

# 16. Lessons from the Finnish Basic Income Experiment

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## INTRODUCTION

The Finnish Basic Income Experiment (FBIE) is one of the few large-scale randomized controlled trials (RCTs) conducted in Finland, providing a unique opportunity to rigorously assess the effects of a concrete policy intervention. Although the experiment is typically framed as an evaluation of unconditional income transfers rather than an intervention in the traditional sense, it embodies the core principles of the intervention-investment approach (see Chapter 2 for a detailed discussion of the investment-intervention framework). It is a direct and structured policy action aimed at influencing individual economic behavior and well-being, offering valuable lessons on how targeted interventions can complement the broader social investment framework. The FBIE goes beyond theoretical discussions on the potential benefits of social investment by implementing and evaluating a tangible policy measure using an experimental design.

Welfare reforms have long sought to address challenges such as poverty, inequality, employment, and fertility. Guaranteed income schemes, means-tested benefits, and unconditional cash transfers seek to support vulnerable groups and reduce the risks associated with homelessness, crime, and social exclusion. Interest in basic income (BI) has grown, especially during the COVID-19 pandemic, when many governments failed to adequately support those facing income shocks. Although much debate has focused on poverty reduction and employment incentives, less attention has been paid to how BI could affect economic autonomy and perceived security in different policy contexts.

Unlike universal basic income (UBI) proposals, which can be costly and could displace targeted support (Hoynes and Rothstein, 2019; Acemoglu, 2019), the FBIE used a targeted and budget-neutral design. It focused on long-term unemployed individuals, particularly those outside active labor market

programs. This approach reflected concerns that broad UBI schemes may provide shallow support while reducing targeted services. COVID-19 subsidies illustrated this risk by offering wide but inadequate aid. FBIE aimed to test whether increased autonomy could improve employment and well-being outcomes in a cost-effective way.

This study offers a harmonized evaluation of the effects of the Finnish Basic Income Experiment on a broad set of outcomes, using high-quality register data. In addition to reviewing previously published findings on employment and income responses (Verho et al., 2022), we provide new and integrated evidence on psychiatric healthcare services, fertility, and geographic mobility. These outcomes were included in the experiment's pre-analysis plan and reflect plausible channels through which basic income could influence well-being. Some of these outcomes have been explored in earlier studies (Simanainen, 2025; Hämäläinen et al., 2025), but presenting them together using a consistent empirical framework (see Chapter 4 for an overview of evaluating interventions and their effectiveness in welfare state contexts) allows for a more holistic assessment of the broader effects of basic income. Our goal is to contribute to the literature on both the intended and unintended effects of income support programs and to see whether these effects remain once this support is removed.

The FBIE, implemented in 2017–2018, was the first non-voluntary, nationwide randomized basic income trial in an advanced economy. It targeted 2,000 long-term unemployed individuals aged 25 to 58, who received a guaranteed monthly income of €560, replacing their conditional unemployment benefits. The control group included approximately 170,000 individuals. The reform was designed to test whether incentives ('carrots') encouraged job-seeking and entrepreneurial activities better than obligations ('sticks') (De Wispelaere et al., 2019). The treatment removed requirements to seek employment or participate in labor programs and allowed participants to keep additional earnings, thereby eliminating many of the administrative and financial disincentives associated with working while receiving benefits.

Three key mechanisms may explain why the experiment improved participants' well-being. First, it allowed the unemployed to retain additional earnings, enhancing income stability. Second, the absence of sanctions provided greater individual freedom. Third, reduced bureaucracy lowered the stigma associated with unemployment benefits, especially for those unemployed long-term.

Despite these design features, initial findings showed limited employment effects. While receiving basic income significantly reduced participation tax rates, no statistically significant impacts were detected on employment in the first year. A modest positive effect emerged in the second year—equivalent to 6.6 additional days worked – but its interpretation is confounded by a

concurrent policy reform that tightened job search requirements for the control group only (Verho et al., 2022). These findings indicate that in contexts with already comprehensive income protection, improving monetary incentives alone may not meaningfully alter labor market behavior. Recent studies have also found that receiving basic income led to higher voter turnout (Hirvonen et al., 2024), shifts from public to private healthcare usage (Simanainen, 2024), and changes in fertility in some subgroups (Simanainen, 2025). A recent analysis indicates that the basic income may have reduced psychotropic drug purchases by 8–11% (Hämäläinen et al., 2025), consistent with earlier survey evidence of improved well-being (Kangas et al., 2021).

