

Migrant Children's Access to Early Childhood Education in Sweden: Integration through ECEC

Eleonora Mussino, Ida Ljungström, Ann-Zofie Duvander, Andreas Ljungström

Introduction

The participation of children with a migrant background in early childhood education and care (ECEC) plays a crucial role in their long-term integration and educational outcomes. While Sweden offers universal access to ECEC from the age of one, the extent and patterns of enrolment among migrant children remain an understudied topic. This gap in research is significant given the well-established link between early educational investment and successful integration (Mussino et al. 2023), as schools and childcare centers can serve as vital hubs for both children and their families (Tallås Ahlzén, 2022).

Research indicates that early childhood education and care (ECEC) attendance among migrant children plays a vital role in facilitating host-country language acquisition and fostering social integration. This is particularly significant for children from economically disadvantaged backgrounds, who often face obstacles such as low family income, limited parental education, and linguistic barriers (Corazzini et al., 2021; Karoly & Gonzales, 2011). For migrant children, formal childcare access serves as an early intervention, helping to mitigate risks of educational marginalization and social exclusion. Furthermore, high-quality ECEC environments have been shown to support cognitive and linguistic development, creating a more equitable foundation for future learning (Crosnoe, 2007; Saraceno, 2011). The benefits of early childcare enrolment are not limited to children alone; they extend to parents, particularly mothers, by improving their employment opportunities and contributing to greater gender equality in the labor market and within households (Haan & Wrohlich, 2011; Mateo Diaz & Rodriguez-Chamussy, 2013).

Despite Sweden's extensive family policies, labor market disparities between native-born and migrant populations persist. Immigrant men have employment rates approximately 10 percentage points lower than their native-born counterparts, while for immigrant women, the gap is even wider at 20 percentage points (OECD, 2021). Moreover, fertility patterns differ significantly, with foreign-born women exhibiting higher fertility rates, particularly shortly after migration (Andersson, 2004). These variations in employment and fertility behavior suggest potential differences in ECEC enrolment between native-born and migrant families. Research indicates that children with an immigrant background attend preschool at lower rates, with enrolment being particularly low among foreign-born children (Skolverket, 2023). Given Sweden's strong connection between family policy and labor market integration, examining these enrolment patterns is essential for understanding the broader implications of childcare access on social and economic inclusion.

By examining how these families navigate early childhood education—focusing on both enrolment timing and intensity—we contribute to existing literature on educational integration. This research aligns with the United Nations' Sustainable Development Goal No. 4, which advocates for equitable and inclusive early education as a foundation for lifelong learning and social integration (United Nations, 2015).

The Swedish Context

In Sweden, ECEC is universally available from the age of one at relatively low costs. Children typically enter pre-school settings before the age of two. Pre-school education extends through age five, with a transition occurring in the autumn when six-year-olds enter a required preparatory kindergarten year. Formal comprehensive education then commences the subsequent fall, as children reach their seventh year. However, enrolment varies based on parental SES, and municipality (Forsber et al 2023, Skolverket 2019). Data from 2019 indicate that preschool enrollment reached 85.4% among children aged one to five. Smaller municipalities have higher participation rates than metropolitan areas, while distribution between boys and girls is balanced. An upward trend in enrollment was evident throughout all age: 50.5% of one-year-olds participated in preschool, two-year-old enrollment stood at 90.6%, three-year-olds at 94.0%, and the combined four- and five-year-old group achieved 95.3% participation (Skolverket 2024). Additionally, seasonality plays a role in ECEC enrolment in Sweden, adding another layer of complexity (Tallås Ahlzén, 2022).

Previous research has also showed that immigrant background children go to pre-school to a lower extent, and the extent is even lower among foreign-born children (Skolverket 2023). On the other side, parental leave policies in Sweden are also generous and flexible, allowing parents to negotiate uptake, which in turn affects the timing of ECEC entry. Parental leave as well is affected by socio-economic characteristics (and possibilities) of the parents, which may further shape childcare participation. Previous research also indicates that migrant men and women have distinct patterns of parental leave usage (Mussino and Duvander 2016, Mussino et al. 2018, 2024) Migrant women in fact tend to use parental leave more intensively and Swedish woman more extensively (Mussino and Duvander 2016).

Starting from these findings in this study we want to 1) study the timing of, and extent to which G2 (born in Sweden from migrants' parents) children access ECEC in Sweden and to 2) identify key determinants of their enrolment patterns. The decision to study early childhood also heightens the importance of understanding how cultural norms influence parental behavior. Immigrant families may differ in their views on early childcare, including the timing of daycare entry. Delayed daycare use can limit maternal labor market participation and increase poverty risk. These dynamics should be study more explicitly, especially since they may disproportionately affect the G2 population and their parents and may be less relevant at older ages.

We have two contradicting hypotheses on the timing and the extend. Following previous international literature, we expect that children with a migrant-background in Sweden do also attend less ECEC and the share of children that do start school without having had ECEC is higher among them. However, among the timing, we expect that children with a migrant background do start earlier because norms and economic constriction.

We also expect that country of birth of the parents and reason of migration play important role on different uptake pattern.

Data and method

This study uses Swedish linked register data within the REFU-GEN data collection. REFU-GEN is specifically designed for studying the migrant population and therefore include extensive migration-related information such as country of birth, reason for migration, and re-emigration

patterns. Monthly data on enrolment in ECEC is collected from the National Preschool register (2014-2023). Children are matched to both parents and their migration histories and to yearly records on parental background in terms of income, educational attainment, labor-market participation and social-insurance benefits. Since the National Preschool register range from 2014 – 2023, we include all children born in Sweden between January 2014 and November 2022 (n = 906 164).

