Macro-level predictors of child removals: Do social welfare benefits and services reduce demand for children's out of home placements?

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ARTICLE INFO

ABSTRACT

The purpose of this macro-level study is to examine the effects of social welfare benefits and services on the demand for child removals. The study is based on the panel data of Finnish municipalities (N = 293) and their social welfare indicators for the period 2010–2021. Linear regression analysis was conducted to analyze the associations between the dependent variable (child removals) and the main predictors (child welfare notifications, family support services, social assistance). The community-level social risk factors were controlled for. It was found that child welfare notifications and family support services were associated with child removals. The more cases there are of children accessing the child protection system, the more cases there also are of child removals in a municipality. On balance, additional income support seems to reduce the demand for child removals. Furthermore, it is noteworthy that community-level social risk factors (drop-out youth, unemployment, low education level) were in a negative relationship with child removals, which would tentatively suggest that the threshold for child welfare notifications is actually higher in the deprived communities than in the prosperous areas. Relatively, it is more difficult for children to access child protection services in the communities with a high unemployment rate and low education level and also if there is a high proportion of youths out of education, employment, and training. The present study underlines the significance of a macro-level approach to child protection.

1. Introduction

In the Finnish public debate, politicians have expressed concern about a trend where increasingly more children have undergone out-of-home placements for their own safety. Indeed, the proportion of child removals has been three times higher for the period of 1990 to date. From this perspective, we aim to explore the macro-level predictors of the demand for child removals in Finland. Finnish social welfare is regulated by the law, but the country's 309 municipalities have a broad autonomy to arrange services for responding to the needs of families and children. For this reason, there is also a large variation in availability and accessibility of services among the municipalities.[1]

It is a well-known fact that communities' socioeconomic environment affects the demand for child protection (Lotspeich et al., 2020; Zhang et al., 2022; Kondrat et al., 2023). Deprived areas have higher rates of child welfare interventions compared to prosperous areas. On the other hand, it is assumed that investment in benefits and services is a way to reduce the demand for child protection. However, the existing research literature does not unequivocally support the common perception of the reducing effect of social welfare benefits and services on the demand for child removals (Bywaters et al., 2016; Testa & Kelly, 2020; see also Bezeczky et al., 2020; Webb et al., 2020; Authors, 2022a). For instance, Scourfield et al. (2021) found that additional preventive services, such as part-time childcare for 2- and 3-year-olds, health visiting services, parenting support, and support for children's speech, language, and communication skills, are associated with an

increase in the demand for child protection after controlling for deprivation. In this sense, it is possible that the intervention threshold is actually lower in the areas where more services are available. On balance, a broad body of research literature supports the notion that financial support for families at risk may reduce the risk of child maltreatment, and in turn also the demand for child protection services (Maguire-Jack, Johnson-Motoyama & Parmenter, 2022; Puls et al., 2021; Spencer et al., 2021; Authors, 2022b).

The present study examines the effect of social welfare benefits and services on the demand for child removals if differences in socioeconomic environment are also considered. The panel data of the study consist of Finnish municipalities (N = 293, the mainland municipalities) and their social welfare indicators for the period 2010–2021. There is a variation in both child removals and family support services among municipalities. From this perspective, it is examined whether investments in child protection services explain the variation in child removals among the municipalities. Further, it is explored whether additional income support reduces the demand for child removals. The variation in the provision of social welfare benefits and services among the municipalities is a problematic issue if it does not systematically follow the community-level risk indicators. This would mean that the variation is at least partly based on the social welfare system itself, and not just differences between the needs of families or the socioeconomic characteristics of municipalities.

2. Finnish welfare system serves to support families at risk

The municipalities are in charge of providing social welfare services in Finland. A framework for social welfare is based on the Social Welfare Act (1301/2014) which determines the nature of the general social services (such as child and family guidance). Further, the Social Assistance Act (1412/1997) is a special law which supplements the general legislation by aiming to support a family's wellbeing. Another example of special law is the Child Welfare Act (417/2007) which is dedicated to ensuring children's best interests (Authors, 2022a), and also includes some financial benefits for families at risk. In this sense, the distinction between benefits and services is ambiguous.

