

RCT Registration

Title: “Access to Early Child Care, Beliefs About the Returns to Child Care and Policy Preferences“

Principal Investigators:

Marina Krauß (University of Augsburg)

Anne Steuernagel (FAU Erlangen-Nürnberg, ifo Institute)

Abstract

Early child care is considered crucial for a range of family outcomes, including gender equality in paid and unpaid work as well as child development. Yet little is known about parents' beliefs regarding early child care enrollment or how these beliefs relate to their preferences for family policy around child care options. This study pursues two main objectives. First, we descriptively examine parents' beliefs about the returns to early child care across multiple domains and investigate whether these beliefs differ by socioeconomic background. Second, leveraging an intervention by Hermes et al. (2025) that induced random variation in early child care enrollment among lower-SES families, we estimate whether access to early child care shapes lower-SES parents' perceived returns and, in turn, their preferences for policies aimed at expanding child care access and support.

Trial start date: 01 July 2026

Intervention start date: 01 July 2026

Intervention end date: 1 October 2026

Trial end date: 31 October 2028

Intervention

This project starts by investigating parents' beliefs about the returns of early child care enrollment, both for their child's development and parents themselves, including labor market outcomes, gender equality in paid and unpaid work, and life satisfaction. We place a particular focus on belief differences between higher- and lower-SES parents. In a second step, we examine whether access to early child care influences the beliefs of lower-SES parents about the early child care returns and their preferences about child care policies.

To identify the causal effects of early child care experiences, we exploit exogenous variation in child care access generated by a randomized controlled trial conducted by Hermes et al. (2025). Their intervention was designed to lower barriers in the application process for early child care slots without influencing preferences around child care attendance and indeed strongly increased the likelihood that lower-SES parents secure a child care place for their child (for details on the intervention and the effects, see Hermes et al. (2025) and Hermes et al. (2024)). In this current project, we measure effects of this intervention on beliefs about early child care returns and preferences about child care policies.

This project's empirical basis is a new survey that will be conducted in summer 2026. Building on the baseline sample of 607 families from Hermes et al. (2025), we will re-contact the original participants, with approximately 450 families expected to take part in this follow-up study. By the time of this survey, the children from the original study are around eight years old. The survey will capture (i) beliefs about the returns to early child care, both for the child's development and for parents' own life outcomes, (ii) intentions regarding child care enrollment, (iii) preferences over child care policies, and (iv) beliefs about societal returns to early child care. As in previous survey waves, our aim is once again to interview the mothers.

One of our primary outcomes is parents' beliefs about how early child care attendance affects a range of outcomes for both children and parents. Since most parents in our study no longer have a child of early-child-care age, we ask them to consider a hypothetical two-year-old child. We then present two scenarios: in one, the hypothetical child attends a child care center eight hours a day, five days a week; in the other, the parents care for the hypothetical child mostly on their own. For each scenario, parents report the likelihood that the parents work full-time, that paid and unpaid work is divided equally between them, and that the child develops well and that the parents are satisfied with their lives.

Primary outcomes:

- Beliefs about returns of child care attendance for the child and parent's own life (parental labor market outcomes, gender equality in paid and unpaid work, child development, fertility and life satisfaction)
- Policy preferences for early child care expansion, including willingness to donate for early child care expansion

Secondary outcomes:

- Intentions regarding child care enrollment for a hypothetical child
- Beliefs about returns of child care for society

References

Hermes, H., P. Lergetporer, F. Peter, and S. Wiederhold (2025). Application Barriers and the Socioeconomic Gap in Child Care Enrollment. *Journal of the European Economic Association* 23 (3), 1133–1172.

Hermes, H., M. Krauß, P. Lergetporer, F. Peter, and S. Wiederhold (2024). Early Child Care, Maternal Labor Supply, and Gender Equality: A Randomized Controlled Trial. CE-Sifo Working Paper No. 10178, Center for Economic Studies.

IRB

IRB Name

Ethics Commission, Department of Economics, University of Munich

IRB Approval Date

2026-03-30

IRB Approval Number

2026-07

Preplan of the first waves of data collection:

<https://www.socialscienceregistry.org/trials/3181>

Pre-analysis plan

Empirical strategy

We conduct three types of analysis. First, we descriptively examine parents' beliefs about the returns to early child care across a range of outcomes. Second, we estimate these beliefs separately for higher- and lower-SES families to assess whether perceived returns differ by socioeconomic background. Third, we estimate the causal effect of early child care access on lower-SES parents' beliefs about its returns and on their child care policy preferences, exploiting random variation in enrollment induced by the experiment described above.

