# Time gap between termination of paid parental leave and eligibility for early childhood education and care services in Croatia

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Article**
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**Abstract**

*Parental leave is essential for supporting women's participation in the labour market, while accessible and affordable childcare is equally important for their return to work. This study examines the care gap in Croatia, defined as the period between the end of paid parental leave and the start of early childhood education and care (ECEC). Data from an anonymous online survey were analysed using logistic regression to identify predictors of this gap. The results confirm its presence and show that it affects mothers disproportionately, as many adjust their employment during this period. The probability of a care gap is lower in larger local government units (LGUs) and for children born later in the year. These findings highlight the importance of aligning parental leave and ECEC enrolment policies to promote gender equality and support a better work-life balance for families.*

*Keywords: childcare, parental leave, care gap, gender equality, Croatia*

## 1 INTRODUCTION

Maternity, paternity and parental leave are crucial for helping parents with young children stay in the labour market. These types of leave enable parents to temporarily leave their jobs to take care of their children, without becoming unemployed. Maternity leave is typically taken to preserve the health of both the mother and the newborn immediately before, during and following childbirth. Fathers use paternity leave in the same period as maternity leave. Parental leave follows on from maternity leave and is intended to be used by both parents, often as an alternative to childcare (European Commission, 2016). The primary issue with parental leave from the standpoint of gender equality has been that it is mainly taken by mothers (Ingólfsdóttir and Gíslason, 2016). According to the Annual Report of the Ombudsperson for Gender Equality of the Republic of Croatia (2024) in 2023, only 4.2% of fathers in Croatia exercised their right to parental leave, indicating that society still views women as the primary caregivers.

Given that women are still primarily perceived as caregivers, motherhood increases the amount of unavoidable unpaid work they do, making it harder for them to balance work and private life. Consequently, women with children face a greater risk of unemployment, find it harder to retain a job and find it more challenging to return to the labour market after an absence from the workforce (Gelo, Smolić and Strmota, 2010). An increase in the number of children in a family leads to a widening gap in the employment rate and activity rate between men and women (Mills et al., 2014). Discontinuing employment reduces the economic independence of women and their future social security in retirement (Fultz and Stenhilber, 2004; according to Matković, 2008). These circumstances lead to gender inequality in other social segments, making women more financially dependent on men.

Though leave is essential for keeping women in the labour market, a long-extended leave reduces their job continuity, productivity, salary and the likelihood of

eventually returning to the labour market (Sikirić, 2021). Helping parents, especially mothers, remain in the labour market after parental leave requires the financing and provision of high-quality public services that establish a balance between family and professional life. Particular importance should be ascribed to early childhood education and care (ECEC). Such services reduce the incompatibility of work and motherhood because the care and education of children are entrusted to pre-school childcare institutions as organised systems, and the position of women with pre-school children on the labour market greatly depends on the availability, quality and affordability of ECEC (Sikirić, 2017; Sikirić and Čičak, 2016). Recent research has shown that ECEC services for nursery-age children are a key factor in women being able to gain employment. Also, utilising full-day ECEC services for children younger than three years of age reduces the differences in employment rates between men and women with children younger than six (Sikirić, 2021).

Hence, in terms of gender equality, it is important to align the ECEC system with the parental leave system to prevent a time gap between the end of paid parental leave and the child commencing an ECEC program, commonly referred to in the literature as the care gap. The care gap refers to the period when parents, having exhausted their right to parental leave, must return to the labour market but do not have access to formal childcare. Aligning these systems would primarily benefit women. by reducing the need to extend leave or withdraw from the labour market to provide childcare, as mothers are significantly more likely than fathers to adjust their employment to bridge this gap. Accordingly, the existence of a care gap constitutes an additional obstacle to achieving greater gender equality in the labour market (Dobrotić, 2015, 2021; Ingólfsdóttir and Gíslason, 2016). The aim of this paper is to examine whether a care gap exists in Croatia, to identify its main predictors, and to explore strategies employed to bridge this gap.

## 2 LITERATURE REVIEW

### 2.1 THEORETICAL PERSPECTIVES

Becker's theory of time allocation and household production has significantly shaped research on childcare and employment gaps between parents, i.e., the father and mother. The theory models households as producers of outputs – such as food and children – by combining goods and time, and suggests that household members specialise in tasks where they have a comparative advantage (Becker, 1973, 1974, 1985; Heckman, 2015). In practice, this often results in women taking on more childcare responsibilities, while men focus on earning income (Dalmia and Sicilian, 2008). Economic resources also play a decisive role: many families cannot afford to live on a single wage, and many women, especially if they are highly skilled, prefer not to take breaks from paid work (Suwada, 2021). Gornick, Meyers and Ross (1998) point out that women's preferences as to the allocation of time between paid and unpaid work are highly individual. The presence of children increases the value of time spent outside the labour market, reducing women's probability of employment and expected work hours (Nakamura and

Nakamura, 1985 according Cleveland, Gunderson and Hyatt, 1996; Connelly, 1991; Leibowitz, Klerman and Waite, 1992). However, the availability of satisfactory ECEC services shifts these preferences toward paid work, resulting in higher female employment rates (Brilli, Del Boca and Pronzato, 2013; De Henau, Meulders and O'Dorchai, 2010; Spansenoska and Fethu-Vehapi, 2011).

### 2.2 EARLY CHILDHOOD EDUCATION AND CARE AND MATERNAL EMPLOYMENT

The impact of ECEC on female labour supply is multifaceted, involving affordability, availability, and quality. In countries where childcare is mainly private, the price of ECEC services directly affects women's employment decisions and work hours (Connelly, 1992; Powell, 1997; Anderson and Levin, 1999; Baker, Gruber and Milligan, 2005; Viitanen, 2005). Higher costs lower effective income and decrease the likelihood of gaining employment (Connelly, 1992; Han and Waldfogel, 2001; Del Boca, 1993; Del Boca and Vuri, 2006). When ECEC places are limited in number, price becomes less relevant, and availability is the key determinant (Del Boca and Vuri, 2006). Empirical research shows that countries with greater availability of full-day ECEC services have smaller gender gaps in employment among parents of young children (Kreynfeld and Hank, 1999; Sikirić and Čičak, 2016; Sikirić, 2021). Quality also matters: high-quality childcare encourages mothers to increase their working hours, suggesting that policies should address the quantity and quality of ECEC (Parera-Nicolau and Mumford, 2005).

### 2.3 DESIGNING PARENTAL LEAVE

Compared to ECEC services, parental leave does not facilitate a balance between unpaid and paid work but allows women to temporarily leave their current job to care for a newborn infant without actually losing their job. The relationship between parental leave and female employment is complex and depends on the duration and specific policies of parental leave. While parental leave generally contributes to higher female employment rates, excessively long leave can reduce women's job continuity, productivity, salary, and the likelihood of returning to work (Spansenoska and Fethu-Vehapi, 2011; Gornick, Meyers and Ross, 1996; Misra, Budig and Boeckmann, 2011; De Henau, Meulders and O'Dorchai, 2010; Mikucka, 2008; Thévenon and Solaz, 2013; Sikirić, 2021). Encouraging fathers to utilise parental leave can reduce a woman's absence from the workforce and promote gender equality (Dobrotić and Varga, 2018). Social norms and cultural expectations further influence women's decisions regarding work and childcare (Blau and Ferber, 1992 according Gornick, Meyers and Ross, 1996).