The Finnish child protection services can be described as a system consisting of three components (Authors 2022a; 2022b): child welfare notifications, family support services, and child removals. Child welfare notifications are based on a mandatory system whereby, for instance, the police, teachers, physicians, and youth workers have to make a notification if they are worried about a child and his or her wellbeing. Those professionals are required to make a child welfare notification if they have identified conditions that endanger the child's development and care, or if they are concerned about the child's own behavior. Further, citizens also have the right to make a notification, but it is not mandatory as in the case of officials and their responsibility. Child protection authorities must investigate a child's situation within one week and, if necessary, the family will be offered services which aim to support their wellbeing. Family support is based on parental consent, implemented within the child protection system (Pösö & Eronen, 2015), and includes care and therapy services but also intensive in-home family work, which aims to support the child's rehabilitation and family cohesion. Family support also includes financial support for the child's schooling, hobbies, maintenance of close relationships, and other personal needs (Child Welfare Act, 417/2007; Authors, 2022a).

A child's placement out-of-home is always the last resort of the child protection process, but there is no attempt to avoid it if a social worker assesses that it is in the best interest of a child. A child is taken out-of-home only if other interventions and services cannot ensure his or her wellbeing. Regarding interventions, child removals include children who have undergone out-of-home placement as an emergency intervention or as a supportive intervention, been taken temporarily into care by consent, or been taken into custody involuntarily (cf. Pösö, 2021). The decision for an out-of-home placement is made by the child

protection system (via social work) except for involuntary custody, which is made by the administrative court. In all those cases, a child may be placed into foster care, professional family group home, or residential care (Child Welfare Act, 417/2007; Authors, 2022a). In 2021, around 1.14 % of all children under 18 years were in alternative care. The rate can be considered relatively high compared to Sweden where the rate was 0.87 %. However, it was almost at the same level as Germany (1.08 %) and France (1.12 %) (https://eurochild.org/resource/datacare-country-overviews/). It is noteworthy that the rates should be treated with caution because there is no fully comparable statistical system in Europe.

Along with, or instead of, child protection services, the family-at-risk can have also preventive social benefits such as social assistance, which is aimed to support a family's function and wellbeing. As stated in the Social Assistance Act (1412/1997), social assistance is a last-resort financial assistance paid in order to ensure the livelihood of persons or families, and to help them cope independently. Social assistance is aimed at ensuring the person or family has at least the minimal living amount needed for a life of human dignity. Social assistance can be divided into two parts. First, there is basic social assistance granted by the state, to individuals or families whose income does not cover their essential daily expenses. Its purpose is to cover basic needs such as housing, food, (public) healthcare, and medication. Second, there is preventive and supplementary social assistance granted by a municipality. This is discretionary support and people can apply for this after they receive basic social assistance, if there are specific expenses not covered by that basic social assistance (Authors, 2022b).

3. Theoretical background

3.1. Deprivation as a community-level risk factor

Deprivation (poverty, unemployment, low education, etc.) is one of the main factors behind the demand for child protection services (Lotspeich et al., 2020; Zhang et al., 2022; Kondrat et al., 2023; Skinner et al., 2023). Based on their literature review, Walsh et al. (2019) argue that a lower childhood socioeconomic position is associated with a greater risk of maltreatment and thus there is a need for child protection (see also Hunter & Flores, 2021). Also, according to results of a study by Eckenrode et al. (2014), the county-level income inequality and child poverty rate were associated with child maltreatment rates. Further, Lewer et al. (2020) show that local areas with high rates of child poverty also have a high frequency of adverse childhood experiences (see also Bywaters et al., 2020; Zhang et al., 2022). Kim and Drake (2023) found that the county-level relationship between child poverty rates and child maltreatment rates had intensified almost linearly from 2009 to 2018 in the US. Further, it is presented that children in the most deprived neighborhoods are almost twelve times more likely to enter out-of-home care than children in the least deprived areas (Elliott, 2020; see also Bennett et al., 2022). In this sense, the demand for child protection is not only an individual-level or household-level challenge because it is also a community-level issue.

