

Does counseling lead to welfare exit? - Evidence from a welfare-to-work experiment *

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Abstract

With public income transfers being a substantial part of the state budget in many developed economies, a continued effort to manage the number of those dependent on such transfers is necessary. This need has resulted in a number of randomized experiments specifically targeted towards welfare recipients. This article investigates how to increase the exit rate from welfare, by analyzing an experiment consisting of frequent counseling meetings. The article demonstrates that the initiative, rather than stimulate job search, instead causes participants to leave the labor force. The frequent contact to a caseworker may serve as a facilitating mechanism for this outcome.

JEL-Classification: C21, J2, J6, J7

Keywords: *Social assistance, welfare, randomized trials, ITT*

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1 Introduction

Because several studies focus on effects of interventions aimed at insured unemployed individuals, one segment is often overlooked when discussing active labor market policies. This more disadvantaged group consists of unemployed individuals without the right to unemployment insurance (UI) benefits, often without any prospects of finding a job, and therefore at risk of social marginalization. They may be either long-term unemployed who have exhausted their UI benefits and receive public income transfers such as social assistance or welfare as a substitute. Alternatively, it may be that they have never had strong ties to the labor market and therefore were never qualified for UI benefits. A wide array of arguments warrant the investigation of efforts targeted toward individuals with weak labor market ties. Not only is sustaining individuals costly; sustaining individuals where no future net gain can be expected is particularly costly for society, as such individuals most often are unable to contribute with e.g. tax payments in return. Welfare recipients also experience high personal costs in terms of lowered health levels, and potential psychological issues. All problems which in turn may result in further increased expenses for society in terms of increased health care expenditures.

The aim of this paper is to use a randomized experiment¹ tailored specifically to welfare recipients to shed light on how long-term unemployed individuals may be (re)introduced to the labor market by means of increased counseling. The experiment, which forms the basis of this study, was conducted in 2008 and consisted of intensified frequencies of counseling meetings with an assigned caseworker. This study furthermore follows the participants for 195 weeks after the start of the intervention, thereby allowing for the investigation of long-term outcomes such as employment, self-sufficiency, disability pension, and continued welfare reciprocity. This type of experimental intervention has several benefits. Through a sequence of meetings with a caseworker, the skill levels as well as the general employability of the unemployed individuals are thoroughly assessed. Moreover, having to attend weekly meetings while unemployed also means having to commit. As such, the leisure benefit of being unemployed is reduced by requiring the individuals to get out of their homes and show up at a specific time every week for six months. This reduction of leisure, however, is to a much lesser extent than with activation or on-the-job training.

Hypothesizing that the regular contact with a professional individual may lead to reduced search costs is straightforward. However, the outcome obviously does not hinge solely on regular contact between the caseworker and the unemployed individual. The caseworker's ability to match the skills of the individual with suitable vacancies is important, as well as the caseworker's dedication to assist with job search. If either the supply of vacancies or the employability of the individual is of a nature, where a match is made difficult, meeting attendance may prove counter-effective. It may be argued that

¹Throughout the paper, I refer to the experiment as a randomized trial or randomized experiment. Since the experiment is not a lab experiment, I refrain from using the term randomized *controlled* trial.

requiring unemployed individuals without real employment prospects to attend employment-oriented meetings, may leave the unemployed feeling discouraged rather than helped. This expectation is supported by Dorsett and Oswald (2014) who examine the individual well-being effects of a randomized trial consisting of interventions aimed at disadvantaged groups. They find that, contrary to the expectation, such interventions may contribute to exacerbating the (already low) levels of well-being and over-all quality of life. A possible explanation may be that the intervention may contribute to creating unrealistic expectations, resulting in an increased sense of discouragement when not fulfilled. Several other studies show that long-term unemployment may lead to social marginalization, mental and physical health issues, lowered self-esteem, and long-term financial problems. Björklund and Eriksson (1998) show that unemployment is associated with deteriorating mental health, and Winkelmann and Winkelmann (1998) find evidence from Germany that non-pecuniary effects arising from unemployment exceed the adverse effects stemming from the associated loss of income.

