group raising one child and 20.0% of fathers raising two children. In the group of male respondents who do not intensively use or do not use ICT in their work, those who devote varying amounts of time to parenting (25.7%) and those who devote 1–2 hours to parenting (20.0%) are the most satisfied with parenting time, with 48.6% of fathers raising one child and 31.4% raising two children in this category of respondents.

We obtained interesting results regarding the dependence of the average satisfaction rating regarding time for parenting on working conditions (Tab. 8). Among women, respondents in the category “working remotely temporarily” are most satisfied with time for child-rearing (average score 8.0). Among men, the highest average satisfaction rating (6.5) is observed in the category of those employed remotely on a permanent basis. The lowest satisfaction with parenting time is demonstrated by male respondents working remotely temporarily and women working in a hybrid format (5.5% in each category, respectively). Satisfaction concerning time spent on children was almost identical for men and women working in a permanent stationary workplace (mean scores of 6.0 and 5.9, respectively). This result may be due to the fact that the transition to a remote format of work blurs the boundaries between work and personal

Table 8. Average satisfaction rating concerning parenting time among all respondents and by gender, depending on working conditions

Working conditions	Total		Male		Female	
	% of employed	Mean score, units	% of employed	Mean score, units	% of employed	Mean score, units
I work at a permanent stationary workplace at employer's place (workplace determined by the employer)	71.6	5.9	71.5	6.0	71.7	5.9
I work remotely constantly from home / other place with the use of the Internet (computer, tablet, cell phone, laptop, etc.).	16.1	6.3	14.1	6.5	7.6	6.3
Hybrid work format (alternating between remote format and standard employment at employer's place)	10.8	5.8	12.9	6.2	9.1	5.5
I work remotely temporarily (industrial necessity, pandemic) from home / from another place using the Internet (computer, tablet, cell phone, laptop, etc.).	1.6	7.0	1.6	5.5	1.6	8.0

Source: own compilation based on sociological research data.

time, thereby increasing the workload and leaving less time for raising children, as a consequence, reducing satisfaction with time for parenthood.

Table 9 presents average satisfaction rating regarding time to parenting by industry.

Women and men employed in the sphere of “sales, customer service” are the most satisfied with time for parenthood: the average satisfaction index is 7.3 and 6.5 points, respectively. We can assume that this is due to the specifics of professional activity, and overtime work.

The lowest average satisfaction rate among women is observed in the professional category “marketing, advertising, PR” (5.5), among men it is “science, education” (5.0). As for those employed in the IT-industry, they have average indicators of satisfaction with time for parenthood.

Figures 1 and 2 present the employment parameters of fathers and mothers at the extremes in terms of satisfaction regarding the time for children.

We have found that men who are dissatisfied with the opportunity to devote time to children are statistically significantly more likely to work with intensive ICT use (39.0% of the total dissatisfied group). Among those satisfied with time for parenthood, 23.0% work with intensive ICT use. In other words, working conditions in jobs with high

digitalization penetration have a negative impact on the work-child balance for men. No significant differences were found for the other employment parameters. We should note that the differences in the parameter “flexibility of work mode” are “borderline” in terms of statistical significance, but rather in a positive direction. In the group of fathers, satisfied with the opportunity to deal with their children, flexible working hours are slightly more common (by 11 p.p.). The average number of children in both groups is the same (1.48).

The results show that women, satisfied with the amount of time for their children, are statistically significantly more likely to work flexible hours than those who believe that they do not devote enough time to their children. Among women, satisfied with the amount of time for children, the share of mothers raising young children is statistically significant.

We obtained interesting data when answering the question “What do you need to change in your work environment to become a better parent?” (*Tab. 10*).