However, Bywaters et al. (2022) argue that deprivation in family income, unemployment, and housing problems has not been sufficiently taken into account in child welfare services. Deprivation is typically connected to the demand for child protection and is often combined with other factors such as mental health, domestic violence and abuse, and addictions but, as Hood et al. (2021) underline, these individual-level risk factors may cluster together to create a 'toxic trio' as, for instance, Cleaver et al. (2011) have formulated. The individual-level explanation dominates the discussion on the need of child protection although Skinner et al. (2021) did not find evidence for the 'toxic trio'. In summary, it is noteworthy that child abuse and, with it, the need for child protection is a result of the accumulation of risk factors at different levels (individual, family, community, the society) and the lack of protective factors (Toikko et al., 2024).

3.2. Preventive measures for poverty

The focus on individual risk factors has arguably obscured the importance of poverty and inequality in driving the demand for child protection. Morris et al. (2018) note that poverty has, in a certain way, become an 'invisible' phenomenon in child protection. Poverty is often centrally connected to, for example, mental health and substance abuse problems. But poverty, unlike parent's substance abuse, is currently not a fully accepted reason for child protection; hence, the issue is about the child protection system's apparent inability to recognize this fact and to include poverty in its criteria regarding child protection cases. The child protection system's inability to detect families' financial difficulties reduces the chances of child protection services establishing effective relationships with families under pressure. Hence, it can be assumed that focusing on individual-level issues ignores some of the key factors in child protection. From this perspective, Saar-Heiman and Gupta (2020) emphasize the so-called poverty awareness paradigm in child protection, which aims to affect the need for child protection on a macro level. Cesar and Decker (2020) stated that a child can be placed in out-of-home care for many reasons that are related to the parents or family life, but finally most of the problems are related to poverty. However, it is noteworthy that there are also structural barriers to utilizing financial support if child welfare social workers cannot grant financial benefits to families (Rantanen et al., 2024). In many countries, child protection and financial support are arranged in different organizations.

According to Wood et al. (2022), national or local policies to increase a family's income, for instance through tax and benefits regimes or the provision of free childcare, could potentially reduce the rate of children in out-of-home care. There is also a role for social workers in providing direct material help to families. The effect of social benefits is reported to be a potential reduction factor for the demand for child protection services (Authors, 2022b). Yang (2015) emphasizes that it is necessary to address a family's unmet material needs for preventing child maltreatment, and in turn the demand for child protection services. Cancian et al. (2013), for example, found that families who received additional income support, compared to families who did not, were less likely to need child protection services. Their study suggests that even a slight increase in income for low-income families can reduce the risk of child maltreatment and in turn the demand for child protection services. Spencer et al. (2021) found that increased cash benefits and access to child protection services were associated with decreased physical abuse (Axford & Berry, 2023). Also, Puls et al. (2021) found that state spending on benefit programs was associated with reductions in child maltreatment, which might offset some benefit program costs. Maguire-Jack et al. (2022) found tentative evidence that economic support programs for working parents may provide preventive benefits against child maltreatment. Providing material support, such as rent payment or guaranteed rent, has been found to help in crisis situations, and discourages the need for out-of-home placements (Authors, 2022b).

3.3. Child protection as a preventive system

Child protection systems are different in each of the European countries (Berrick et al., 2016). In general, the purpose of child protection is to secure children's well-being by determining whether the child's right to a safe life is threatened. The child protection system is responsible for the investigation of alleged child maltreatment and is empowered to separate a child from his or her family (Berrick et al., 2022).

The mandatory system of child welfare notifications is in many countries a kind of basis for child protection processes. The mandatory system requires that staff routinely interacting with families and children are required by law to report suspected child abuse or neglect (Raz, 2017). In this sense, the opening of a child protection case depends on teachers, the police force, health and social services, and the community at large (Wells et al., 2014). The mandatory system follows the notion that for securing the best interest of a child it is necessary to investigate each and all potential cases. On the other hand, a result of the mandatory system has been that in many countries the child protection systems are struggling with the deluge of child welfare notifications that do not necessarily call for a child protection response (Raz, 2020). The situation is the same in Finland, where the proportion of child welfare notifications has been increasing during recent years (Sotkanet Indicator Bank). Further, some scholars have criticized that the mandatory system lowers the threshold of child protection interventions, especially in the case of disadvantaged families (Edwards, 2016; 2019; Fong, 2020; Raz, 2020). Hughes (2017), for example, describes how the negotiation between the disadvantaged families and social authorities contains both supporting and controlling (surveillance) elements of social welfare (see also Merritt, 2020). In this sense, families at-risk have to open themselves up to the state for receiving public benefits such as social assistance, and for keeping their child at home.