All effects are estimated via OLS. For the first and second analysis, we estimate the multivariate regressions (1) and (2):

$$(1) : Y_i = \alpha + \beta_1 \text{Childcare}_i + \gamma Z_i + \varepsilon_i$$
$$(2) : Y_i = \alpha + \beta_1 \text{Childcare}_i + \beta_2 \text{Childcare} * \text{HigherSES}_i + \gamma Z_i + \varepsilon_i$$

with

Y_i : Outcome of interest for individual i

β_1 : Coefficient of interest, association between child care and outcome (1) and between child care and outcome for lower SES parents (2)

$\beta_1 + \beta_2$: Coefficients of interest, association between child care and outcome for higher SES parents (2)

Z_i : Vector of control variables for individual i

ε_i : Idiosyncratic error term for individual i

In Equation (1), β_1 represents the parents' belief about the effect of early child care attendance on the outcome of interest conditional on the control variables. In Equation (2), β_1 represents the belief for lower-SES parents and $\beta_1 + \beta_2$ the belief for higher-SES parents. Vector of control variables includes socio-demographic controls such as the age and sex of the parent, and whether or not the target child of the original intervention has a younger sibling. In general, we will show both estimates with and without control variables.

In the third analysis, we estimate the effects of the original intervention by Hermes et al. (2025) on lower-SES parents' beliefs about returns of early child care and preferences for early child care expansions. In this analysis, we augment our main specification with a vector of control variables to improve precision and account for minor imbalances between treatment and control groups. The vector of controls comprises the strata variables (defined below) alongside predetermined sociodemographic characteristics expected to correlate with our outcomes of interest. To avoid losing observations due to item non-response on control variables, we impute missing values and include imputation dummies in all regressions. Where available, we also control for baseline levels of the respective outcome variable.

Our main specification for estimating treatment effects is as follows:

$$(3) Y_i = \alpha + \beta_1 T_i + \beta_2 \text{HigherSES}_i + \beta_3 T * \text{HigherSES}_i + \gamma X_i + \delta Y_{i,t-1} + \varepsilon_i$$

with

Y_i : Outcome of interest for individual i after the intervention

T_i : Dummy equal to 1 if individual is assigned to the treatment condition, 0 otherwise

HigherSES: Dummy equal to 1 if parent has a college-entrance degree ((Fach-)Abitur)

β_1 : Coefficient of interest, Treatment effect for lower-SES parent

X_i : Vector of control variables for individual i

$Y_{i,t-1}$: Outcome of interest for individual i at baseline (if available)

ε_i : Idiosyncratic error term for individual i

Due to the randomized research design by Hermes et al. (2025), β_1 represents the estimated causal effect of our treatment on the respective outcome for lower-SES parents. Again, $\beta_1 + \beta_2$ is the effect for higher-SES parents. Vector of control variables includes variables used for stratification (city (2 values), birth quarter of child (4 values), child lives with both parents (yes/no), and (a proxy for) first-time parent (yes/no))¹ as well as socio-demographic control variables that include household income, age of the parent, a dummy for migration background (indicator for the parent being born in Germany), whether she/he planned to work or was actually employed, and whether she/he was the main caregiver.

¹ We include the stratification variables linearly in our regressions rather than as stratum fixed effects. Given the large number of strata relative to the sample size, including a full set of stratum dummies would result in a substantial loss of degrees of freedom and thereby reduce estimation precision.

Randomization

To assess successful randomization, we regress control variables on the treatment indicator. Under successful randomization, the share of statistically significant associations should not exceed the applied significance level ($\alpha = 0.05$).

We further examine differential attrition by estimating treatment effects on survey participation and outcome measurement success, and test for covariate balance among follow-up respondents. As robustness checks, we provide inverse-probability-weighted estimates based on baseline predictors of survey response, as well as bounding analysis for key binary outcomes.

Main Analyses

In a first step, we examine how parents assess the returns to early child care. Specifically, we analyze parents' perceptions related to the returns to child care across several domains: parental labor market outcomes, gender equality in paid and unpaid work, child development, fertility and life satisfaction. We further investigate whether these beliefs differ systematically between higher- and lower-SES parents.

Second, we examine how randomized access to early child care shapes lower-SES parents' beliefs about its returns and their willingness to enroll a hypothetical child in child care. Third, we investigate how such access affects preferences for child care policy, focusing on both support for expanding early child care provision and willingness to donate toward child care expansion in their city. As potential mechanism we investigate how the treatment affects parents' beliefs about the societal returns to early child care.