### 2.4 EVIDENCE OF THE CARE GAP INTERNATIONALLY

The "care gap" is explicitly defined as the period between the end of paid parental leave and when a child becomes eligible for publicly supported ECEC services. It refers to the absence of any guaranteed, available place in formal care for a period of a child's early life. In contrast, affordability and quality refer to the conditions and standards of care once a place becomes available. During this time, families

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may have no entitlement to formal, accessible childcare, forcing them to make difficult decisions such as one parent (typically the mother) leaving the workforce, relying on informal care, or seeking a costly private option. In Iceland, for example, the care gap results in mothers taking longer leave and experiencing reduced income, while fathers use only their permitted leave (Farstad, 2014). Studies from Iceland show that most parents turn to private child-minders, extended family support, or reduced working hours to bridge the care gap, with mothers more likely than fathers to decrease their labour market participation (Ingólfsdóttir, 2013 and Jónsdóttir, 2007 according Ingólfsdóttir and Gíslason, 2016). Similar circumstances are observed in Poland, where the care gap exacerbates gender inequalities (Suwada, 2021).

### 2.5 RESEARCH GAP

The research described in this paper contributes to existing literature in several ways. First, a considerable body of research explores the impact of childcare services and parental leave on women's employment. This study focuses on the under-researched issue of the care gap – the period between the end of paid parental leave and the point at which accessible, affordable childcare becomes available. Second, the paper aims to raise awareness of the care gap faced by parents in Croatia, particularly by women. In Croatia, parental leave ends before children are universally entitled to a place in ECEC, leaving a period in which many families have no formal, accessible childcare options. Third, it identifies and examines key predictors of the care gap, providing empirical evidence on the factors that influence access to ECEC. Finally, the findings highlight the need to reconsider current parental leave policy and criteria for enrolling children in ECEC programmes.

## 3 EARLY CHILDHOOD EDUCATION AND CARE AND PARENTAL LEAVE IN CROATIA

The Early Childhood Education and Care Act governs ECEC in Croatia, assigning local self-government units (LGUs) the responsibility for organising services for children from six months of age up to school entry. Although the Act permits enrolment from six months, in practice, most municipalities admit children only after their first birthday and only once per year, typically during an enrolment period in April or May for the following school year beginning on 1 September. This practice creates a significant implementation gap, as children who are not yet six months old at the time of enrolment, or who do not reach the minimum required age by 31 August, must wait until the following year to access formal childcare. Whether parents whose child is not yet one year old as of 31 August will be able to access ECEC programs once the child reaches one year of age – or earlier – depends on the availability of vacant places. Paid parental leave in Croatia lasts six months for the first and second child, or up to 30 months for twins or a third child if only one parent uses the leave, and may be used until the child turns eight (Croatian Health Insurance Fund, 2025). However, the structure of the ECEC system, combined with its restrictive annual enrolments and age requirements, often forces parents to use their leave only up to the child's first birthday, after which

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immediate access to ECEC is not guaranteed. As a result, there is a real possibility that parents will be unable to secure formal childcare immediately after parental leave ends, resulting in a time gap between the end of paid parental leave and the start of entitlement to ECEC. This misalignment is the primary driver of the care gap in Croatia.

In Croatia in 2023, 29.6% of children younger than three years of age attended some form of formal ECEC, while 82.3% of children older than three participated (Eurostat, 2025a). The enrolment rate for children under three was down from the previous year, while the percentage for children over three increased, partly due to a legal amendment prioritising children over four (The Early Childhood Education and Care Act).

Regional differences in availability, quality, and financial accessibility characterise the ECEC system in Croatia. While responsibility for ECEC, including its establishment and financing, lies primarily with LGUs, expecting municipalities and cities with limited fiscal capacity to provide the same level of service as those with greater resources is unrealistic. Larger cities such as Split, Rijeka, Zadar, and Pula are characterised by better fiscal performance and capacity, whereas the majority (80%) of cities and municipalities have fewer than 5,000 inhabitants (Koprić, Musa and Đulabić, 2016) and struggle with their limited financial resources. These circumstances affect their ability to provide public services, including ECEC (Hodžić and Paleka, 2020; Slijepčević, Broz and Rasic, 2024; Dobrotić and Matković, 2023). Coverage is lowest in rural areas and the smallest LGUs, which often lack a sufficient population to organise efficiently sized childcare facilities, especially in economically less developed parts of the country. As a result, the care gap may be more pronounced in these areas. Consequently, children do not have the same right to access ECEC, and parents – especially mothers – may face greater difficulty in reconciling work and family life and re-entering the labour market after parental leave. To address these disparities, inter-territorial fiscal equalisation mechanisms are needed to help redistribute resources more equitably (Dobrotić and Matković, 2023).

Regional differences are also evident in financial accessibility. Public funds from local authorities finance ECEC capacity and partially cover the cost of accommodating children, making services more financially accessible. Parental participation in program costs is determined by the founders of a centre and usually amounts to around 33% of the declared economic price (Eurydice, 2024). Though the level of parental participation does not differ significantly between more or less developed LGUs, the burden relative to average wages is much higher in less developed areas, making childcare programs hardly affordable for parents with lower economic status (Dobrotić, 2013; OECD, 2017).

## 4 METHODOLOGY

This research aims to examine whether a time gap exists between the end of paid parental leave and the availability of accessible, affordable ECEC for families with young children in Croatia. It also seeks to identify the predictors of this care gap and to explore the strategies parents use to bridge this period. Given that parental leave is mainly taken by mothers who also adjust their participation in the labour market to care for their children more than fathers, the target group studied was women with children under the age of three. They are mothers who, in the subsequent period or recently, have faced problems with the availability of formal childcare after the expiration of paid parental leave. At the time of the study, there were around 170,000 children under the age of three in Croatia (Census, 2021). Determining the size of the target population solely by the number of children is challenging, as women can have multiple children. Nonetheless, this number is valuable in getting an idea of the size of the target population.

A non-probability convenience sample was used. In all, 674 female respondents completed the questionnaire. The data were collected online from an anonymous questionnaire dating back to 2022. The link to access the questionnaire was shared on social media platforms. Participation was voluntary, and no personally identifiable information was collected. In line with institutional guidelines, approval from the ethics board was not required for this study design. Given that the survey was conducted online, the sample did not include many women with low incomes or low digital skills. Although generalisation of the results to a broader population is limited, a suitable sample for this study is not necessarily limiting, as the aim is primarily to determine whether women in Croatia face a care gap that should be considered in the design of future work-life balance policies and strategies.