Family support services are viewed as having a central role within the child protection system (cf. Berrick et al., 2017), and family support is spoken of in both a broad and a narrow sense (McGregor et al., 2020). From a broad perspective, family services cover a wide range of social welfare services aimed to support the wellbeing of families, but from their narrow perspective, they are focused on early interventions undertaken by child protection. The goal of family support services is to prevent child removals (Hollinshead et al., 2017), and the Family First Prevention Services Act in the USA, for example, has the same goal (Testa & Kelly, 2020). However, families with children in deprived areas may be in an unequal position in terms of child protection services. Disadvantaged families often do not seek social services, therefore children living in deprived areas are more driven into being targets for direct child protection interventions (Bywaters et al., 2016). This is a system-level problem, which in deprived areas may lead to direct interventions such as child removals because there are insufficient preventive services available compared to the prosperous areas. On the other hand, the child protection system does not always recognize the real deficits of families and thus may provide early intervention services which do not meet families' needs. In this sense, there is a distinction between the real needs of the families and the perceived demand for services by the professionals.

Further, it is possible that the relationship between demand and provision for child protection services is not straightforward (Bywaters et al., 2016; Testa & Kelly, 2020; see also Webb et al., 2020; Authors, 2022a). For instance, Scourfield et al. (2021) found that additional preventive services are associated with an increase in the demand for child protection after controlling for deprivation (see also Authors, 2022a). This connection can be considered as a system-level characteristic where the provision of services also adds to the demand for additional services. The situation can be seen as analogous to health care services. At the individual level, health examinations may prevent diseases, but at the system level the examinations increase the need for follow-up care and also operations. Although family support services increase the demand for child removals (Authors, 2022a), they may be justified if they tackle hidden problems (child maltreatment: abuse and neglect). This has also been found in the case of emergency removals (Authors, 2023a). From this perspective, the increasing need for services is an opportunity to protect children and their rights, as considered by Davidson et al. (2017), for example.

4. Material and methods

4.1. Research questions and hypotheses

The present study approaches the macro-level predictors for child removals in three different ways. First, child removals may be explained by differences in communities' socioeconomic characteristics. Previous studies have found that disadvantaged areas have more demand for child protection than prosperous areas (Harrikari, 2014; Hood et al.,

2016; Elliot, 2020; Lotspeich et al., 2020; Bennett et al., 2022). Second, poverty is found to be a key risk factor of the demand for child protection (Hiilamo, 2009; Eckenrode et al., 2014; Kääriälä & Hiilamo, 2017; Lotspeich et al., 2020; Zhang et al., 2022), which can be reduced by social benefits and income support programs (Cancian et al., 2013; Wood et al., 2022). Third, the child protection system is itself an entity which may increase the demand for child protection. System-level factors aim to prevent and protect the demand for child removals, but they also may have unintentional opposing consequences (Bywaters et al., 2016; Scourfield et al., 2021). In more detail, we present the following three hypotheses (H1, H2, H3):

H1: Child protection services (H1a: the proportion of child welfare notifications, H1b: the proportion of clients in family support services) increase the demand for child removals.

H2: Additional social assistance reduces the demand for child removals.

H3: The community-level risk factors (H3a: high proportion of single parent families, H3b: high proportion of drop-out youth, H3c: high unemployment rate, H3d: high GINI coefficient, and H3e: low education level) increase the demand for child removals.

4.2. Data and methods

To verify the three research hypotheses (H1, H2, H3), the empirical research was conducted based on panel data for Finnish municipalities in years 2010–2021. The indicator of child welfare notifications is available from year 2010 which gives a starting point for this study. The data were retrieved from the Sotkanet Indicator Bank, which is provided by the National Institute of Health and Welfare in Finland. The databank offers information on health and social services from all Finnish municipalities. The indicators are based on individual level information, which is aggregated at the municipality level [Referred 03.03.2023]. Initially, we wished to include all 293 municipalities, however, the availability of data on the child protection system limited the number of included municipalities to 219[1]. All information with a number of cases less than 5 was removed from the data by the registrar for security reasons. This means that the missing data are mostly focused on the smallest municipalities.