The literature from other contexts suggests that income stability may indeed yield benefits beyond employment. Prior studies have linked income gains to reductions in psychological distress and improvements in life satisfaction. For instance, the Canadian Mincome experiment reduced mental health-related hospitalizations (Forget, 2011), and randomized cash transfer studies in Africa (Haushofer and Shapiro, 2016) and lottery studies in Europe (Gardner & Oswald, 2007; Lindahl, 2005; Cesarini et al., 2016) have found similarly positive effects on well-being. While the contexts and treatment in these studies vary greatly from the Finnish Basic Income Experiment, this body of research gives consistent indication that increasing economic security improves mental health. Fertility responses to different income schemes have also been documented. The cash transfers of the Alaska Permanent Fund Dividend have been found to increase fertility (Cowan & Douds, 2022; Yonzan et al., 2024; Dökmeci et al., 2023) while evidence from the Mincome experiment has been mixed (Forget, 2011; Dökmeci et al., 2023). Overall, universal child benefit transfer programs from the mid-1970s to early 2000s suggest temporary positive effects on fertility (Bergsvik et al., 2021), with similar effects from recent pro-natalist policies conducted in the Canadian province of Quebec (Milligan, 2005) and in Spain (González & Trommlerová, 2023). There is also emerging interest in the effects of cash transfers on geographic mobility, though evidence remains limited. Some studies suggest that stable income can reduce the need to relocate for economic reasons, while others find that added financial security facilitates mobility (Simeonova et al., 2024).

Overall, our general conclusion is that the FBIE had limited effects on most indicators of socio-economic well-being but led to a potentially meaningful reduction in psychiatric medication use, suggesting improved mental well-being. However, once the experiment ended, the outcomes reverted largely to the trajectories of the control group. These findings contribute to a more comprehensive understanding of how income support policies may affect different domains of life. In a welfare state like Finland—where baseline coverage is high and income protection robust—basic income may offer

psychological benefits without significantly altering employment, family, or housing decisions.

While we analyze FBIE in line with other case studies of interventions in this volume, it was not a single, tightly targeted intervention in the conventional sense, but rather a broad intervention program embedded in Finland's social security system. It was conducted as a large-scale policy experiment combining several changes to benefit rules and administration under a unified design. As such, the experiment offers valuable lessons for other countries considering similar policies. Overall, our findings align with the view that basic income does not significantly impact well-being in a welfare state with comprehensive coverage and a sufficient minimum income scheme (e.g., Natili, 2019). These lessons contribute to the ongoing policy debate on basic income's viability, offering insights on how to design and implement such programs effectively across different socio-economic contexts.

## THE FINNISH BASIC INCOME EXPERIMENT

The Finnish Basic Income Experiment (FBIE) was implemented in 2017–2018 and included 2,000 participants aged 25–58 who received flat-rate minimum unemployment benefits in the treatment group, and 173,222 individuals in a control group of similar age. Those in the treatment group were guaranteed a tax-free income of €560 per month, replacing their prior unemployment benefits (Verho et al., 2022). Recipients were not required to join any active labor market programs.

Initially intended to study basic income's effects on a broader population, the experiment was limited to unemployed individuals receiving benefits from the Social Insurance Institution (SII) due to political and time constraints (Verho et al., 2022). The SII provides flat-rate unemployment benefits to those ineligible for contributory unemployment allowances. Randomization occurred on 15 December 2016, with information sent on 28 December 2016. Participation was mandatory, supported by a law (Finnish Act (1528/2016)). Using nationwide data, the treatment and control groups were representative of the target population.

From an evaluation perspective, the FBIE can be characterized as an intervention program rather than a discrete intervention. It consisted of a set of rule changes and administrative simplifications applied uniformly to the treatment group over a two-year period. This program-like nature distinguishes it from narrowly defined, short-term interventions often studied in public health or education research.