The questionnaire consists of three groups of questions. The first group of questions consisted of closed-type questions related to the basic characteristics of the respondents, the month of birth and the child's age. The second group comprised questions asking about the intention to use ECEC after finishing parental leave (for respondents with a child younger than 12 months of age) and the use of ECEC (for children older than 12 months of age), including the existence of the time gap between finishing paid parental leave and the possibility of utilising ECEC, and the manner of overcoming the gap. The questions were accompanied by multiple-choice answers and the opportunity to supplement the answers. The third group of questions inquired about the attitudes of respondents regarding the impact of formal ECEC programs on the development of children under three years of age. In some cultures, enrolling children in formal types of childcare as early as possible is desirable; in others, the expectation is that children up to a certain age should remain solely in the family environment. Finally, the respondents were allowed to express their personal experiences and highlight some of the inadequacies within the existing early childhood education and care system in Croatia. The questionnaire underwent face validity testing with five non-expert women. While this confirmed basic clarity, the absence of thorough validation represents a limitation of the study.

Associations between categorical variables (e.g., residence size and care gap occurrence) were examined using the chi-square test. The more significant findings reveal relationships that merit further investigation, but do not establish causality (Bewick, Cheek and Ball, 2003; Maxwell, 1971). Therefore, to identify predictors of care gaps, binary logistic regression was conducted, assessing independent variables such as residence size, the child's birth month, and employment status in relation to the binary outcome of the presence or absence of a care gap (Hosmer, Lemeshow and Sturdivant, 2013).

## 5 RESULTS AND DISCUSSION

### 5.1 SAMPLE CHARACTERISTICS

Of the 674 female respondents who completed the questionnaire, one did not answer the questions from the second and third groups, so her answers were excluded from the analysis. The female respondents came from all counties in Croatia, with the most coming from the City of Zagreb (26.7%) and the fewest from Krapina-Zagorje and Požega-Slavonia County (0.7%). With respect to the size of the locations in which the respondents reside, most of them live in towns with more than 100,000 inhabitants (36%) and locations with fewer than 10,000 inhabitants (30.8%), thereby providing a clearer picture of the differences in ECEC services between large towns or cities and smaller locations. In terms of level of education, more than 75% of the female respondents had a tertiary education, and most respondents (91.2%) were employed or self-employed prior to taking parental leave or sick leave due to pregnancy complications. For most respondents, their employment status remained unchanged (86.6%), whereas 90 respondents had undergone a change in their employment status after finishing leave (48 respondents had their employment terminated due to the expiration of their fixed-term employment contract, 22 respondents had their employment terminated by the employer, 12 respondents terminated their employment, and eight respondents gained employment or self-employment). In line with the main characteristics of the respondents, the study mostly included highly educated employed women. This is due to both the suitability of the sample and the fact that the survey was conducted online, which is why many low-income and less digitally literate women were not included.

### 5.2 CARE GAP

The participants were divided into two groups: (1) respondents with children younger than 12 months of age (N=195) who will encounter the care gap issue in the near future, (2) and respondents with children older than one year (N=478) who have already faced or are facing the care gap issue. Of the 195 respondents with children younger than 12 months, 70.3% (137) planned to utilise ECEC services after their child reached one year. Accordingly, of the 137 respondents who planned to utilise ECEC services, almost half of them had to wait for the following school year to utilise such services. In bridging the existing care gap, the majority of respondents (41.2%) received help from their extended family, but around 26% of mothers decided to adjust their participation in the labour market by taking unpaid

leave (11.8%), annual leave (2.9%), working from home (2.9%), remaining unemployed (5.9%). In all, 14% of respondents stated that the father would adjust his participation in the labour force in one of the above-mentioned ways in order to bridge the care gap. Interestingly, 10.3% of respondents hired a babysitter.

Overall, 333 out of 478 (69.7%) respondents with a child older than 12 months of age expressed their intention to utilise ECEC services, but only 51.7% of them were able to exercise the right to such services upon finishing parental leave, whereas 36.9% had to wait for a new school year, 1.2% decided against it because it was too expensive, and 10.2% were on a waiting list. Due to their inability to access ECEC services after parental leave ended, 43.6% of women received help from their extended family, 35% decided to adapt their professional life to family responsibilities by taking unpaid leave (9.9%), being unemployed (5.5%), using their annual leave (2.2%), quitting their job (1.9%), working from home (1.9%), and only 4.3% stated that fathers did the same. Accordingly, 13.7% respondents hired a babysitter. In 3.4% of cases, women reported that their partners share the caring responsibilities equally in bridging the care gap.

These results show a tendency among parents to divide caregiving in traditional ways, aligning with Becker's theory of household specialisation, which suggests that families maximise utility by allocating tasks to individuals based on their comparative advantages. In the context of caregiving, this often results in mothers assuming primary responsibility for childcare and domestic duties, while fathers focus on staying in the labour force. The data reveals a stark specialisation pattern: among mothers facing the care gap, 26% with infants and 35% with older children adjusted their labour participation (e.g., unpaid leave, unemployment), while paternal adjustments were minimal (14% and 4.3% respectively), and equal care-sharing was rare (3.4%). This situation reflects Becker's core premise of mothers disproportionately absorbing care burdens as a "rational" household efficiency strategy.

### 5.3 CHI-SQUARE TEST RESULTS

Discrepancies between the end of paid parental leave and access to childcare services were observed in both small and large LGUs. The results of the non-parametric chi-square test of independence indicate an association between the presence of a care gap and the LGU size (Pearson $chi^2 = 6.31$, $p = 0.0974$). Although this association does not reach conventional levels of statistical significance ($p < 0.05$), the result may suggest a possible trend: smaller LGUs, which often have more limited financial resources, may face greater challenges in organising efficient early childhood education and care (ECEC) services, thus increasing the likelihood of a care gap. However, this finding should be interpreted with caution given the p-value, and further research with larger samples may be needed to clarify this relationship.

A total of 671 respondents provided information on the month of their child's birth. Although the highest number of children was born in January, all birth months were

well represented in the sample. The results of the non-parametric chi-square test of independence indicate a statistically significant association between the month of birth and the likelihood of mothers facing a care gap (Pearson $chi^2 = 39.81$, $p = 0.0000$). Mothers with children born between February and June were most likely to experience a care gap, while those with children born in September had the lowest probability of experiencing a care gap. This pattern is likely explained by the eligibility criteria for early childhood education and care (ECEC) services in Croatia: to apply for ECEC, children must be at least six months old by the end of August, and priority is given to infants who turn one year old by this date. Whether children who meet the minimum age requirement but turn one after August are admitted depends on the availability of places. As a result, children who turn one shortly after August are more likely to secure a childcare place – provided places remain – than those born in the middle of the pedagogic year.

According to the results of the non-parametric chi-square test of independence, there is no statistically significant association between the presence of a care gap and women's employment status (Pearson $chi^2 = 0.21$, $p = 0.6467$). This outcome suggests that, based on the data, whether a woman experiences a care gap appears to be unrelated to her employment status. In other words, employed and unemployed women are equally likely to report experiencing a care gap.