In the first step, we selected data reflecting the child protection system and defined a dependent variable, independent variables, and control variables, and their operationalization and descriptive statistics are presented in Table 1.

The dependent variable, child removals, indicates the proportion (in %) of children aged 0–17 years who have been placed outside the home during the year in the total population of the same age in a municipality (Indicator 191 in the Data Bank). The indicator includes children who have been placed outside the home as a supportive intervention, or as an emergency placement, being taken into care by consent or involuntarily.

The following independent variables for the child protection system were used in the analysis. The indicator of child welfare notifications (Indicator 1086 in the Data Bank) gives the proportion (in %) of children of equivalent age (under 18 years) in a municipality. For a single child more than one notification during one year can be filed, but the indicator includes each child only once per year.

The indicator of family support services describes the share (in %) of children aged 0–17 years in services provided by the child protection system (Indicator 1245 in the Data Bank) in a municipality. The aim of family support services is to enhance the everyday life of a family and prevent the need for out-of-home placements.

The indicator for the recipients of supplementary social assistance describes % of population of the same age (ind. 296 in the Data Bank). The indicator gives the percentage of those individuals living in households with a social assistance recipient receiving supplementary social assistance during the calendar year in the 25–64 years age group (reference person and his/her spouse). Section 7 c of the Social Assistance Act (30.12.1997/1412) provides for the possibility of granting supplementary social assistance for the applicant's special needs when granting basic social assistance is not sufficient to secure the client's essential living expenses.

The following community-level social risk factors were treated as control variables. The indicator of single parent families, as % of all families with children (ind. 74 in the Data Bank) gives the percentage of single parent families of all families with children aged under 18 years.

The indicator of the GINI coefficient (disposable income, ind. 3126 in the Data Bank) gives the distribution of disposable income in the household-dwelling units in the region under examination. The GINI coefficient is one of the most frequently used indicators for income inequality. It gives the level of income inequalities in one numerical value from 0 to 100. The greater the value, the more unequally income is distributed.

Table 1
Variables' operationalization and their descriptive statistics for 219 Finnish municipalities in years 2010–2021.

Variable	Variable explanations	Mean	Median	Standard Deviation	Minimum value	Maximum value
Dependent variable						
Removals	Child removals measured as the proportion (in %) of children aged 0–17 years who have been placed outside the home during the year in the total population of the same age in a municipality	1.46	1.40	0.71	0.20	8.40
Independent variables related to social welfare benefits and services						
Notifications	Child welfare notifications measured as the proportion (in %) of child welfare notifications in the total number of children of equivalent age (under 18 years) in a municipality	6.19	6.00	2.31	0.00	24.0
Family Support	The share (in %) of children aged 0–17 years in family support services provided by the child protection system in a municipality	5.32	4.90	2.62	0.00	22.6
Social Assistance	Recipients of supplementary social assistance measured as the proportion (in %) of population of the same age living in households with a social assistance recipient receiving supplementary social assistance	2.25	2.10	1.16	0.00	9.70
Independent variables related to the social risk factors						
Single parent families	Single parent families measured as the proportion (in %) of all families with children	19.3	19.3	4.16	5.20	30.9
GINI	GINI coefficient which shows the distribution of disposable income in the household-dwelling units in the region under examination	24.6	24.2	2.38	20.6	49.2
Education	The indicator for education level indicates the proportion of persons with higher education qualifications of total population aged 20 years and over	23.7	22.4	6.66	11.7	59.9
Drop-out	The proportion of drop-out youth measured as the proportion of individuals aged 17–24 years not in education or training, as % of total population of same age	8.82	8.50	2.76	2.40	23.3
Unemployment	The unemployment rate measured as the proportion of unemployed people, as % of labor force	10.9	10.7	3.43	2.40	22.9

The indicator of educational level indicates persons with higher education qualifications as % of total population aged 20 years and over (Indicator 3195 in the Data Bank). Persons with a higher education qualification refers to those individuals who have completed, in a vocational institution, studies of more than 3 years duration and leading to a vocational qualification, or who have completed a degree in a university related to applied sciences, or any university degree.