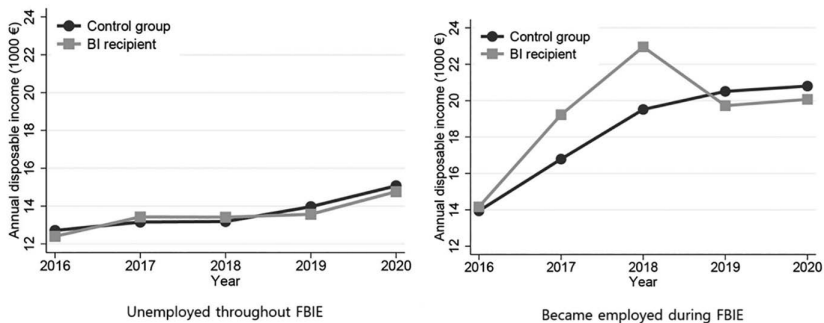
In terms of the research design, the Finnish Basic Income Experiment included many attractive features such as a truly randomized treatment assignment, full compliance, no attrition bias, and prospects for a rich set of

register-data linkages. The experiment is also listed in the American Economic Association's registry for randomized controlled trials (Hämäläinen et al., 2022). While employment was the primary outcome of the trial, there were multiple secondary outcomes listed in the pre-analysis plan including child-bearing, antidepressant drug purchases, and migration.

Despite the aforementioned advantages, challenges in the experiment's implementation pose limitations to analyzing the effect of the experiment. Budget and administrative limitations reduced the size of the treatment group, lowering statistical power. Additionally, the unemployment benefit reform implemented in 2018 tightened eligibility for receiving unemployment benefits. This directly impacted the control group mid-experiment, complicating interpretations of the outcomes in 2018 (Hämäläinen and Verho, 2022).

The experiment aimed to enhance economic incentives and minimize barriers to receiving benefits. Treatment group members were not required to seek employment or apply for benefits. They continued to receive the basic income even if they found work, without reductions in earnings. Unlike typical basic income proposals, the experiment maintained consistent taxation and stronger economic incentives.

Figure 16.1 shows financial outcomes for employed and non-employed participants, depicting annual disposable income (expressed in 2020 euros) trends for both groups during the FBIE. Employment by the end of 2018 signifies job acquisition during the experiment. Income levels for BI recipients who remained unemployed matched those of the control group, indicating that



Source: Authors' own calculations.

**Figure 16.1** Financial implications for basic income recipients by employment status during the Finnish Basic Income Experiment

basic income replaced equivalent unemployment benefits. Treatment group members who found employment during the experiment saw a disposable income rise of €5,900 compared to the control group.

In the control group, additional earnings reduced SII unemployment benefits. Prior analyses showed that basic income did not alter days in employment (Verho et al., 2022), but BI recipients had higher disposable income as their benefits stayed consistent, unaffected by employment hours.

The FBIE, offering a guaranteed income floor, resembled unconditional cash transfer (UCT) programs elsewhere but differed in not adding new cash inflows, setting it apart from other UCTs. The experiment eliminated means-testing, allowing recipients to retain benefits regardless of earnings. Unlike programs for specific family types, it was open to all within the target population, making it well-suited to assess basic income's effects on unemployed individuals (Widerquist, 2018).

## DATA AND METHODS

### Data

The data for this study were collected from three institutions: the Social Insurance Institution of Finland (Kela), Statistics Finland, and the Finnish Institute for Health and Welfare (THL), covering the years 2015–2020.

Data from these sources were linked at the individual level using personal identifiers within the secure remote access environment FIONA, administered by Statistics Finland.

Economic outcomes were derived from datasets maintained by Statistics Finland. Employment is defined as being employed at the end of the calendar year. Social assistance captures whether an individual received either regular or preventive social assistance at any point during the year. Disposable income refers to gross income—including earned income, entrepreneurial income, property income, and current transfers—minus taxes and other compulsory levies.

Information on treatment status, based on the randomized assignment to receive basic income, was obtained from Kela. Data on prescribed psychotropic medications were also retrieved from Kela and included purchases of reimbursed drugs under ATC codes N05A, N05B, N05C, N06A, and N06CA. Fertility outcomes were constructed from THL's Medical Birth Register, which includes detailed information on each childbirth in Finland, such as birthdates, estimated conception dates, and maternal characteristics. We focus on the timing of conception, rather than the date of birth, to assess the effects of basic income on fertility.