This paper adds to a growing literature focusing on various labor market policies aimed at the less advantaged group of unemployed individuals.² Numerous studies analyze how welfare recipients are affected by welfare-to-work programs, and the existing literature generally reports positive effects of such programs. However, the interventions previously analyzed are predominantly activation-based, see e.g. Besley and Coate (1992), Moffitt (1996), Dyke et al. (2006), Lorentzen and Dahl (2005), or consist of subsidized employment programs, see e.g. Card and Hyslop (2005) or Card and Hyslop (2009). Besley and Coate (1992) demonstrate that there are both short- and long-term effects of activation-based programs. In the short run, they find that welfare recipients are prompted to either leaving welfare or refraining from entering, as the perceived cost of being on welfare is increased by the mandatory program. In the longer run, activation-based programs may even provide incentives for making choices that will limit the risk of entering welfare as welfare appears a less appealing alternative to work. Similar findings are reported by Moffitt (1996) and Dyke et al. (2006). Analyzing heterogeneous effects in welfare-to-work programs, Dahlberg et al. (2009) present evidence of positive effects of mandatory activation programs, particularly for younger individuals and non-western immigrants. Distinguishing between types of intervention, Bolvig et al. (2003) evaluate the effect of employment and training initiatives on the duration dependence of social assistance. They find positive evidence of employment measures while training measures have negative effects on the exit from social assistance. Jahn and Rosholm (2013) evaluate the effect of temporary agency employment for immigrants in Denmark on the probability of finding regular employment and find positive results. Finally, evaluating how caseworker counseling may contribute to assisting unemployed workers over the age of 50 in finding employment, Boockmann and Brändle (2015) find positive effects.

²For excellent studies on the general effects of active labor market policies, see e.g. Card et al. (2015) or Kluge (2010).

This paper makes a considerable contribution to the existing literature. First, it exploits access to data gathered from a randomized trial, which allows for the straightforward identification of the causal effect of interventions aimed at welfare recipients. Furthermore, it adds to the literature by exploiting an intervention different from those previously studied. While the existing literature focuses on activation or employment subsidy programs, the intervention analyzed in this paper consists of relatively cost-effective increased counseling thereby adding to the knowledge of the effectiveness of different types of interventions.

The main finding of the paper is that while the experiment appears to slightly decrease the fraction of individuals on welfare, participants increasingly transition into disability pension suggesting that there is no real net benefit of the intervention. Non-western participants are quite surprisingly found to have a slightly higher probability of entering employment, while individuals under the age of 40 in general have the best employment probabilities. Individuals with more than two years on previous income transfers are significantly more likely to go on disability pension.

The remainder of this paper is organized as follows: Section 2 explains the setup of the experiment, section 3 presents the data and the institutional settings, the identification strategy and methodological approach are presented in section 4, section 5 presents the main results and robustness checks, and section 6 discusses and concludes.

2 The experiment

Purpose and design

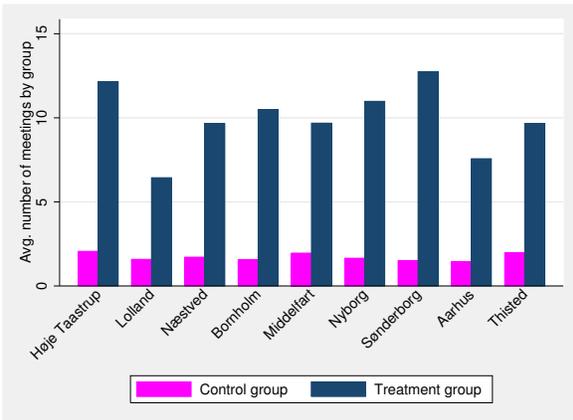
The Danish labor market authorities frequently conduct randomized trials in order to provide empirical evidence for the effect of various initiatives. The randomized trial forming the foundation of this paper was named “Everyone back to work” and was aimed at welfare recipients above the age of 29 and with at least 26 consecutive weeks on social assistance prior to the start of the experiment. This experiment was largely inspired by two other randomized trials from 2005 and 2008 respectively, “Quickly back to work 1 & 2” (QB1 & 2), which were both aimed at insured unemployed. QB1 and QB2 also included more frequent meetings, which have been shown to decrease the individual unemployment duration, see e.g. Vikström et al. (2013), Graversen and Van Ours (2008), and Maibom et al. (2016).

The present experiment was conducted in nine of the 91 job centers. Within each job center, the desired population would be evaluated in order to sort out individuals who were not eligible for the experiment. Excluded individuals included persons on maternity leave, individuals receiving welfare as a substitute for disability pension, long-term sick-listing, employment or maternity leave to begin