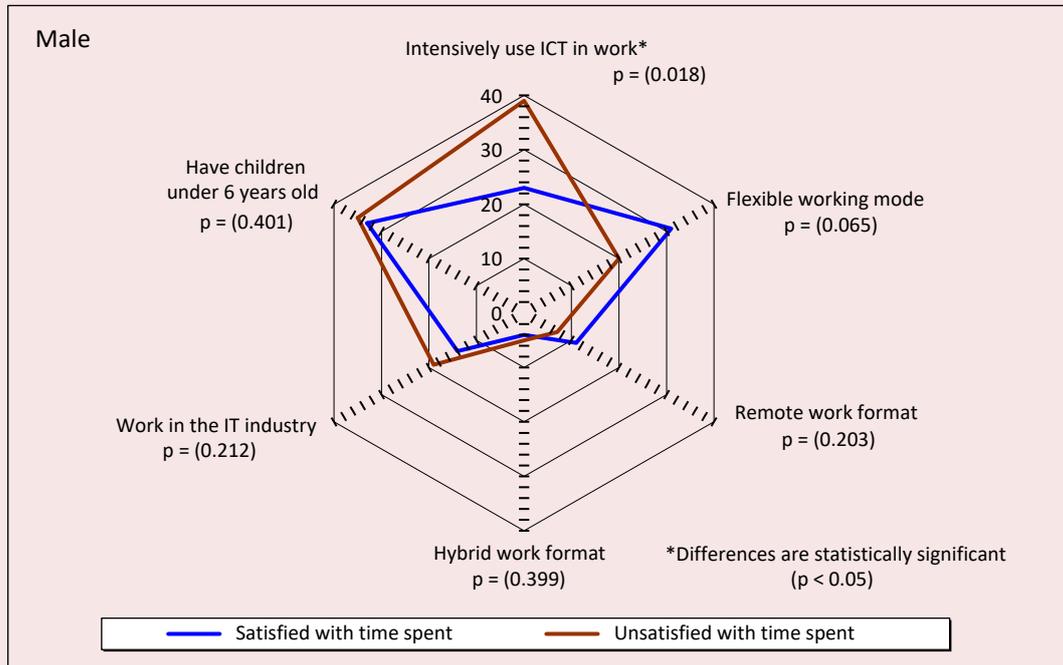
About a third of the women surveyed (28.7%) believe that switching to a hybrid employment scheme can increase parental well-being; almost a quarter of women (23.0%) expressed that a change in working conditions to a permanent remote

Table 9. Average satisfaction rating concerning time for parenthood among all respondents and by gender, depending on belonging to a professional category by industry, units

Professional category	Total	Male	Female
Sales, customer service	7.1	6.5	7.3
Administrative staff	6.7	6.1	6.7
Transport, logistics, shipping	6.4	6.3	6.4
Information technology	6.3	6.2	6.4
Senior and middle management	6.2	6.2	6.1
Science, education	6.2	5.0	6.2
Building, real estate	6.1	6.3	5.8
Personnel management, trainings	6.1	5.5	6.1
Production, service	6.0	5.8	6.6
Finance, accounting	5.8	6.2	5.8
Marketing, advertising, PR	5.7	6.2	5.5

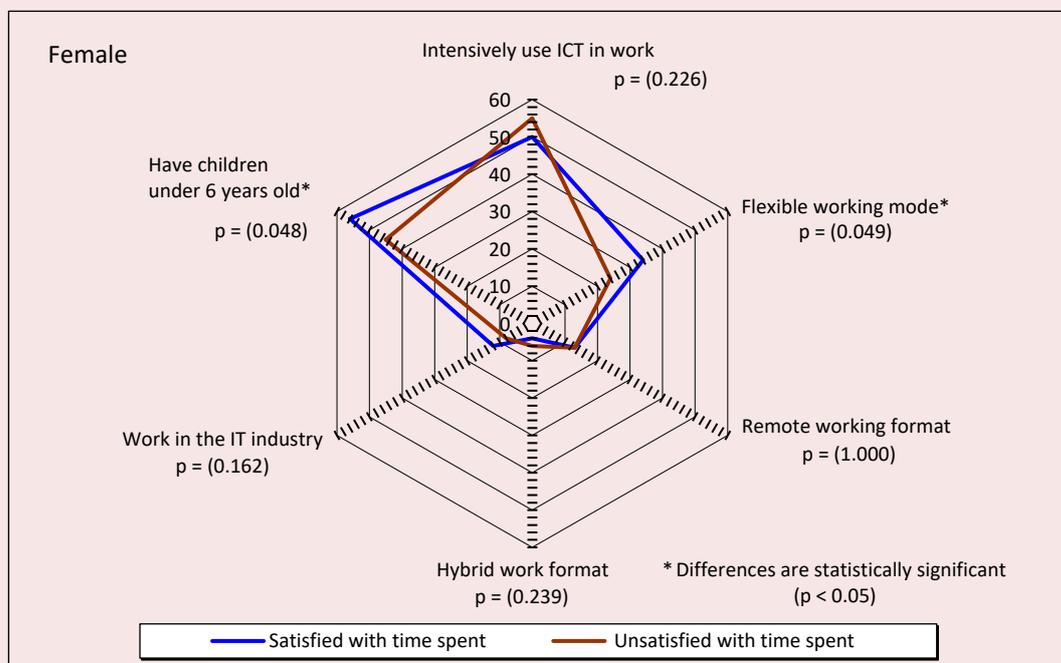
Source: own compilation based on sociological research data.