For men, fertility was measured by linking individuals to children born during the study period using biological parent-child linkages from population registries. Data on primary healthcare use were obtained from the Register of Primary Health Care Visits (AvoHilmo), from which we constructed a binary indicator for having any psychiatric primary healthcare contact.

For consistency, all outcomes were aggregated at the annual level. The yearly indicators include fertility (defined as any conception leading to a birth during the year), geographic mobility (including internal and international migration), use of psychiatric primary healthcare services, and purchases of prescribed psychotropic medications.

All recipients of basic income are included in these data (N=2,000) along with their control group (N=173,222). We excluded individuals with missing background characteristic values as of the end of 2016 and those outside the 25 to 58 age range (N=181). The final analytic sample includes 1,999 basic income recipients and 173,042 individuals belonging to the control group.

Table 16.1 presents selected average background characteristics of the study sample (i.e., all unemployment benefit recipients at ages 25–58 at the end of 2016) just before the start of the FBIE. The table also reports the same characteristics for the rest of Finland's population within the same age range.

Overall, we observe that the study population is very different from the rest of the population. This difference manifests as lower probabilities of graduating with the matriculation examination and having children, as well as lower income levels among the study population compared to the rest of Finland. All these differences were statistically significant, which means that the results from the experiment have a limited external validity outside its target population.

However, there are no statistically significant differences between the treatment and the control group in background characteristics aside from BI recipients being more likely to be receiving a (partially) means-tested labor market subsidy (LMS) than a non-means tested unemployment allowance as their minimum unemployment benefit. The labor market subsidy is for those unemployed without a work history or those who have received the unemployment allowance for the maximum period. About 48% of BI recipients were women and 25% of foreign origin. About three fourths lived in an urban residential area and a third did not have an educational degree beyond the compulsory level. Most of the studied individuals were living alone. About 15% were in a cohabiting relationship and 30% married. The average age at the start of the experiment was 40.6 years. The treatment group was as likely as the control group to have finished high school, to be born abroad, to have children in the household, and to have prior antidepressant drug prescription history. The average income levels between the two groups were also closely matched.

Table 16.1 Descriptive statistics of treatment and control samples

Variable	Rest of Finland	BI recipient	Control group	Est.	P-value	N
Labor market subsidy	NA	0.871	0.846	0.025	0.002	175,041
Age	41.738	40.807	40.447	0.361	0.110	175,041
Age 40+	0.563	0.516	0.504	0.012	0.290	175,041
Female	0.492	0.477	0.475	0.002	0.874	175,041
HH size	2.796	2.426	2.414	0.012	0.729	170,264
Born abroad	0.078	0.244	0.252	-0.008	0.394	175,041
Urban resident	0.720	0.758	0.759	-0.001	0.926	175,041
Finished high school	0.439	0.210	0.208	0.002	0.829	175,041
Annual income	34966	10586	10611	-24.8	0.793	175,041
Eq. disposable income	30449	16650	16858	-207.4	0.290	170,264
HH decile	6.291	2.643	2.700	-0.56	0.235	170,264
Has children	0.441	0.355	0.348	0.007	0.499	175,041

*Notes:* This table presents sample means for basic income recipients, the control group, and the rest of the Finnish population aged 25–58. It also reports the differences in sample means between the treatment and control groups, along with the associated p-values from the F-test. With the exception of age, annual income, equivalized disposable income, and household size, all other variables are binary.