The proportion on the drop-out youth indicator of those aged 17–24 years and not in education or training, as a % of total population of the same age (ind. 3219 in the Data Bank). The indicator gives the percentage of those individuals not in education or training in the 17–24 years age group. 'Persons not in education or training' refers to those individuals who are not students during the year or who have no degree code, that is, they have not attained a degree or qualification after basic education.

The indicator of unemployed people, as % of labor force (ind. 181 in the Data Bank) gives the unemployed as a percentage of the total labor force. An unemployed person is someone who is not in an employment relationship or who is not full-time self-employed or a full-time student in the manner referred to in Chapter 2 of the Unemployment Security Act. The labor force consists of those individuals who were employed or unemployed during the research period.

To answer the research question (as in, verify the hypothesis) on the predictors for child removals, the assumed influence of elements of child welfare benefits and services and social risk factors on the child removals is estimated based on equation (1). Raw data were converted into natural logarithms (ln) to linearize the function. The REMOVAL (lnREMOV) is treated as the dependent variable, measures of child protection system are the independent variables, and the equation is controlled by variables related to the social risk factors.

$$lnREMOV_{it} = b_0 + b_1 lnNotif_{it} + b_2 lnFamSup_{it} + b_3 lnSocAss_{it} + b_4 lnSingle_{it}$$
$$+ b_5 lnGINI_{it} + b_6 lnEdu_{it} + b_7 lnDrop_{it} + b_8 lnUnemp_{it} + v_i$$
$$(1)$$

Where: i are the municipalities (1, 2,…, 219) and t the years (2010, 2011,…, 2021), b_0 to b_8, are vectors (constant and parameters or regression coefficients), v_{it} total random error consisting of a purely random part ε_{it} and individual effect u_i referring to the specific i unit of the panel ($v_{it} = \varepsilon_{it} + u_i$).

In order to exclude the collinearity among variables for equation (1), variance inflation factor (VIF) analyses were conducted. The results shown in Table 2 demonstrate the absence of collinearity between the independent and control variables, as all values of the VIF coefficients are less than 2, which is much lower than the commonly accepted threshold of 10. Such VIF results allow all variables to be included in the model estimation.

As the panel regression can be estimated using several methods, the Breusch-Pagan and Hausman tests were conducted to determine the regression method. Statistics of the Breusch-Pagan test (LM = 3196.15, p = 0) lead to the rejection of the classical least squares method of estimation in favor of the panel regression method. Statistics of the Hausman test (H = 222.2, p = 0) determine the panel regression method with fixed effects. Results of the estimation of the panel model with fixed

Table 2
VIFs results.

Variable	VIF
ln Notifications	1.485
ln Family Support	1.266
ln Social Assistance	1.299
ln Single Parent Families	2.094
ln GINI	1.346
ln Education	1.515
ln Drop-Out	1.223
ln Unemployment	1.926

Table 3
Estimations of panel regression with fixed effects for child removals (ln Removals) as dependent variable based on equation (1).

Variable	Coefficient	Standard errors	p-value
Constant	−3.383	0.575	<0.0001***
Independent variables related to child welfare system			
ln Notifications	0.099	0.019	<0.0001***
ln Family Support	0.100	0.013	<0.0001***
ln Social Assistance	−0.022	0.013	0.0859*
Independent variables related to social risk factors			
ln Single-Parent Families	0.225	0.066	0.0006***
ln GINI	−0.062	0.124	0.6168
ln Education	1.019	0.128	<0.0001***
ln Drop-out	−0.076	0.026	0.0032***
ln Unemployment	−0.071	0.030	0.0168**
Fit statistics of models	LSDV R² = 0.818		
	Within R² = 0.167		
	N = 2549		

ln = natural logarithm.

effects are presented in Table 3.

