

## 5. Evaluation of the experiment

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### INTRODUCTION

The aim of the Finnish basic income experiment was to provide information for the coming social security reforms and to test a new type of social security benefit that would better meet the challenges of the future labour market. From the outset, the idea was to run a randomised controlled trial that could be reliably evaluated.

Randomised controlled trials have been used in medicine for several decades to examine the effects of various medicines. In addition, randomised controlled trials have become widespread in development economics, and they have extended over the social sciences. Randomised controlled trials conducted in natural settings are often called field experiments. Randomised controlled trials are utilised in cases where it is unclear what the actual effect would be and whether a treatment, such as development programmes, is effective (Gerber and Green, 2012; Glennerster and Takavarasha, 2013). Trials can also be informative for policy implementation because costs and risks are significantly lower in an experiment organised in a small scale than in a full-scale implementation process (Haynes et al., 2012).

In real life, we cannot observe both outcomes for the same individual simultaneously with and without treatment. In other words, we cannot observe the counterfactual. Units of the target group, such as individuals or villages, are divided into groups in a randomised controlled trial. The assignment to the treatment and control groups is random, ensuring that the average effect of the treatment can be evaluated. The treatment and control groups have no systematic differences affecting the results, which imitates the counterfactual. In addition, the effects of external factors, such as economic fluctuations, can be excluded. As a result, randomised controlled trials allow causal inferences to be made. When the treatment and control groups are identical at the beginning of the experiment, the observed difference between the groups is attributed to

the treatment (Gerber and Green, 2012; Glennerster and Takavarasha, 2013; Haynes et al., 2012).

In the case of the Finnish basic income experiment, the group that received basic income was randomly assigned from the entire target group. The treatment group would suffer from selection without the random assignment. If the treatment group was participating on a voluntary basis, the group would be biased, probably consisting of more active individuals. The randomised controlled trial and these two groups provide an excellent basis for the evaluation of the Finnish basic income experiment. Naturally, several practical matters emerged in the evaluation process, and the aim of this chapter is to describe the process. Nevertheless, the experiment provided information that would not have been yielded without the experiment.

The evaluation comprises several studies that explored the experiment and basic income from different perspectives with a rich set of data sources. First, the employment effect of basic income was evaluated using a register-based statistical analysis. Second, possible impacts of the experiment on subjective well-being were analysed by examining survey data collected towards the end of the experiment. Third, a qualitative study based on many in-depth interviews with basic income recipients described the details of everyday life in relation to basic income. Finally, the media coverage of the basic income experiment and public opinion on basic income were analysed in two additional studies.

This chapter is organised as follows. First, the evaluation process and data sources are described. Then, we consider the possible pitfalls of the data collection and evaluation process. Finally, the lessons learned from this process are summarised.

## EVALUATION PROCESS

A randomised controlled trial consists of several phases. Planning (see Chapter 3) and implementation phases are followed by an evaluation. From the outset, scientific evaluation of the Finnish basic income experiment was part of the project since the aim was to provide empirical evidence for future social security reforms. The evaluation and data collection phases for research purposes had been designed in the planning phase prior to implementation. The research ethics committee of the Social Insurance Institution of Finland (Kela) had also conducted an ethical review of the survey and interview protocols before starting the evaluation phase. The committee emphasised accurate information letters, voluntary participation in the data collection, good data management practices, regulations on archiving and reusing the data.

The evaluation process started in 2018 when the survey was conducted, and register data from the first year of the experiment (i.e. 2017) were collected. The preliminary report (Kangas et al., 2019) was published in February 2019

shortly after the end of the experiment. Employment effects from the first year of the experiment and preliminary survey results on well-being were presented in the report. The results of the entire experiment period were not available due to time lags in the availability of register data. Some of the registers provided real-time data. Benefit payments could have been observed instantly. However, registers on employment and income were available for research purposes not before the second half of 2019.