### 5.4 LOGISTIC REGRESSION RESULTS

In line with these results, a logistic regression model was established to assess the association between the presence of a care gap and the size of place of residence, the month of the child's birth, and the respondent's employment status. The selection of only three variables for the logistic regression model is grounded in both theoretical relevance and the specific policy context of the Croatian ECEC system. The care gap primarily depends on structural and institutional factors – specifically, the timing of parental leave expiration, the child's eligibility for ECEC, both relying on the month of birth of the child, and the enrolment policies of ECEC institutions, which are nearly uniform across all publicly owned facilities in Croatia. Other potential predictors, such as the education or income level of respondents, do not directly determine whether a care gap occurs; instead, they influence the strategies families use to bridge the gap once it arises. Similarly, while ECEC availability is generally lower in smaller local government units (LGUs) due to fiscal constraints, the size of the place of residence serves as a practical proxy for this dimension in the absence of detailed fiscal data. Consequently, the model includes only those variables that are both available in the survey and theoretically justified as direct predictors of the care gap: child's month of birth (to capture the timing of a parental leave expiration and eligibility for ECEC enrolment by the end of August), size of residence (as a proxy for ECEC availability and LGU fiscal capacity), and the parent's employment status (since employed parents are often prioritised for ECEC access when demand exceeds supply). This approach avoids overfitting and multicollinearity, ensures interpretability, and focuses the analysis on the most policy-relevant determinants of the care gap in Croatia.

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The log-odds of experiencing a care gap were modelled as:

$$\log\left(\frac{P(CGAP=1)}{1-P(CGAP=1)}\right) = \beta_0 + \beta_1 RSIZE + \beta_2 CMONTH + \beta_3 EMP \qquad (1)$$

where $\beta_0$ is the intercept, i.e., baseline log-odds when all predictors are zero, and $\beta_1$, $\beta_2$ and $\beta_3$ are the coefficients for independent variables. The dependent variable, care gap (CGAP), was coded dichotomously (1 = care gap present, 0 = no care gap). The independent variables included the following:

– The size of place of residence (RSIZE) is an ordinal variable, where 1 = LGU with fewer than 10,000 inhabitants; 2 = LGU with 10,000 to 50,000 inhabitants; 3 = LGU with 50,000 to 100,000 inhabitants; and 4 = LGU with more than 100,000 inhabitants. This variable was included under the assumption that smaller LGUs have a lower fiscal capacity and, consequently, lower availability of ECEC, increasing the probability of the care gap.
– The child's month of birth (CMONTH) is an ordinal variable ranging from 1 (January) to 12 (December). This variable was included because enrolment in ECEC typically occurs once a year, and eligibility is determined by the child's age, making the birth month a relevant predictor of care gap risk.
– The respondent's employment status (EMPL) is a binary variable (1 = employed or self-employed, 0 = unemployed or student). Employment status is often used as a criterion for prioritising ECEC access and was therefore included as a predictor.

**Table 1**

*Logistic regression results – predicting the presence of a care gap*

| Variables names | Coefficient (b) | Std. error (SE) | z-value | p-value | Odds ratio (OR) | 95% CI for OR |
|---|---|---|---|---|---|---|
| Residence size (LGU) | -0.218 | 0.081 | -2.680 | 0.007 | 0.804 | 0.686 – 0.943 |
| Child's month of birth (CMONTH) | -0.116 | 0.024 | -3.900 | 0.000 | 0.890 | 0.840 – 0.944 |
| Employment status (EMPL) | 0.292 | 0.433 | 0.670 | 0.500 | 1.339 | 0.573 – 3.128 |
| Constant | 0.761 | 0.495 | 1.740 | 0.125 | 2.140 | 0.810 – 5.651 |

*Note: Number of obs. = 419; Log likelihood = -276.81646; LR chi2(3) = 21.48; Prob > chi2 = 0.0001; Pseudo R2 = 0.0374.*

*Source: Own calculations using STATE/SE 13.0.*

The overall model fit is statistically significant, although the explained proportion of variance remains relatively modest (approximately 3.7%). The negative and statistically significant coefficient for residence size indicates that, controlling for other variables, a larger LGU size is associated with a statistically significant reduction in the log-odds of experiencing a care gap. An odds ratio of approximately 0.804 suggests that, all else being equal, each increase in place of residence size (LGU) is associated with a 21% reduction in the odds of a care gap occurring (95% CI for OR [0.686 – 0.943]).

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Similarly, the negative and statistically significant coefficient for the child's month of birth shows that a later birth month is significantly associated with a reduction in the log-odds of a care gap occurring. The corresponding odds ratio of approximately 0.890 indicates that, all else being equal, for each additional month later in the year a child is born, the odds of a care gap decreasing are approximately 11% (95% CI for OR [0.840 – 0.944]).

Employment status has a positive coefficient, indicating that, all else being equal, employed respondents may have higher odds of experiencing a care gap than non-employed respondents. However, this effect is not statistically significant ($p = 0.500$), providing no evidence of a true association between employment status and the likelihood of experiencing a care gap in the population. This finding can be explained in theory by recognising that the primary drivers of care gaps are systemic issues within the ECEC system, such as limited capacity, inflexible enrolment procedures, and organisational shortcomings, rather than individual parental employment. Although employed parents may receive some priority in the ECEC enrolment process, these advantages are frequently offset by broader structural barriers. Ultimately, the organisation and availability of ECEC, rather than employment status, play a decisive role in whether families experience a care gap.

### 5.5 THE ATTITUDES OF MOTHERS TOWARDS THE ROLE OF EARLY CHILDHOOD EDUCATION AND CARE SERVICES IN CHILD DEVELOPMENT

The answers from respondents show that in Croatia, ECEC services are recognised as part of the education system, and including children older than 12 months of age in formal types of childcare is considered mostly socially acceptable. From the first group of respondents (with children under 12 months), only 29.7% of respondents did not plan to utilise ECEC services and decided to personally care for their child or use an alternative, relying on grandparents or a babysitter (table A1 in the appendix). In all, 30.3% of respondents with children older than 12 months of age neither utilise nor intend to utilise ECEC services for children younger than three years. Almost 60% of these respondents opted for an alternative form of childcare, such as hiring a babysitter or having a family member care for the child. Overall, 24.1% of respondents decided to care for the child themselves even after the expiration of parental leave, despite 70% of these respondents being employed or self-employed (table A2 in the appendix).

Parental attitudes on the role of ECEC services in child development certainly influence the number of children enrolled in formal programs providing ECEC services for pre-school children. According to these research results, 62.9% of respondents felt that including children younger than three years of age in formal types of childcare had a positive effect on child development. Some respondents pointed out that achieving positive results requires maintaining a high pedagogical standard. Nonetheless, some mothers believe that children younger than three years of age should attend formal types of childcare only after their second year of life, specifically half-day stays and not all-day stays. Overall, 22.7% of respondents believe that enrolling

children under three years of age in ECEC services does not have a positive effect on child development. The remaining 14.4% could not determine whether ECEC services have a positive impact on child development.