## Empirical Approach

To investigate the impact of increased economic autonomy in the Finnish Basic Income Experiment, we used a linear probability model, estimated separately for three periods: the pre-experimental period (2015–2016), the experimental period (2017–2018), and the post-experimental period (2019–2020):

$$\mathbf{Y}_{i,p} = \alpha + X_i\beta + \delta_p BI_i + \dot{o}_{i,p} \quad (16.1)$$

where  $\mathbf{Y}_{i,p}$  represents a binary outcome variable measured during period  $p \in$  [years 2015–16, 2017–18 and 2019–20],  $BI_i$  indicates receipt of basic income,  $X_i$  is a vector of covariates of observed characteristics measured just before the experiment started, and  $\dot{o}_i$  summarizes the unobserved factors. We use robust standard errors clustered at the individual level. The coefficient  $\delta_p$  captures the causal estimate of receiving basic income. The random assignment of the treatment ensures that the causal estimate of receiving basic income can be retrieved from simply comparing averages between the treatment and the control group. However, to gain precision in the estimates, in the main regression estimates we use the following covariates: birth year, sex, indicator for urban residency, indicator for being born abroad, indicator for having children, indicator for receiving labor market subsidy, and education level (primary, secondary, and tertiary level) in 2016.

The pre-experimental period of 2015–2016 essentially serves as a placebo regression, and the expectation is not to find any statistically significant differences in the outcomes between the treatment and the control group during this period. The impact of receiving basic income is captured during the experimental period (2017–2018). Even if receiving basic income here means merely temporarily enhanced work incentives and reduced administrative barriers, we refer to impacts of basic income for simplicity.

One notable interpretational difficulty regarding the experimental period comes from the unemployment benefit reform, which was implemented in 2018. This widely criticized reform cut unemployment benefits if the unemployed had not participated in any active labor market programs in the last three months (Kangas & Kalliomaa-Puha, 2019). The reform also affected basic income recipients but only in the case where the recipient applied for unemployment benefits that exceeded the amount of the basic income. The impact of the 2018 unemployment benefit reform is likely to have had a larger impact on the control group because their incentives to seek work and participate in active labor market policies changed more (Verho et al., 2022). Thus, besides receiving basic income, the differences between the treatment group and control group were partially affected by the unemployment benefit reform.

This is likely to affect mostly employment-related outcomes and not so much other outcomes.

Moreover, we examine the post-experimental period to assess potential longer-term or delayed effects of the FBIE. Since participants were informed that the experiment would come to an end by the end of 2018, it is reasonable to expect that any changes observed during the experimental period might disappear afterward, with participants reverting to their prior trajectories once the intervention ended.

## RESULTS

Table 16.2 presents linear probability estimates along with robust standard errors for all 14 outcomes, individually assessed across the two distinct time periods. While certain demographic groups in many of the outcomes are likely to be more responsive (e.g., under 40-year-olds in fertility) than the full study population to BI, we consider Table 16.2 to describe the main lessons from the experiment.

First of all, the pre-experimental estimates in Table 16.2 confirm that at the baseline the treatment group and the control group are alike. In this placebo analysis, none of the six estimates are statistically significant at the 5% level. Overall, the pre-experimental period analysis suggests that the randomization procedure was truly random, and that the observed divergences in outcomes in the following periods can be attributed to the impacts of receiving temporary basic income in the FBIE.

During the experimental period (2017–2018), we observe that the probability of being employed increased by 2.8 percentage points, and average disposable income increased by €1,550—findings consistent with Verho et al. (2022). Basic income recipients were also 5.6 percentage points less likely to receive social assistance, which is in line with an improved financial situation for the treatment group. We find no statistically significant effects on fertility or geographic mobility. Regarding mental health outcomes, the probability of purchasing psychotropic medication and having psychiatric contacts in primary care decreased by 1.6 and 1.5 percentage points respectively. This finding aligns with previously reported results from the experiment (Hämäläinen et al., 2025), as well as literature on cash transfers and their positive impacts on mental health (Haushofer and Shapiro, 2016; Romero et al., 2021).

After the experiment ended, outcomes between the treatment and control groups largely converged, as expected given that the intervention did not substantially alter long-term economic conditions. However, one notable exception is that post-experimental disposable income was €350 lower in the treatment group compared to the control group. The employment rate and social assistance uptake returned to levels observed in the control group. Also, effects