After the preliminary report, the research team continued with further survey data analysis. Several indicators of survey data were examined more thoroughly. The register data from the entire duration of the experiment were collected, and the employment effect was analysed. Qualitative interviews were conducted after the experiment. The final report (Kangas et al., 2020) was published in Finnish in May 2020, containing all sub-studies of the evaluation. In addition, the VATT Institute for Economic Research has reported results on employment, participation in active labour market policy measures, benefit take-up, and income in two separate reports (Hämäläinen, Kanninen, Simanainen and Verho, 2019; 2020). Eventually, register data will be available via Statistics Finland and the survey data via the Finnish Social Science Data Archive.

The evaluation of the basic income experiment was conducted by the Social Insurance Institution of Finland (Kela) together with the VATT Institute for Economic Research, University of Turku, University of Helsinki, Labour Institute for Economic Research, the Finnish Association for Mental Health, and think tank Tänk. Some of the institutions and researchers participated in the planning phase, but new researchers joined the evaluation team. The Ministry of Social Affairs and Health funded and steered the evaluation project.

## SEVERAL DATA SOURCES

### **Register Data and Employment Effects**

The focus of interest in the evaluation was how basic income affects employment. In Finland, the extensive register data on income, benefit reciprocity, and use of public services provide fruitful possibilities to carry out register-based analyses. Registers enable analysis before, during, and after the experiment since they are collected frequently and stored permanently. All individuals permanently residing in Finland are identified by their individual identity (ID) code in all official registers. Therefore, separate administrative registers can be easily linked with this ID code, and new research can be carried out after the experiment. Register data collection does not rely on individuals' possibilities or motivation to participate in the data collection process. All 2000 participants in the basic income experiment and the entire control group of 173 000 persons

were included in the register data because the administrative registers are statutory and are compiled in any case.

Register data from Kela, Finnish Centre for Pensions (ETK), local Employment and Economic Development Offices, Finnish Tax Administration, and the Population Register Centre were collected (Table 5.1). These registers contain information on general demographic variables, receipt of social security payments, employment, income, and participation in active labour market policy measures. Eventually, an accurate and detailed database was compiled, including both treatment and control groups.

*Table 5.1 Register data sources and their contents*

Register	Data
Social Insurance Institution (Kela)	Target population of the experiment Basic income payments and spells Social security benefits
Finnish Centre for Pensions (ETK)	Employment spells
Local Labour Offices	Registration as a job seeker Participation in active labour market policy measures
Finnish Tax Administration	Income from employment Other taxable income
Population Register Centre	Demographic variables

The target population was randomly assigned to the treatment and control groups, which enabled the identification of the causal effect of basic income on selected outcomes. The evaluation was designed prior to the experiment, and the outcome variables were selected in the pre-analysis plan, RCT ID: AEARCTR-0002095 (Hämäläinen, Kanninen and Verho, 2019). The analysis was documented in this plan to increase reliability and to avoid problems of testing several outcome variables. Testing multiple outcomes increases the risk of obtaining statistically significant effects by accident. The primary outcome was the number of days in employment between 1 November 2017 and 31 October 2018. Secondary outcomes were annual earnings, take-up of social security benefits, and enrolment in employment services. Owing to the multiple testing, the results of the secondary outcomes are less reliable (Hämäläinen et al., 2020).

According to the results, the employment effect was modest. Basic income increased employment for six days over a one-year period (Hämäläinen et al., 2020). The employment effect was somewhat heterogeneous. When the effect was estimated for sub-groups, the basic income increased employment the most in groups of foreign language speakers and families with children.

In addition, the participants remained as customers of local Employment and Economic Development Offices and participated in active labour market policy measures almost as actively as prior to the experiment, although basic income was unconditional.

### **Well-being Indicators Measured in Target Group Survey**

Official registries do not capture some aspects that are relevant in understanding basic income and its effects, for example, subjective well-being and the personal experience of participating in the experiment. In order to capture some of these more subjective aspects, a survey was carried out. The survey focused on social and financial well-being, subjective health, trust and confidence as well as attitudes towards basic income. For example, life satisfaction is a relevant factor of overall well-being, and health is a determinant of employment. Aspects of well-being are prominent in basic income discussions. Analysing health and well-being indicators was also highlighted by the parliamentary committee during the law-making process.