5. Results

The results of panel regression estimations allow identifying variables that are significant in explaining child removals, both from the group of factors related to the child welfare system, and from community-level social risk factors (see Table 3). All three variables describing social welfare are statistically significant, and child welfare notifications and family support services are associated with the increasing demand for child removals. The greater the proportion of child welfare notifications and children in family support services, the greater the proportion of child removals there will be in a municipality. Thus, both hypotheses H1a and H1b were supported. Social assistance is also significant in explaining child removals, however, its impact is negative, as the higher the level of social assistance, the lower the level of children removals will be. In this sense, Hypothesis 2 (H2) was also supported.

Among five community-level social risk factors, one (GINI index) was statistically insignificant in explaining child removals. Single parenthood was significant and found to be increasing the child welfare notifications, which supports hypothesis H3a. The level of youth dropped-out of education (H3b), employment (H3c), and low education level (H3e) were found to be associated with reduced child removals, which means Hypotheses H3b, H3c, and H3e were not supported.

6. Discussion

This study examined the macro-level predictors for child removals across the Finnish municipalities. The following three issues can be addressed based on the results of the analysis.

First, it was studied whether the demand for child removals can be reduced by family support services. In the case of family support services, the general thinking was that their main function is to support a family's everyday life and prevent child maltreatment (Waldfogel, 2009), which in turn is assumed to reduce also the need to place a child out of his or her home. Individual level studies have found mixed results about the effectiveness of family support services (Hollinshead et al., 2017; Testa & Kelly, 2020). However, in approaching child protection as a system, we found that the more there are clients in family support services, the more there are also child removals. Indeed, family support services may secure the child's well-being at an individual level, but at the same time this can include the families under closer surveillance, which in turn increases the demand for child protection services. The result is based on the assumptions of Edwards (2019) and Fong (2020)

and is consistent with the studies of Scourfield at al. (2021) and Authors (2022a).

The public debate has expressed concern about the high and increasing proportion of children's out-of-home placements. Thus, social workers have intensively aimed to find effective practices for family support services (Kananoja & Ruuskanen, 2019) for reducing the number of child removals. However, according to the present study, it might be more effective to focus on the child welfare notifications and their role in the child protection system. It was found that the more there are notifications, the more there are also child removals in a municipality, and also if the contextual risk factors are considered. Mandatory notifications seem to have a kind of 'input' function in the child protection system. The critics of the mandatory child welfare notification system argue that families are set under a surveillance system which is getting even more tight within family support services (Fong, 2020; Edwards, 2019). However, Simon et al. (2022) suggest that there are also families who are too easily screened-out by child protection services and consequently opportunities to prevent future maltreatment are missed.

Second, it was studied whether additional income support reduces the demand for child removals. It was found that supplementary social assistance reduces the demand for children's out-of-home placements even if contextual risk factors were controlled for. The more receivers of additional income support there are in a municipality, the lower the likelihood of that municipality being associated with the need for child protection services. The result is consistent with a broad body of previous studies in the literature such as, for instance, the study by Wood at al. (2022), where it was found that a change in family income can alter the risk of child abuse and neglect and thus affect the rate of children in out-of-home care. This is the case also with the recommendation of Berger and Slack (2020), which is based on the strong evidence of a relationship between economic disadvantage and child maltreatment, and which suggests a broad community-based approach to address poverty, and such an investment in turn reduces the demand for child protection services.

It is interesting that although there is quite a large body of evidence on the significance of additional income support, there is a large variation among Finnish municipalities in utilizing additional income support for helping families at-risk. It seems that the child protection authorities are focused primarily on the core of child protection services instead of seeking new and broader solutions within and from other social services such as for, instance, financial social work. On the other hand, it might also be that child protection issues are not at the top of the priority list; for example, regarding adult social work. Child protection services are a key element in ensuring a child's best interest but if we are aiming to reduce the proportion of child removals, we must adopt a broader approach with other health and social services (Doebler et al., 2024). However, financial and material help need to be associated with social work and its aim (Saar-Heiman & Krumer-Nevo, 2021). For instance, Wood et al. (2022) underline that building a trusting relationship with social workers is a key factor for achieving a positive effect from income support delivered to families at-risk.

Third, the effects of community level contextual factors on child removals were studied. The proportion of single-parent families is a strong risk factor for the demand for child protection, and even after all other risk factors are controlled for (Harrikari, 2014; Hiilamo & Kangas, 2010). This raises a question of whether there are enough supportive services targeting single-parent families in Finland, although for instance day care for children is available whereby payment is reduced for low-income families.