Table 16.2 Impact of basic income on various measures of well-being

	Baseline mean	Pre-FBIE period: Est.	Pre-FBIE period: SE	FBIE period: Est.	FBIE period: SE	Post-FBIE period: Est.	Post-FBIE period: SE	N
Economic outcomes:	13167.0	-84.7	129.7	1548.9**	166.9	-348.0*	175.8	175,040
Disposable income								
Employed	0.128	-0.008	0.006	0.028**	0.009	-0.003	0.009	175,040
Social assistance	0.364	-0.008	0.01	-0.056**	0.01	-0.001	0.01	175,040
Social outcomes:	0.024	0.002	0.003	0.000	0.002	-0.003	0.002	175,040
Fertility								
Geographic mobility	0.225	-0.004	0.007	0.011	0.007	0.010	0.007	175,040
Mental health outcomes:	0.200	-0.008	0.008	-0.016*	0.008	-0.013	0.009	175,040
Psychotropic medication								
Psychiatric primary care	0.066	-0.004	0.005	-0.015**	0.004	-0.001	0.005	175,040

Notes: Linear probability model estimates for receiving basic income across three distinct time periods: the pre-experimental period (2015–2016), the experimental period (2017–2018), and the post-experimental period (2019–2020). The control variables included birth year, sex, indicator for urban residency, indicator for being born abroad, indicator for having children, indicator for receiving labor market subsidy, education level (primary, secondary, and tertiary), and taxable income in 2016. Standard errors were clustered at the individual level. Symbols \*, and \*\* refer to statistical significance—10%, 5%, and 1% of the point estimates relative to the reference group.

on psychiatric outcomes were no longer statistically significant, although the estimate for psychotropic medication use remained sizable in magnitude (-1.3 percentage points, or -6.5%).

We also analyzed heterogeneity in the effects by sex and age group. The reduction in social assistance receipts was substantially larger among men (-7.9 pp.) than among women (-3.1 pp.). This aligns with the employment outcome: male recipients of basic income saw a 3.6 percentage point increase in employment, while no statistically significant effect was found for women. The reduction in psychotropic medication use was also found in men (-2.5 pp.), with no significant change among women. For psychiatric primary care visits, the treatment effects were similar for both men (-1.6 pp.) and women (-1.5 pp.). Geographical mobility showed a suggestive increase among women (1.0 pp.) but not among men. Interestingly, after the experiment, geographic mobility remained significantly higher among women (1.9 pp.), while all other outcomes returned to their pre-experiment levels.

Heterogeneity analysis by age suggests that younger recipients were more responsive to receiving basic income. Participants under the age of 40 were more likely to be employed during the experiment (3.6 pp. vs. 1.8 pp.), less likely to receive social assistance (-7.7 pp. vs. -3.1 pp.), and less likely to have psychiatric primary care contacts (-2.5 pp. vs. -0.6 pp.) compared to the recipients aged 40 and older.

## DISCUSSION AND CONCLUSIONS

The Finnish Basic Income Experiment (FBIE) exemplifies the investment-intervention framework by demonstrating how experimental methods can assess and refine welfare policies. While social investment strategies emphasize long-term structural reforms, controlled policy trials like FBIE highlight the need for evidence-based interventions that address immediate social risks. The experiment provided robust evidence on both intended and unintended effects, showing that unconditional basic income in a well-developed welfare state does not significantly enhance employment or economic autonomy. However, the absence of strong negative effects is equally relevant for policymaking. Given the high fiscal costs, future discussions should critically evaluate basic income's feasibility relative to alternative policy solutions that balance proactive investments with targeted interventions.

Internationally, the evidence on basic income and similar cash transfer programs is diverse and context-specific. The Overseas Development Institute (ODI) report states that cash transfer programs in various low- and middle-income countries have led to significant positive impacts on savings, investment, and production (Bastagli et al., 2016). However, related evidence from developed countries is limited. This study summarizes the lessons from the

Finnish Basic Income Experiment. This experiment targeted unemployment benefit recipients aged 25–58, of whom 2,000 individuals were randomized to receive a guaranteed monthly income of €560 for two years. While labeled as a basic income experiment, rather than creating a cash influx for the treatment group, the experiment aimed to reduce the administrative burden on the target population—unemployment benefit recipients—and increase work incentives. Thus, the Finnish Basic Income Experiment serves as an example of the impacts of temporarily removing administrative barriers and increasing work incentives in a welfare state.