For comparative purposes, questions from international and large national surveys of well-being were chosen for our survey (European Social Survey, the International Social Survey Programme, the European Union Survey on Income and Living Conditions, and the Regional Health and Well-being Study ATH). Thus, the questions used in the survey had been mainly approved in previous studies, and we have plenty of comparative data. The survey results on health and well-being, financial well-being, bureaucracy, trust, confidence, and opinions on basic income are reported in this book.

The survey was targeted at 2000 recipients of basic income and at a sample of 5000 persons in the control group. These individuals were contacted with an information letter about the survey following the survey, which was conducted through a phone interview from October–December 2018. In total, 3970 persons out of 7000 were reached, and 1633 agreed to participate in the survey; in total, 586 were from the treatment group, and 1047 were from the control group (Table 5.2). Participation in the survey was entirely voluntary for both groups. The response rate was low, being 31 percent in the treatment group and 20 percent in the control group, which is not exceptional in survey studies.

Owing to the low response rate, we cannot exclude the possibility of attrition and non-response bias. Individuals speaking a foreign language as their mother tongue as well as those in age categories under 45 years were underrepresented (Table 5.2). Around 25 percent of the target group spoke a foreign language as their mother tongue, whereas the proportion of this group was more than 10 percentage points lower in the survey data. In the target group, the proportion of individuals 45 years or older was less than 40 percent, but in the survey the proportion was over 40 percent.

*Table 5.2 Demographic characteristics of the target group, survey respondents and in the re-weighted survey data*

	Target group		Respondents		Respondents (re-weighted)	
	Treatment	Control	Treatment	Control	Treatment	Control
Labour market subsidy	87.2%	84.6%	85.2%	83.2%	86.9%	83.6%
Woman	47.8%	47.5%	47.6%	48.2%	48.1%	45.6%
Age:						
–34	33.5%	35.1%	31.6%	28.7%	33.4%	35.8%
35–44	27.5%	27.1%	25.4%	23.8%	27.3%	27.0%
45–	39.1%	37.7%	43.0%	47.5%	39.3%	37.2%
Married	35.0%	34.1%	31.6%	33.4%	33.7%	33.6%
Foreign language	24.6%	25.4%	13.3%	9.6%	23.1%	24.6%
Number of observations	2000	173222	586	1047	586	1047

Due to the non-response-bias, the survey data were re-weighted with a response probability model. Personal characteristics, such as gender, age category, marital status, mother tongue, unemployment benefit, and region of residence, were included in the model, and weights were calculated.

Background variables of the target group, survey respondents, and re-weighted data are presented in Table 5.2. The background variables show that the re-weighted data are similar to the original target group. The re-weighted data were used in all analyses included in this book.

### **Other Data Sources**

More in-depth information was collected via face-to-face interviews after the experiment. By collecting interview data, we can answer some of the unanswered questions and understand unexpected results yielded by other sub-studies. The interview invitation and informed consent form were delivered to 988 basic income recipients after the end of the experiment. In total, 106 informed consent forms were returned, and 81 participants were interviewed between February and June 2019. Interviews were semi-structured, enabling participants to freely discuss several themes and their own experiences. The three main themes were: (1) general life situation and well-being; (2) unemployment, work, and bureaucratic encounters; and (3) experiences as a basic income experiment participant. Chapter 12 illustrates how labour, work, and action modalities are reflected in participants' own experiences.

We were also interested in the media coverage of the Finnish basic income experiment both internationally and nationally, in particular, how Finnish and the international media have framed the Finnish basic income experiment. The data contain 348 online news articles published in Finnish online newspapers and 48 news articles published in international online newspapers from 2016 to 2019. Many of the articles are short but include extensive reportage, editorials, columns, and opinion pieces. The selected articles, which were from internationally well-known media outlets, were mainly published in English. The study on media coverage is reported in Chapter 13.