In the final open-ended question, 394 respondents (58.5%) shared their personal experiences and expressed their satisfaction or dissatisfaction with the current ECEC system in Croatia. Qualitative analysis was conducted manually by a single researcher using an inductive coding approach, meaning that thematic areas and codes emerged organically from the responses of participants, without reliance on predefined categories or theoretical frameworks. The researcher began by thoroughly reading all collected responses to gain a comprehensive understanding of the content, then identified and marked key concepts, patterns, and themes present in their statements. These codes were subsequently grouped into broader thematic areas that reflected the most significant aspects and experiences described in the data. This approach allowed the analysis to remain open to new meanings and unexpected patterns, thereby enhancing the credibility and depth of the qualitative findings. The responses reveal a nuanced picture, with a strong emphasis on systemic challenges alongside a few positive experiences. Table 2 presents the main themes and their frequency in the responses of participants.

**Table 2**

*Main themes and their frequency in the responses of participants*

| Themes | Number of participants |
|---|---|
| Insufficient capacity and long waiting lists | 103 |
| Overcrowded groups and staff shortages | 96 |
| Inflexible and unfair enrolment policies | 44 |
| Positive experiences | 35 |
| Mismatch with parental work schedules | 20 |
| High costs | 19 |
| Reliance on informal care | 17 |
| Quality of care and dedication of staff | 14 |
| Impact on child and family well-being | 12 |

*Source: Author's calculation.*

**Insufficient capacity and long waiting lists:** Many parents highlighted the lack of vacancies in nurseries and kindergartens, especially in certain regions. The waiting lists are long, and some parents are unable to secure a place for their child when needed. These circumstances are particularly problematic for unemployed parents, who are often excluded from enrolment, making it even more difficult for them to seek employment.

"Extremely useful, but unfortunately a mission impossible to get a place. Build new childcare facilities and enable working mothers to return to work." (R13)

"It is terrible that 300 children are not enrolled in ECEC in Rijeka every year." (R48)

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**Overcrowded groups and staff shortages:** Respondents frequently mentioned that the childcare groups are too large and there are too few caregivers per child. This overcrowding is seen as reducing the quality of care and negatively impacting child development.

"Too little space, too many children, too few child carers. Not organised for or geared towards the children at all." (R4)

**Inflexible and unfair enrolment policies***:* Parents expressed frustration with the annual enrolment policy and existing care gap, which means that children born after the cut-off date must wait almost a year to enter the system. This situation places additional stress on families, forcing them to seek expensive private care or rely on their extended family.

"For example, my third child was not admitted because it was born on 1 September." (R28)

"The situation is that you have to plan your fertile days so that your child is born between June and September, so that you can get a place at the nursery when your parental leave ends." (R72)

**Mismatch with parental work schedules:** Many parents reported that ECEC operating hours do not align with shift work or summer employment, particularly in regions where tourism is a major part of the local economy. During holidays, groups of children are combined and staff numbers are reduced, further lowering quality and increasing the spread of illness.

"Many parents work two or even three shifts... and we have no right to a two-shift kindergarten because we don't live in the city." (R27)

**High costs:** The cost of ECEC services is a major concern, especially for families without high incomes. Some noted that fees are not adjusted to household incomes, and additional costs for supplies further strain budgets.

"The price is also too high. There is no income-based price adjustment, which I think there should be, as in Zagreb." (R105)

**Reliance on informal care:** Due to limited availability and inflexible policies, families are forced to rely on grandparents or hire private babysitters, resources that are not always affordable or sustainable.

"We were lucky enough to have a 'granny service', but we hope she can go to a day centre as soon as possible because granny is quite old." (R25)

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**Impact on child and family well-being:** Some parents noted the negative effects of frequent illness due to large groups, as well as the financial strain of taking sick leave. The sick leave allowance is often much lower than regular wages, increasing the financial burden on families. Sick leave allowance for a child up to three years of age amounts to 100% of the base salary and is paid by the Croatian Health Insurance Fund, which at that time, amounts to a maximum of EUR 565.04 (HRK 4,257.28) for the entire month at the time of conducting this study. When taking into account that the average monthly net wage for an employee in legal entities in Croatia for 2022 amounted to EUR 1,016.33 (HRK 7,653) (CBS, 2023), the maximum allowance is exceptionally low and certainly less than the wage for a large number of mothers, whereas the amount for parental participation in the cost of a nursery program has not necessarily decreased, thereby putting an additional burden on household budgets. The forthcoming legislative amendments on increasing these maximum amounts are therefore a step forward in this matter.

"The only disadvantage or fear is that the child will catch all sorts of diseases and viruses and often get sick, which can be avoided by keeping it at home." (R569)

**Quality of care and dedication of staff:** Despite systemic issues, many respondents praised the dedication and professionalism of caregivers, noting that staff commitment is the greatest strength of the system.

"Caregivers are a miracle." (R23)

"Caregivers are underpaid and neglected by the system, and the whole pre-school education system relies on the enthusiasm of individuals." (R136)

**Positive experiences:** A minority of parents, particularly those with children in private nurseries or with access to supportive family networks, reported high satisfaction with the quality of care and the developmental benefits for their children.

"Personally, as the mother of a nursery school child and a child in the older group, I am satisfied and we have not had any unpleasant experiences." (R102)

In summary, while a small number of parents are satisfied with the Croatian ECEC system, the majority report significant challenges related to insufficient capacity, overcrowding, inflexible enrolment policies, high costs, and a lack of alignment with parental work schedules. The dedication of ECEC staff is widely recognised, but parents overwhelmingly call for systemic improvements to ensure accessible, affordable, and high-quality care for all children.

## 6 CONCLUSION

Parenthood significantly increases the amount of unpaid and mental labour for women, making work-life balance more challenging, particularly during the early years of a child's life. Maternity and paid parental leave allow one parent, typically the mother, to temporarily step away from paid employment without suffering major economic repercussions. However, the problem arises at the end of paid parental leave. Research findings reveal a misalignment between Croatia's parental leave system and the availability of institutional ECEC. Specifically, when paid parental leave ends, many families encounter difficulties securing a nursery place for their one-year-old child. Among the 470 respondents who used or planned to use ECEC services, nearly 45% had to wait for the start of the next school year. This care gap poses a significant organisational challenge for parents, particularly mothers, as many women are unable to return to work due to a lack of access to ECEC. To effectively address the care gap, in the short term, local and central authorities should focus on expanding ECEC capacities, particularly in smaller LGUs where families face the highest risk of the care gap. Immediate measures should also include revising enrolment criteria to ensure fairness – such as implementing continuous enrolment throughout the school year – so that all children who reach the minimum age requirement have access to services as soon as they are eligible. In the medium term, policymakers should work to align the end of paid parental leave with the availability of ECEC places, thereby preventing care gaps that disproportionately affect women who want to return to the workforce. However, excessively long leaves should be avoided, as it can reinforce gender inequality and hinder career advancement for women. A long-term, structural reform that invests in universal, high-quality ECEC should become a strategic priority, recognising its foundational role in both early education and gender equality. Strengthening governance and coordination between family policy, parental leave, and ECEC systems will further ensure that reforms are effective and sustainable. By clustering recommendations in this way, policymakers can implement immediate solutions while laying the groundwork for systemic change.