The general finding is that receiving basic income for two years had negligible effects on socio-economic outcomes but improved mental health. However, these effects largely faded away once the experiment ended. A likely mechanism is the increased economic autonomy, reflected by increased disposable income arising from the participation tax rate during the experiment. Once this income channel ceased after the experiment ended, the outcomes mostly reverted to the paths of the control group. The results imply that the extent to which the FBIE increased economic autonomy during the two-year experiment was not enough to nudge the unemployed to increase employment or to create other considerable changes in life (such as in geographic mobility or childbearing decisions) but was likely to create temporary psychological relief.

The decline in psychotropic medication purchases during the experimental period—particularly among men and younger recipients—raises important questions about its underlying causes. Does the reduction signal improved mental well-being from reduced stress and greater autonomy, or could it reflect reduced access to care, changes in treatment practices, or affordability issues? Work by Hämäläinen et al. (2025) provides a strong argument that the reduction reflects genuine improvements in mental health and not disengagement from care. In Finland's universal healthcare system with generous reimbursement for psychotropic drugs, structural or financial barriers are unlikely explanations. The effect was specific to mental health medications—with no similar decline in other drug categories—and supported by suggestive reductions in mental health-related specialty care. Notably, the decline was strongest among those without prior psychotropic use, pointing to a possible preventive impact. The timing of the effect and its specificity further support the interpretation that basic income improved psychological well-being rather than reduced access to treatment.

Our results on fertility differ from those reported in a prior study which found a negative effect of the experiment on female recipients and a positive fertility response among their spouses (Simanainen, 2025). The prior study employed a different methodological approach, focusing on cumulative fertility, using a restricted analytic sample of individuals under the age of 44.

Also, the outcomes were constructed based on maternity grant data rather than actual information on births.

While we acknowledge that our choice of sample and statistical methods may not be ideally suited to detect subtle fertility effects, we argue that fertility is among the most challenging outcomes to study in the context of this experiment. Childbirths are rare within the experiment's short timeframe and occur predominantly among individuals under the age of 40, effectively halving the already limited sample. Overall, the discrepancy between our findings and the earlier results underscores the importance of clearly defined pre-analysis plans in social experiments—specifying analytical sample construction, outcome definitions, choice of control variables, empirical methods, and conducting power analyses not only for primary but also for secondary outcomes.

Our results and experiences from the Finnish Basic Income Experiment provide valuable lessons for other countries considering similar policies. These lessons contribute to the ongoing policy debate on the viability of basic income schemes, offering guidance on designing and implementing such programs effectively in different socio-economic environments.

## REFERENCES

- Acemoglu, D. (2019). Why universal basic income is a bad idea. *Project Syndicate*.
- Bastagli, F., Hagen-Zanker, J., Harman, L., Barca, V., Sturge, G., Schmidt, T., & Pellerano, L. (2016). Cash transfers: what does the evidence say. *A rigorous review of programme impact and the role of design and implementation features*. London: ODI, 1(7), 1. <https://media.odi.org/documents/11316.pdf>
- Bergsvik, J., Fauske, A., and Hart, R. K. (2021). Can policies stall the fertility fall? A systematic review of the (quasi-) experimental literature. *Population and Development Review*, 47(4), 913–964. <https://onlinelibrary.wiley.com/doi/10.1111/padr.12431>
- Cesarini, D., Lindqvist, E., Östling, R., & Wallace, B. (2016). Wealth, health, and child development: Evidence from administrative data on Swedish lottery players. *The Quarterly Journal of Economics*, 131(2), 687–738.
- Cowan, S. K., & Douds, K. W. (2022). Examining the effects of a universal cash transfer on fertility. *Social Forces*, 101(2), 1003–1030. doi:10.1093/sf/soac013
- De Wispelaere, J., Halmetoja, A., & Pulkka, V.-V. (2019). The Finnish Basic income experiment: A primer. In M. Torry (Ed.), *The Palgrave international handbook of basic income* (pp. 389–406). Springer International Publishing. doi:10.1007/978-3-030-23614-4\_20
- Dökmeci, T., Rainer, C., & Schneebaum, A. (2023). Economic security and fertility: Evidence from the Mincome experiment. *Canadian Public Policy*, 49(2), 136–161. doi:10.3138/cpp.2022-063
- Forget, E. L. (2011). The town with no poverty: The health effects of a Canadian guaranteed annual income field experiment, *Canadian Public Policy*, 37(3), 283–305. doi.org/10.3138/cpp.37.3.283
- Gardner, J., & Oswald, A. J. (2007). Money and mental wellbeing: A longitudinal study of medium-sized lottery wins. *Journal of Health Economics*, 26(1), 49–60.