As the interest was also in the opinions on basic income, we conducted two phone surveys from February–March 2020. In both surveys the survey sample was representative of the total Finnish population. The two population surveys explored the support for basic income in Finland by collecting data that complement previous opinion surveys. Chapter 11 describes how income inadequacy, insecure employment relations, and attitudes to societal problems are associated with the propensity to support or oppose basic income in Finland.

## ASSESSING THE EVALUATION STUDY

The Finnish basic income experiment was designed as a randomised controlled trial. Randomisation enables the avoidance of several pitfalls, but field experiments are not conducted in a laboratory environment. When evaluating an experiment, we need to keep in mind that several factors can affect the results. Experiments have also encountered criticism. Economic trends occurring simultaneously with the experiment also affect the results. GDP and employment rate increased in Finland during the experiment, but we can assume that this trend affected both the treatment and control groups, which is an advantage in nationwide experiment.

In randomised controlled trials, non-compliance and partial compliance are possible threats (Gerber and Green, 2012; Glennerster and Takavarasha, 2013). In other words, individuals randomly assigned to the treatment group may not participate or participate only partially in the programme. In those cases, exposure to the treatment decreases in the treatment group, hindering the benefits of randomisation. In the Finnish basic income experiment, individuals allocated to the treatment group were not allowed to opt out since participation was obligatory. Some statuses, such as receiving a pension or moving abroad, disallowed the basic income payments, but the number of these cases was small. By the end of the experiment, only 94 individuals had discontinued their participation, but everyone else received a monthly basic income. Due to obligatory participation and a small number of discontinuations, non-compliance did not pose a problem in the evaluation of this experiment.

Another threat in evaluation is attrition, which means that the outcome cannot be measured for all participants because some refuse to take part in the data collection process (Gerber and Green, 2012; Glennerster and Takavarasha, 2013). In this experiment, the primary outcome was observed from the register data that contained all individuals in the treatment and control groups and thus did not suffer from attrition. Attrition is a more significant problem when the survey data are at stake.

The response rate of the survey was low, 31 percent in the treatment group and 20 percent in the control group, indicating that we cannot exclude problems caused by attrition. The two groups are randomly assigned in the register data, but this is not the case with the survey data. A low response rate reduces comparability of the treatment and control groups. However, it is possible to analyse and correct attrition by linking survey data with registers that contain objectively measured covariates. As described above, the survey data were re-weighted, but the survey results need to be interpreted with caution. We compared two groups and avoided making causal claims when interpreting the results. Eventually, the survey data contained subjective indicators of health and well-being that complemented the evaluation and allowed us to observe different aspects of basic income.

The experiment itself may have affected the participants in several ways (Glennerster and Takavarasha, 2013; Widerquist, 2018). Individuals in the treatment group were aware that they were participating in the basic income experiment since they received an information letter at the beginning of the experiment. In addition, the payment date of benefits changed. The control group was not informed about the experiment, but they could have found out since the information on the target group criteria was publicly available. The basic income experiment gathered significant media attention, and a small number of participants gained publicity in several news articles. However, the research team avoided contacting the participants during the experiment to ensure that the participants were not reminded of the experiment. The aim was to investigate the effect of basic income, not the effect of participating in this experiment. An information letter on the experiment was delivered to the treatment group in December 2016, and the survey was conducted from October–December 2018, taking place at the end of the experiment. No other contacts occurred.

The treatment group knew that they were participating in the study. Therefore, they might have changed their behaviour and acted differently because they were under evaluation. This phenomenon is called the Hawthorne effect (Glennerster and Takavarasha, 2013; Widerquist, 2018). The aim of the experiment, which was to improve employment, was announced publicly. Therefore, it is possible that the treatment group knew what the expectation was. For example, if they were thankful for being in this experiment and



wanted to promote basic income, they might have increased their job search effort. From the register data, we learned that the employment effect was eventually modest. The survey data might have been distorted by the same Hawthorne effect, and the survey itself might have affected their behaviour and responses. Interestingly, the in-depth interviews provided insight into the experiences of the basic income recipients; thus, we are able to gain some insight into how the participants felt that they were affected by the experiment.