Figure 1. Fathers' profile in groups with extreme satisfaction ratings concerning time with children, %*



* We present the share of employment by selected parameters and the share of fathers with children under 6 years old. The frequencies are calculated respectively in groups: respondents who highly rated their satisfaction with time for children, 9–10 points (satisfied with time) and respondents with extremely low level of satisfaction, 1–3 points (dissatisfied with time).

Figure 2. Mothers' profile in groups with extreme satisfaction rating concerning time with children, %*



* We present the share of employment by selected parameters and the share of fathers with children under 6 years old. The frequencies are calculated respectively in groups: respondents who highly rated their satisfaction with time for children, 9–10 points (satisfied with time) and respondents with extremely low level of satisfaction, 1–3 points (dissatisfied with time).

Table 10. Performance improvements/changes needed to become a better parent, %

Indicator	Total	Male	Female
Switch to a hybrid employment scheme (alternating between telecommuting and standard on-site employment)	25.6	21.5	28.7
Switch to remote working mode (working from home/away from home all the time using the Internet)	20.5	16.2	23.0
Work in office (organization, enterprise) on a flexible schedule: independently regulate the time of start, breaks and end of work	17.5	11.8	21.5
Reduce overtime work	17.1	18.3	16.7
Reduce working hours	16.9	16.2	17.4
Reduce number of working days per week	14.6	13.6	15.5
Change career	13.1	13.4	12.4
Reduce workload, responsibility	12.8	11.5	13.9
Become self-employed, freelancer, blogger	7.9	7.3	8.2
Change to a standard five-day week with two days off	7.5	6.7	7.7
Become an individual entrepreneur	5.2	8.1	3.3
Nothing needs to be changed	22.4	27.7	18.6

Source: own compilation based on sociological research data.

working mode can have a positive effect, about one-fifth of the women surveyed (21.5%) believe that parental well-being improves when switching to a flexible work schedule.

Among male respondents, the main changes in working conditions to improve parental well-being are switching to a hybrid employment scheme (21.5%), reducing overtime work (18.3%), reducing working hours and switching to a remote working format (16.2% each, respectively). A statistically significant proportion of women indicated positive effects in reducing overtime (16.7%) and working hours (17.4%), and reducing the number of working days per week (15.5%). The desired changes in working conditions noted by respondents indicate the need to reduce the workload, overtime work; change the schedule and mode of work to hybrid and flexible.

Conclusions

The research results allow drawing the following conclusions.

First, we have revealed the existence of a relationship between the processes of digitalization of employment and subjective perception of working parents' satisfaction with time for children, which generally confirms our hypothesis. The relationship

is of a contradictory nature. A comparative analysis of satisfaction concerning time for parenting in groups with intensive and non-intensive use of ICT in work demonstrated a negative correlation. In the group of respondents who intensively use ICT in work, the average satisfaction rating regarding parenting time is lower than in other groups, both in the relationship with the actual time spent on parenting and in the relationship with the presence of children of different ages (up to 14 years old). We should recognize that the revealed differences are alarming. At the same time, the average values in the sectoral breakdown of employment showed that those working in IT-industry have average indicators of satisfaction concerning time for children. Thus, we have identified a problem field related to the ambiguous, and possibly unfavorable, impact of ICT on time satisfaction with parenthood. The obtained data require further verification, it is necessary to conduct additional research to create an objective and complete picture of the possible effects of ICT on the work-child balance and parental well-being.