- González, L., & Trommlerová, S. K. (2023). Cash transfers and fertility: How the introduction and cancellation of a child benefit affected births and abortions. *Journal of Human Resources*, 58(3), 783–818. doi:10.3368/jhr.59.
- Haushofer, J., & Shapiro, J. (2016). The short-term impact of unconditional cash transfers to the poor: Experimental evidence from Kenya. *The Quarterly Journal of Economics*, 131(4), 1973–2042.
- Hämäläinen, K., Kanninen, O., & Verho, J. (2022, 30 March). Finnish basic income experiment. Pre-analysis plan. AEA RCT Registry. <https://doi.org/10.1257/rct.2095-4.1>
- Hämäläinen, K., Simanainen, M., & Verho, J. (2025). Health effects of cash transfers: Evidence from the Finnish Basic Income Experiment. *Journal of Public Economics*, 250, 105480. <https://doi.org/10.1016/j.jpubeco.2025.105480>
- Hämäläinen, K., & Verho, J. (2022). Design and evaluation of the Finnish Basic Income Experiment. *National Tax Journal*, 75(3), 573–596. doi:10.1086/720737
- Hirvonen, S., Schafer, J., & Tukiainen, J. (2024). Policy feedback and voter turnout: Evidence from the Finnish Basic Income Experiment. *American Journal of Political Science*, 69, 1388–1405.
- Hoynes, H., & Rothstein, J. (2019). Universal basic income in the united states and advanced countries. *Annual Review of Economics*, 11, 929–958.
- Kangas, O., Jauhainen, S., Simanainen, M., & Ylikännö, M. (Eds.) (2021). *Experimenting with unconditional basic income: Lessons from the Finnish BI Experiment 2017–2018*. Edward Elgar Publishing.
- Kangas, O., & Kalliomaa-Puha, L. (2019). The ‘activation model’ in the Finnish unemployment protection system. Tech. Rep. 2019/05. European Commission.
- Lindahl, M. (2005). Estimating the effect of income on health and mortality using lottery prizes as an exogenous source of variation in income. *Journal of Human Resources*, 40(1), 144–168.
- Milligan, K. (2005). Subsidizing the stork: New evidence on tax incentives and fertility. *Review of Economics and Statistics*, 87(3), 539–555. <https://doi.org/10.1162/0034653054638382>
- Natili, M. (2019). Worlds of last-resort safety nets? A proposed typology of minimum income schemes in Europe. *Journal of International and Comparative Social Policy*, 0(0), 1–19. doi:10.1080/21699763.2019.1641134
- Romero, J., Esopo, K., McGuire, J., & Haushofer, J. (2021). The effect of economic transfers on psychological well-being and mental health. *Mimeo*.
- Simanainen, M. (2024). How an increase in income affects the use of dental care services among a low-income population: Evidence from the Finnish basic income experiment. *BMC Health Services Research*, 24(1), 499.
- Simanainen, M. (2025). How changes in cash transfers can affect childbearing among low-income women: Evidence from the Finnish basic income experiment. *European Journal of Population*, 41(1), 9.
- Simeonova, E., Akee, R., & Jones, M. R. (2024). Tribal casinos and identifying who moves to opportunity. *AEA Papers and Proceedings*, 114, 435–441.
- Verho, J., Hämäläinen, K., & Kanninen, O. (2022). Removing welfare traps: Employment responses in the Finnish basic income experiment. *American Economic Journal: Economic Policy*, 14(1), 501–522. doi:10.1257/pol.20200143

- Widerquist, K. (2018). *A critical analysis of basic income experiments for researchers, policymakers, and citizens*. Springer International Publishing.
- Yonzan, N., Timilsina, L., & Kelly, I. R. (2024). Economic incentives surrounding fertility: Evidence from Alaska's permanent fund dividend. *Economics & Human Biology*, 52, 101334. doi:10.1016/j.ehb.2023.101334