There were three contextual factors which act as kinds of counter risk factors, which means that they are in a negative relationship with the demand for child removals. The proportion of drop-out youth, unemployment, and the low level of education predict less child removals. The factors for deprivation have been found to be one of the most essential backgrounds for the needs of child protection (Lotspeich et al., 2020; Zhang et al., 2022; Kondrat et al., 2023). This initially suggests the

inverse intervention law, which assumes that families experiencing similar levels of deprivation are more likely to have care and protection if they live in less deprived areas (Bywaters et al., 2015; Keddell et al., 2019; Webb et al., 2020). According to the present study, the more cases there are of drop-out youth, unemployed, low-level education in a municipality, the higher will be the threshold for child protection interventions. The surveillance system is not, in these cases, as effective as it is in prosperous municipalities. This might be related to differences in resources between municipalities, or cultural differences concerning the threshold level of interventions.

Overall, this macro-level analysis tentatively suggests that the number of child removals should be approached from a broad perspective. The main focus of the child protection system is not to avoid a child's out-of-home placement, but rather to ensure a child's well-being. In this sense, the question of increasing child removals should be focused on the starting point of the child protection process. The threshold level of child welfare notifications cannot be raised because it could endanger the securing of the best interests of children, so instead the social welfare system should focus on preventive benefits such as social assistance and interventions, which can decrease the level of social risk factors behind child welfare notifications. In turn, social assistance and decreased levels of social risks can reduce the levels of child removals.

Finally, it is necessary to underline also the strengths and weaknesses of this study. The panel data, which cover the entire country, can be considered a strength of the study. In this sense, the study brings a novel approach to our previous cross-sectional studies (Authors, 2022a; 2022b; 2023). However, there are also several uncertainties associated with the research design and the research results. The missing data are a problem which may affect also the results of the study, and as a minimum they weaken the generalizability of the results. Further, the study design is narrow because the social welfare system has been approached using only a few system-level factors. In addition, the indicators describing social welfare benefits and services are quite rough quantitative factors (Alastalo & Pösö, 2014), and thus, the indicators do not take into account the quality or intensity of services. The ability of the factors to describe the child welfare system and its components can be questioned. For instance, the indicator of child welfare notifications has a certain legal basis, but reporting also always remains a subjective decision, so there is also uncertainty about the indicator in this regard. Also, cultural factors, and for example the level of co-operation between different authorities, may explain the differences in making (or not making) child welfare notifications.

7. Conclusions

The relationship between the demand and provision for social welfare services is a crucial one. It is obvious that the child protection system itself cannot reduce the demand for child removals and it is noteworthy that this is not even its purpose. The main focus of the child protection system is on securing the best interest of a child. If the social welfare system aims to reduce the demand for child protection, it should put attention on benefits and services outside of the child protection system, which in turn could reduce the demand for child removals. In this sense, the child welfare system should be approached from a broad perspective where individual-, household-, and community-level factors could be addressed (Saar-Heiman & Krumer-Nevo, 2021).

Equality is a key principle in the Nordic countries, so its violation is a crucial issue in terms of the political and legal bases of social welfare services. However, the results of the study suggest that the municipality-level variation may put citizens in an unequal position, relative to which municipality they live in. The variation was found to be especially related to contextual factors, where the community-level proportion of drop-out youth, unemployment, and the low level of education predicted, paradoxically, less child removals. This observation tentatively demonstrates the situation where the threshold of child protection

interventions is higher in the communities with higher levels of deprivation. In this sense, although the purpose of social welfare is to support the well-being of citizens, unequal accessibility may even increase the marginalization of disadvantaged people.

Funding

CRediT authorship contribution statement

Timo Toikko: Writing – original draft. **Aleksandra Gawel:** Formal analysis. **Juulia Hietamäki:** Writing – original draft, Conceptualization. **Laura Häkkilä:** Writing – review & editing. **Piia Seppälä:** Writing – review & editing. **Ning Zhu:** Writing – review & editing.

Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Data availability

No data was used for the research described in the article.

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