Although the results of this study offer valuable insights into the care gap in Croatia, a major limitation is that the research was conducted using an online questionnaire distributed to a convenience sample, i.e., not representative of the entire population. Consequently, mothers living in poorer material conditions and those with lower digital literacy, many of whom lack internet access or the necessary technical means, were underrepresented. This limitation should be considered when interpreting the findings, as it restricts the generalizability of the results to the broader population and probably leads to an underestimation of the scale and severity of the care gap in Croatia. Nonetheless, the findings clearly demonstrate the existence of a care gap, which has a tangible impact on work-life balance and compels some women to adjust their labour market participation to bridge the gap. To overcome these limitations, future studies should utilise stratified sampling by region and socioeconomic status to ensure adequate representation of rural populations and disadvantaged groups. Linking survey responses to administrative

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data, such as ECEC enrolment records or employment histories, would allow for more precise measurement of the impact of the care gap on the participation rate of women in the labour market and their reliance on alternative care arrangements. Additionally, longitudinal research could capture the long-term effects of care gaps on the career trajectories and economic security of women. Expanding the focus to include the experiences of fathers, other caregivers, and families in remote or underserved areas would further guide targeted and equitable policy interventions.

**Disclosure statement**

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## REFERENCES


1. Anderson, P. M. and Levine, P. B., 1999. Child care and mothers' employment decisions. *NBER Working Paper,* No. 7058. https://doi.org/10.3386/w7058
2. Baker, M., Gruber, J. and Milligan, K., 2005. Universal Child Care, Maternal Labour Supply and Family Well Being. *NBER Working Paper*, No. 11832. https://doi.org/10.3386/w11832
3. Becker, G. S., 1973. A theory of marriage: Part I. *Journal of Political Economy*, 81(4), pp. 813-846. https://doi.org/10.1086/260084
4. Becker, G. S., 1974. A theory of marriage: Part II. *Journal of Political Economy*, 82(2), pp. 11-26. https://doi.org/10.1086/260287
5. Becker, G. S., 1985. Human capital, effort, and the sexual division of labor. *Journal of Labor Economics*, 3(1, Part 2), pp. 33-58. https://doi.org/10.1086/298075
6. Bewick, V., Cheek, L. and Ball, J., 2004. Statistics review 8: Qualitative data – tests of association. *Crit Care*, 8(1), pp. 46-53. https://doi.org/10.1186/cc2428
7. Brilli, Y., Del Boca, D. and Pronzato, C., 2013. Does child care availability play a role in maternal employment and children's development? Evidence from Italy. *Centre for Household, Income, Labour and Demographic Economics (CHILD) – CCA Working Paper,* No. 13.
8. CBS, 2023. Prosječne mjesečne neto i bruto plaće zaposlenih za prosinac 2022. *Priopćenje,* RAD-2022-1-1/12.
9. Census, 2021. *Population by age and sex, 2021 census first results, by counties.* Zagreb: Croatian Bureau of Statistics.
10. Cleveland, G., Gunderson, M. and Hyatt, D., 1996. Child Care Costs and the Employment Decision of women: Canadian Evidence. *The Canadian Journal of Economics*, 29(1), pp. 132-151. https://doi.org/10.2307/136155
11. Connelly, R., 1991. *The Importance of Child Care Costs to Women's Decision Making, The Economics of Child Care.* New York: Russell Sage.
12. Connelly, R., 1992. The Effect of Child Care Costs on Married Women's Labor Force Participation. *Review of Economics and Statistics*, 74(1), pp. 83-90. https://doi.org/10.2307/2109545
13. Croatian Health Insurance Fund, 2025. *Rodiljne i roditeljske potpore.* Zagreb: Croatian Health Insurance Fund.
14. Dalmia, S. and Sicilian, P., 2008. Kids Cause Specialization: Evidence for Becker's Household Division of Labor Hypothesis. *International Advances in Economic Research*, 14, pp. 448-459, https://doi.org/10.1007/s11294-008-9171-x
15. De Henau, J., Meulders, D. and O'Dorchai, S., 2010. Maybe Baby: Comparing Partnered Women's Employment and Child Policies in the EU-15. *Feminist Economics*, 16(1), pp. 43-77. https://doi.org/10.1080/13545700903382703
16. Del Boca, D., 1993. *Offerta di lavoro e Politiche Pubbliche.* Rome: Nuova Italia Scientifica.
17. Del Boca, D. and Vuri, D., 2006. The Mismatch between Employment and Child Care in Italy: the impact of Rationing. *CEIS Working Paper*, No. 86. https://doi.org/10.2139/ssrn.921585

18. Dobrotić, I. and Matković, T., 2023. Understanding territorial inequalities in decentralised welfare systems: early childhood education and care system expansion in Croatia. *Public Sector Economics*, 47(1), pp. 89-110. https://doi.org/10.3326/pse.47.1.4
19. Dobrotić, I. and Varga, M., 2018. Zašto su važni očevi dopusti i kvote? Komparativni pregled shema dopusta za očeve u europskim zemljama te čimbenika i učinaka njihova korištenja. *Revija za sociologiju*, 48(2), pp. 209-237. https://doi.org/10.5613/rzs.48.2.4
20. Dobrotić, I., 2013. Dostupnost i korištenje usluga predškolskog odgoja i obrazovanja te drugih oblika skrbi. In: N. Pećnik, ed. *Kako roditelji i zajednice brinu o djeci najmlađe dobi u Hrvatskoj.* Zagreb: UNICEF, pp. 166-179.
21. Dobrotić, I., 2015. Politike usklađivanja obiteljskih obaveza i plaćenog rada i položaj roditelja na tržištu rada. *Revija za socijalnu politiku*, 22(3), pp. 353-374. https://doi.org/10.3935/rsp.v22i3.1258
22. Dobrotić, I., 2021. "*Rastuća (ne)vidljiva većina"? Nesigurna i netipična zaposlenost i roditeljstvo.*
23. Early Childhood Education and Care Act. *Official Gazette,* 10/97, 107/07, 94/13, 98/19, 57/22, 101/23.
24. European Commission, Directorate-General for Employment, Social Affairs and Inclusion, Applica, IES (Institute for employement studies), ÖSB Consulting, Melhuishm, E., 2016. *Provision of quality early childcare services: Czech Republic*, 10-11 November 2015: synthesis report. https://data.europa.eu/doi/10.2767/757173
25. Eurostat, 2025a. *Children in formal childcare or education by age group and duration - % over the population of each age group*, [ilc_caindformal]. https://doi.org/10.2908/ilc_caindformal
26. Eurostat, 2025b. *Other types of childcare by age group and duration - % over the population of each age group*, [ilc_caindother].
27. Eurydice, 2024. *Key Features of the Educational System – Early Childhood Education and Care.* Brussels: European Commission.
28. Farstad, G. R., 2014. Difference and equality: Icelandic parents'division of parental leave within the context of a childcare gap. *Community, Work & Family*, 18(3), pp. 351-367. https://doi.org/10.1080/13668803.2014.965661
29. Gelo, J., Smolić, Š. and Strmota, M., 2010. Sociodemografske odrednice zaposlenosti žena u Hrvatskoj. *Društvena istraživanja*, 20(1), pp. 69-88. https://doi.org/10.5559/di.20.1.04
30. Gornick, J., Meyers, M. and Ross, K., 1996. Supporting the Employment of Mothers: Policy Variation Across Fourteen Welfare States. *Sociology – All Scholarship,* No. 1.
31. Gornick, J., Meyers, M. and Ross, K., 1998. Public Policies and the Employment of Mothers: A Cross-National Study. *Social Science Quarterly*, 79(1), pp. 35-54. https://www.jstor.org/stable/42863766
32. Han, W. and Waldfogel, J., 2001. Child care costs and women's employment: a comparison of single and married mothers with pre-school-aged children. *Social Science Quarterly*, 82(3), 552-568.