Second, the detailed assessment of parental satisfaction with time spent on children depending on the actual time spent on child care and upbringing shows that there is no direct correlation

between the amount of time parents spend with their children and subjective satisfaction with time spent on parenting. Women who spend up to 1 hour a day on childcare (mean score is 8.3) and men whose actual time spent on childcare is up to 1 hour a day or 5–6 hours (mean score is 6.8) rated their satisfaction with parenting time the highest. We also have found differences in satisfaction with parenting time depending on children's age. Women raising children up to three years old and men with children aged 11–14 assess their satisfaction with parenting time higher than respondents in other groups (mean score – 7.3 and 6.6 respectively). The results are broadly consistent with findings from other studies (Monna, Gauthier, 2008). This once again confirms that in addition to the actual costs of parenthood, the subjective assessment of satisfaction with time for children is conditioned by many other factors.

Third, the detailing of satisfaction with time spent on parenting depending on the mode of work demonstrates that respondents working in rigid mode assessed their satisfaction concerning time spent on parenting lower than in the categories with flexible work modes. Given that almost half of the respondents surveyed are employed under rigid working conditions, we can conclude that half of the respondents are not satisfied with their ability to spend time on parenting. The obtained results are quite expected and generally correspond with the data of other studies (Bagirova, Blednova, 2021; Ichino, De Galdeano, 2004), which record the positive impact of flexible forms of work organization on the subjective perception of satisfaction regarding time for parenting. We believe it is quite reasonable that women are more satisfied when there is a possibility of “stress-free” shifting of the time of the beginning and end of the working day/breaks and there is an employer who takes care of organizational issues and bears full responsibility for the creation and monitoring of a flexible workplace. Consequently, it is necessary to strengthen measures to introduce “family-

oriented workplace” practices, especially in terms of giving parents raising children under 14 the right to choose a flexible schedule. We consider it appropriate to introduce measures to ensure flexible working hours for parents of children of different age groups, in particular, in families with two working parents raising children of preschool and primary school age, both parents should be able to choose flexible working hours, since the care and education of children of this age requires more time and involvement of both parents. For a more harmonious combination of professional and parental responsibilities, it is advisable to enshrine in the regulatory framework in terms of regulating the labor activity of persons raising children under 14 years of age, the possibility of employment on flexible schedules, part-time work, remote employment (work at home). We are confident that these measures will create the necessary conditions to increase parents' time spent on child care and education, which will have a positive impact on parental well-being and reproductive attitudes.

Finally, the results obtained in the group of respondents employed in a hybrid work format revealed a contradiction in satisfaction with time spent on children. Women working in the hybrid format rated their satisfaction significantly lower than women in the groups with other working conditions. However, almost a third of women (29%) felt that switching to the hybrid format was a major change in working conditions in terms of positive impact on perceptions of parental well-being. Thus, despite the fact that about a quarter of the total number of respondents rated the hybrid employment scheme as optimal for combining parenthood and work, in its practical implementation, women face difficulties that significantly reduce their satisfaction with parenting time. We believe that this effect requires further research using qualitative methods. Perhaps there are problems in the sphere of work organization, self-discipline, blurring of boundaries and actual

overtime, which is not recorded in the timesheet. Employers when setting tasks do not adequately estimate the time for their implementation, so there are difficulties with time management and self-organization of the working day at home.

As a future research task, we see the implementation of a broader study on a representative sample, which will make it possible to detail the nature of the relationship between the digitalization

of employment and the “work-child” balance, and to conduct correlation and cluster analysis of the data obtained. Such a comprehensive assessment will help to specify the factors of positive and negative impact of different profiles of digital employment on fertility and parental well-being, and will form the basis for improving family and demographic policy to increase parental well-being and fertility in Russian families.

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