Our dependent variable is enrolment in ECEC. Immigrant-specific variables include parental country of origin, year of migration, parental reason for migration measured as reason for resident permit, and age at migration. We include a variable of birth-order based on the mother, municipality of residence, month of birth, and whether or not parents live together. Labour market variables include earnings-income collected from the Tax register, this includes earnings and all benefits based on labor market attachment (sickness leave, parental leave etc.), meaning that 0 in this variable indicate no labor-market attachment. Since each unit of analysis is a unique parent-child combination all variables except for birth-order are included for both parents.

Method

We employ Event-History Analysis (EHA) as we are interested in both whether enrolment in ECEC takes place as well as its timing. Exposure starts at one month before eligibility which is the year and month when the child turns 11 months and the event is year and month of enrolment. The analysis unit is each parent and child combination, and they are censored in November 2023, year and month when either parent or the child emigrates, or in October the year the child turns five, whichever comes first. We censor in October the year the child turns five because this is the last time point where we may observe enrolment as mandatory preschool class starts in September the year the child turns six.

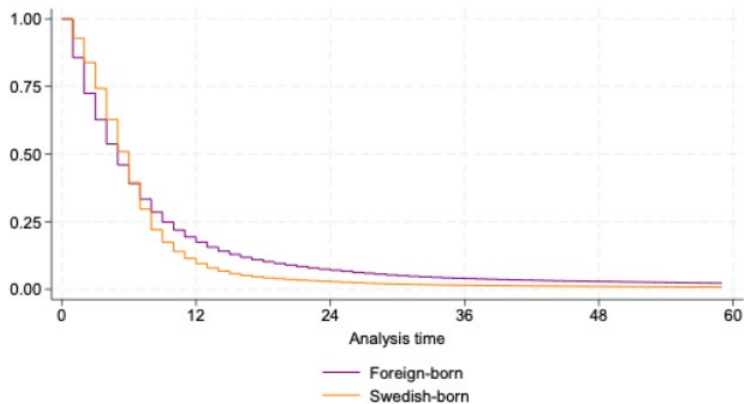
We show descriptive results of enrolment in ECEC in a set of Kaplan-Meier survival curves. We use Piecewise Exponential Model as it allows the baseline hazard to change over time while being kept constant within fixed intervals. An advantage with the EHA models is that it allows for time-varying covariates. In our analysis the following variables are time-varying: earnings-income, municipality of residence, and cohabitation with the other parent. We also include an interaction between labor-market attachment and migrant background.

Results

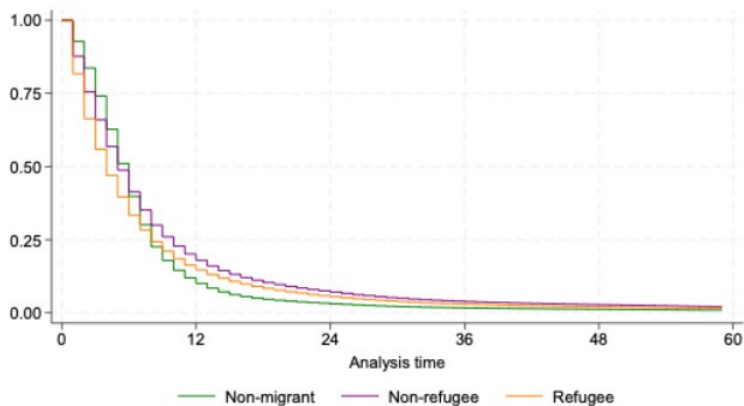
Foreign-born and Swedish-born mothers demonstrate comparable Early Childhood Education and Care (ECEC) enrollment rates for their children, with minimal differences observed in enrollment timing. These patterns suggest that Sweden's universal ECEC access may serve as an equalizing mechanism for enrollment across different maternal backgrounds. To examine the subtle differences that persist, we will employ Event History Analysis (EHA) parametric modeling. Our analysis will incorporate refined categorizations of country of origin and residence permit status, while controlling for labor market attachment (including interactions with migration background), cohabitation status, seasonal effects, and municipality characteristics. Complete results will be presented at the European Population Conference.

Figure: First time enrollment: Kaplan-Meier survival curves by a) country of birth and b) reason of migration

a)



b)



Reference (no complete)

Corazzini L., Meschi E., Pavese C. (2021). Impact of Early Childcare on Immigrant Children's Educational Performance. *Economics of Education Review*. 85: 102181.

Crosnoe R. (2007). Early Child Care and the School Readiness of Children from Mexican Immigrant Families. *International Migration Review* 41 (1):152–181

Mussino, E. and Duvander (2016) Use it or save it? Migration background and parental leave uptake in Sweden. *European Journal of Population*, 32(2), 189-210

Mussino, E., Kraus, E. & Milewski, N. Introduction to the Thematic Series: Use and consequences of family policies among migrants and their descendants in Europe. *Genus* 79, 25 (2023). <https://doi.org/10.1186/s41118-023-00204-x>

Mussino, E., & Ortensi, L. E. (2023). Childcare in Italy among migrants and natives: Who uses which type and why? *Genus*, 79(1), 16. <https://doi.org/10.1186/s41118-023-00197-7>

Tallås Ahlzén, Malin (2022). *Essays in Swedish Family Policy 2022* Doctoral thesis, monograph. Stockholm University