33. Heckman, J. J., 2015. Introduction to a Theory of the Allocation of Time by Gary Becker. *The Economic Journal*, 125(583), pp. 403-409. https://doi.org/10.1111/ecoj.12228
34. Hodžić, S. and Paleka, H., 2020. Fiscal Capacities of Large Cities in Croatia – Financial Support for Smart Cities. *Naše gospodarstvo/Our Economy*, 66(2), pp. 42-49. https://doi.org/10.2478/ngoe-2020-0 010
35. Hosmer, D. W. Jr., Lemeshow, S. and Sturdivant, R. X., 2013. *Applied Logistic Regression.* New York: John Wiley & Sons.
36. Ingólfsdóttir, E. S. and Gíslason, I. V., 2016. Gendered Solutions to the Care Gap Issue in Iceland. *NORA – Nordic Journal of Feminist and Gender Research*, 24(4), pp. 220-233. https://doi.org/10.1080/08038740.2016.1241826
37. Koprić, I., Musa, A. and Đulabić, V., 2016. Local Government and Local Public Services in Croatia. In: W. Hellmut, I. Koprić and G. Marcou, eds. *Public and Social Services in Europe*. Cham: Palgrave Macmillan, pp. 201-216. https://doi.org/10.1057/978-1-137-57499-2_14
38. Kreynfeld, M. and Hank, K., 1999. *The Availability of Child Care and Mother's Employment in West Germany. DIW Discussion Paper,* No. 191. https://ideas.repec.org/p/diw/diwwpp/dp191.html
39. Leibowitz, A., Klerman, J. A. and Waite, L. J., 1992. Employment of New Mothers and Child Care Choice: Difference by Children's Age. *Journal of Human Resources*, 20(1), pp. 112-133. https://doi.org/10.2307/145914
40. Matković, T., 2008. Tko što radi? Dob i rod kao odrednice položaja na tržištu rada u Hrvatskoj. *Revija za socijalnu politiku*, 15(3), pp. 479-502. https://doi.org/10.3935/rsp.v15i3.802
41. Maxwell, A. E., 1971. *Analysing Qualitative Data*. Chapman and Hall Ltd.
42. Mikucka, M., 2008. Variation in Women's Employment Across European Countries – The Impact of Child Care Policy Solutions. *International Journal of Sociology*, 38(1), pp. 12-37. https://doi.org/10.2753/IJS0020-7659380101
43. Mills, M. [et al.], 2014. *Gender equality in the workforce: Reconciling work, private and family life in Europe.* RAND Europe. https://doi.org/10.7249/RR462
44. Misra, J., Budig, M. and Boeckmann, I., 2010. Work-family policies and the effects of children on women's employment hours and wages. *Community, Work & Family*, 14(2), pp. 139-157. https://doi.org/10.1080/13668803.2011.571396
45. OECD, 2017. *OECD family database*. Paris: OECD.
46. Ombudsperson for Gender Equality of the Republic of Croatia, 2024. *Annual Report of the Ombudsperson for Gender Equality of the Republic of Croatia 2023.*
47. Parera-Nicolau, A. and Mumford, K., 2005. Labour supply and childcare for British mothers in two-parent families: a structural approach. *IZA Discussion Papers*, No. 1908. https://doi.org/10.2139/ssrn.876446

48. Powell, L. M., 1997. The Impact of Child Care Costs on the Labour Supply of Married Mothers: Evidence from Canada. *The Canadian Journal of Economics / Revue Canadienne d'Economique*, 30(3), pp. 577-594. https://doi.org/10.2307/136234
49. Sikirić, A. M. and Čičak, J., 2016. Public Spending on Childcare as an Indicator of Gender Sensitivity of a Budget. *Mednarodna revija za javno upravo,* 14(2-3), pp. 95-119. https://doi.org/10.17573/ipar.2016.2-3.05
50. Sikirić, A. M., 2017. *Rodna perspektiva proračunskog procesa.* Doctoral Dissertation. Rijeka: Faculty of Economics and Business.
51. Sikirić, A. M., 2021. The Effect of Childcare Use on Gender Equality in European Labor Markets. *Feminist Economics*, 27(4), pp. 90-113. https://doi.org/10.1080/13545701.2021.1933560
52. Slijepcevic, S., Broz, T. and Rasic, I., 2024. The Capacities and Sustainability of Croatian Cities in Performing Municipal Services. *Sustainability*, 16(17), 7277. https://doi.org/10.3390/su16177277
53. Spansenoska, I. and Fetahu-Vehapi, M., 2011. Determinants of Female Employment Rate in the European Union. *Chinese Business Review*, 10(11), pp. 1076-109. https://doi.org/10.17265/1537-1506/2011.11.012
54. Suwada, K., 2021. Care Work and Parenting. In: *Parenting and Work in Poland*. Springer, Cham. https://doi.org/10.1007/978-3-030-66303-2_3
55. Thévenon, O. and Solaz, A., 2013. Labour Market Effects of Parental Leave Policies in OECD Countries. *OECD Social, Employment and Migration Working Papers*, No. 141. https://doi.org/10.1787/5k8xb6hw1wjf-en
56. Viitanen, T., 2005. Costs of Child Care and Female Employment in England. *Labour,* 19(S1), pp. 149-170. https://doi.org/10.1111/j.1467-9914.2005.00325.x