This experiment cannot provide evidence on general equilibrium effects or community effects. In addition, the two-year duration of the experiment was predetermined, and the participants were aware of this fact. After this experiment, we do not know what would happen in the labour market between employers and employees if the basic income was implemented in Finland. The number of participants was limited, and these participants were located around the country. The two-year duration does not allow the evaluation of the long-term effects of permanent implementation of basic income.

Community effects have been emphasised in basic income literature (Widerquist, 2018). Regional experiments would have provided more information about the effects of basic income on the local labour market and regional economy. When basic income is experimented or implemented in a community, there are also feedback effects. These feedback effects can either similarly affect or counteract the effects at the individual level. In the evaluation of this experiment, we analyse the effects of basic income at an individual level.

### **Activation Model**

Introducing the activation model in 2018 was a major policy reform during the experiment, and it affected the target group asymmetrically by increasing the conditionality of the unemployment benefits. This is not in accordance with the standard principles of field experiments. In addition, the activation model sparked a major public debate on conditionality and working while receiving an unemployment benefit. Basic income and conditional unemployment benefits are, to some extent, opposite social security models, although they both aimed to increase employment, particularly in the Finnish context. The activation model was abolished at the end of 2019.

According to the activation model, an unemployed individual had to either find employment for 18 hours in a three-month observation period, receive entrepreneurial income of at least €241, or participate for five days in a training course or other services offered by the employment offices. If the condition was not met, the unemployment benefit was cut by 4.65 percent for the next three months. The control group was affected by the activation condition if they received an unemployment benefit. In contrast, basic income remained

unconditional. Individuals receiving only a basic income did not have to meet the conditions, and the basic income was not cut. Some of the basic income recipients applied and received unemployment benefits, especially child and activation supplements. At the end of the first year of the experiment, the share of those in the control group who applied for unemployment benefit was about 63 percent, and in the treatment group the share was around 47 percent (Hämäläinen, Kanninen, Simanainen and Verho, 2019 and 2020). The activation model affected these participants and supplements.

The activation model might have affected the results in several ways, thus complicating the interpretation of the results. On the one hand, the possible employment effect of basic income would be reduced if the conditionality increased employment in the control group. On the other hand, the activation model encouraged participation in active labour market policy measures. Due to the lock-in effect, increased participation in these measures could also reduce the job search effort and employment of the control group.

The employment effects of both the activation model and basic income were modest. The results showed that the employment of the control group did not increase above that of the treatment group (Hämäläinen et al., 2020), and the employment effect of the activation model on the unemployed receiving a basic unemployment benefit and labour market subsidy was small (Kyyrä et al., 2019). The survey was conducted in autumn 2018; thus, we cannot exclude the role of the activation model in those results. The treatment group knew that they were better off, which might have increased their well-being, whereas the activation model might have negatively affected the well-being of the control group.

## LESSONS LEARNED

The Finnish basic income experiment showed that it is possible to plan, implement, and evaluate a nationwide randomised controlled trial. The randomised controlled trial, and especially this experiment, has some caveats because the setting was not ideal. The planning phase was substantial, but still, the time frame was limited. However, the experiment has several features accompanied by multiple datasets, which enable scientific evaluation. This experiment has already provided information on basic income that would have been impossible to obtain otherwise.

The experiment was planned together with ministries and policymakers. Therefore, some choices were not based on scientific principles but were a compromise between practical and scientific arguments. Constitutional preconditions and budgetary constraints also needed to be considered. In Finland, this experiment was the first field experiment in which participation was obligatory. Therefore, many practicalities and legislative matters were

dealt with for the first time, as described in Chapter 4. Planning and conducting a field experiment entails public servants and policymakers having knowledge on experiments.

In this book, we present a variety of sub-studies that evaluate the Finnish basic income experiment. This chapter aims to describe the process of scientific evaluation, several data sources, as well as the strengths and weaknesses of the research design. Thus, the results presented can be interpreted from different perspectives.

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