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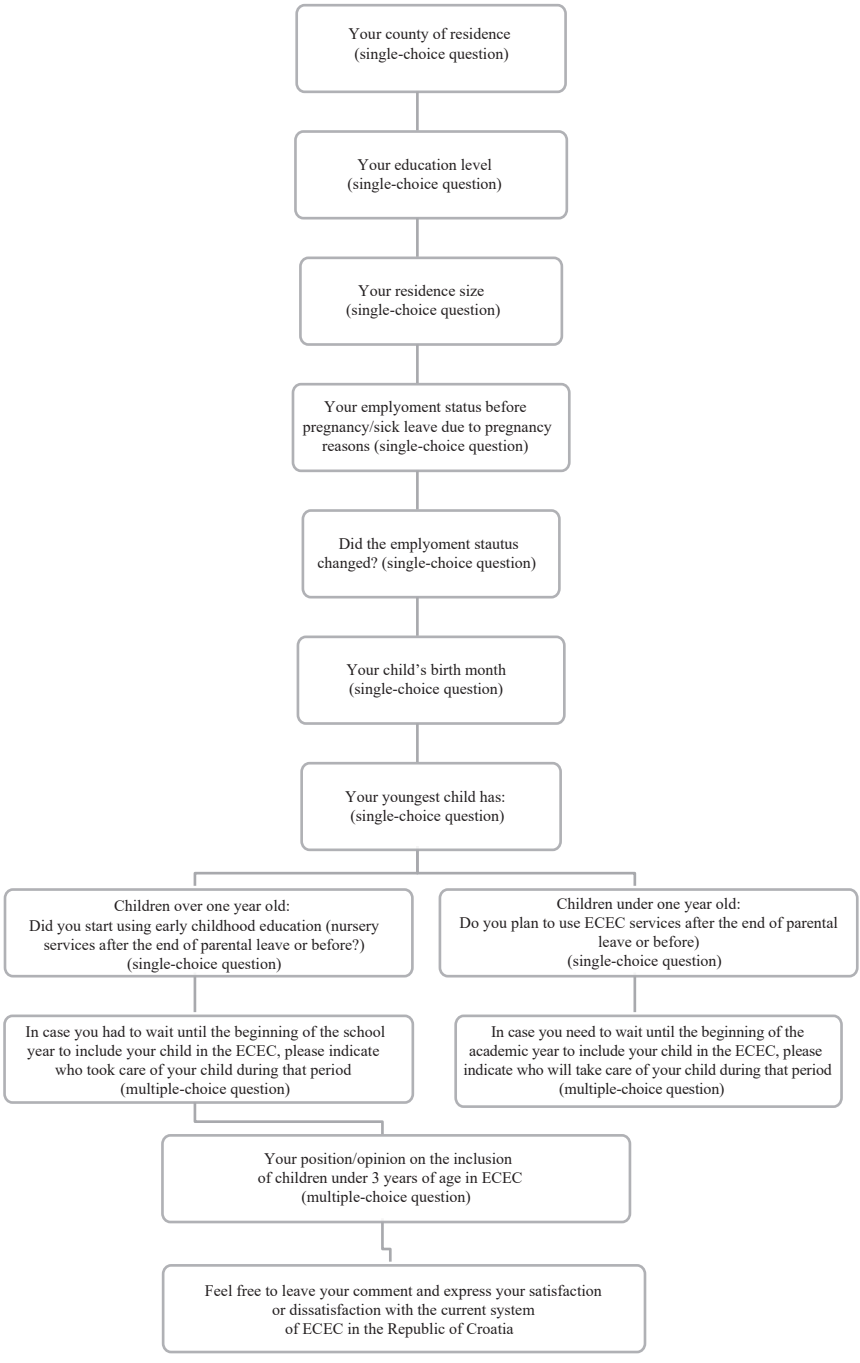
## APPENDIX

**FIGURE A1**

*Structure of questionnaire*




*Source: Author.*

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**Table A1**

*Intention to utilise ECEC services by respondents with children younger than 12 months*

| **Do you plan to utilise early childhood education and care services after finishing parental leave?** | **Yes** | | **No** | | |
|---|---|---|---|---|---|
| | **f** | **%** | **f** | **%** | |
| Yes | 63 | 46.0 | 18 | 31.0 | No, because I choose to look after the child myself |
| Yes, but I have to wait for the start of the new pedagogic year (beginning of September) | 68 | 49.6 | 39 | 67.2 | No, because I have alternatives (e.g., grandparents, hired lady) |
| Yes, but I am not able to due to other reasons | 6 | 4.4 | 1 | 1.7 | No, due to other reasons |
| **Total** | **137** | **100** | **58** | **100** | |

*Source: Author.*

**Table A2**

*Utilisation of ECEC services by respondents with children older than 12 months of age*

| **Do you utilise early childhood education and care services?** | **Yes** | | **No** | | |
|---|---|---|---|---|---|
| | **f** | **%** | **f** | **%** | |
| Yes, after finishing parental leave | 172 | 51.7 | 35 | 24.1 | No, because I choose to look after the child myself |
| Yes, but I had to wait for the start of the new pedagogic year (beginning of September) | 123 | 36.9 | 19 | 13.1 | No, because I was on sick leave to look after my pregnancy or was on extended parental leave |
| I had planned to do so, but it was too expensive | 4 | 1.2 | 85 | 58.6 | No, because I have alternatives (e.g., grandparents, hired lady) |
| I had planned to do so, but we are currently on the waiting list (or we were) | 34 | 10.2 | 6 | 4.1 | No, due to other reasons |
| **Total** | **333** | **100** | **145** | **100** | |

*Source: Author.*

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**Table A3**

*Results of the Chi-Square Test of Independence for different categorical variables*

**Tabulation of CMONTH CGAP, RSIZE CGAP and EMPL CGAP**

| **CMONTH – Child's month of birth** | **CGAP (Care gap)** | | |
|---|---|---|---|
| | **0 – no care gap** | **1 – care gap present** | **Total** |
| 1 – January | 23 | 17 | 40 |
| 2 – February | 19 | 18 | 37 |
| 3 – March | 15 | 15 | 30 |
| 4 – April | 12 | 27 | 39 |
| 5 – May | 10 | 20 | 30 |
| 6 – June | 11 | 22 | 33 |
| 7 – July | 26 | 16 | 42 |
| 8 – August | 26 | 12 | 38 |
| 9 – September | 23 | 6 | 29 |
| 10 – October | 24 | 12 | 36 |
| 11 – November | 23 | 9 | 32 |
| 12 – December | 22 | 11 | 33 |
| Total | 234 | 185 | 419 |
| Pearson Chi2 = 39.81 Prob = 0.0000 | | | |
| RSIZE – Residence size | | **CGAP(Care gap)** | |
| | **0** | **1** | **Total** |
| 1 – up to 10.000 citizens | 64 | 70 | 134 |
| 2 – 10.000 to 50.000 citizens | 55 | 46 | 101 |
| 3 – 50.000 to 100.000 citizens | 24 | 15 | 39 |
| 4 – more than 100.000 citizens | 91 | 56 | 147 |
| Total | 234 | 187 | 421 |
| Pearson Chi2 = 6.31, Prob = 0.0974 | | | |
| EMPL – Employment status | | **CGAP (Care gap)** | |
| | **0** | **1** | **Total** |
| 0 | 15 | 10 | 25 |
| 1 | 219 | 177 | 396 |
| Total | 234 | 187 | 421 |
| Pearson Chi2 = 0.21, Prob = 0.6467 | | | |

*Source: Author's calculations using STATE/SE 13. 0.*