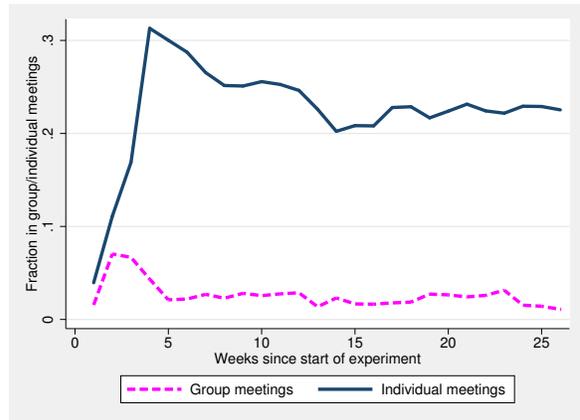
within four weeks from the start of the experiment, and individuals assigned to other job search assistance programs. After excluding these individuals, the remaining population was assigned to either the control or treatment by random draws. The control group would receive the “normal” treatment, i.e. meetings with caseworkers every 13 weeks; while the treatment group would receive intensified treatment consisting of 26 weekly meetings with a caseworker at the job center.³ The meetings would have the sole purpose of discussing and outlining possible employment options. Table A1 in the appendix presents an overview of the variation in treatment in the participating job centers. The Table demonstrates that the treatment to a large extent was outlined by the individual municipalities, who in general hold a strong degree of autonomy in scheduling the meetings. The relatively large degree of local autonomy in the execution of the experiment of course means that those enrolled in the treatment group will be exposed to varied treatments. Such varied treatments may consist of either group meetings or individual meetings, while the meeting effort may also vary among either coaching, counseling, and educational workshops. This variation, however, is not considered a problem for comparability, as most municipalities except Høje Taastrup in addition to group meetings always have individual meetings, cf. Table A1 in the appendix. Consequently, at least some degree of homogeneity in the type of treatment across job centers is ensured.

Figure 1: Outline of the experiment

(a) Meeting intensity by assignment status during the 26 weeks of the experiment



(b) Share of (treated) participants in individual and group meetings



As Figure 1 makes clear, significantly more meetings were held for the treated individuals, although the average number of meetings held varies greatly by job center. The figure further demonstrates in panel (b) that individual meetings dominate group meetings in terms of frequency, and that the average number of meetings held for the treated is far from the intended weekly meetings for 26 weeks. Reasons for the lower number of meetings attended by the treated are cancellations of meetings due

³Figure A1 in the appendix shows the frequency of meetings by assignment group for selected job centers.

to either vacation, illness, granted disability pension, or moving.

Execution

Obviously such an intervention presents a increased caseload in each selected job center. In order to compensate each job center for this extra inconvenience, the labor market authorities covered all costs incurred by the job centers in connection with the experiment. The cost for a meeting is around USD 50 an hour, which is equal to the hourly wage of a caseworker. The individual job center was also given free choice as to whether the experiment-related meetings would be with in-house caseworkers, or whether they should be outsourced to external counseling firms.⁴ Aarhus and Næstved were the only ones to opt for the external counseling firms in this experiment, and Aarhus only did so in part. The duration of a meeting was typically 30-60 minutes.

In an interview-based report prepared by a local consultancy firm upon the end of the experiment, caseworker attitudes toward the experiment were outlined. The treated have mostly been seeing the same caseworkers through the experiment in order to establish a continuous procedure for the treatment. Caseworkers furthermore had a large degree of autonomy, meaning that while the overall purpose of the meetings was employment focus, caseworker attitudes toward the individual surely have contributed to shaping the actual nature of the meeting. When interviewed about the intervention, one caseworker stated that there is no doubt that the treated individuals have benefited from the experiment in terms of increased social contact, but that personal problems have dominated the meetings leaving very little time for actual job talk. Another caseworker stated that the job-related part of the conversation was more focused on actually motivating the individual to begin to think about employment. Finally, a caseworker explained that one of the individuals had been out of the labor market for 25 years, and was clearly not fit to take on any employment. For such individuals, caseworkers report to have commenced the application process for disability pension.

3 Institutional settings and data

Institutional framework

Welfare benefits

Social assistance is a cornerstone of the Danish social ideology, based on equal opportunities for all, and the availability of a financial safety net in times, where individuals fail to be self-sufficient. Social assistance benefits consequently ensure all national citizens and foreign citizens permanently residing in Denmark with the means to maintain a reasonable standard of living in the absence of other income sources. There are strict eligibility requirements that must be met for individuals in order to receive

⁴Many contact meetings between the unemployed and the job centers are commonly outsourced to private consulting firms specializing in career counseling, job transition management, job search assistance, etc.

welfare. Any assets such as savings, real estate, cars etc. must be exploited first, just as the income of a partner or spouse will also reduce the welfare benefits. If the welfare recipient is raising children, the benefits may be as high as DKK 14,203 per month, while the upper bound for adults over 30 with no children is DKK 10,689 per month.⁵ The general idea is that the period on social assistance should be temporary, but for some individuals it becomes a prolonged state lasting for several years. That social assistance recipients have many personal issues going beyond just being unemployed is a common problem. Several are known to be either socially isolated, addicted to substances, in debt, in bad (mental) health, or in lack of sufficient Danish language proficiency. Consequently, the prospects for self-sufficiency or regular employment are naturally more limited than is the case for regular insured unemployed individuals. Similarly to insured individuals, social assistance recipients are also encompassed by a mutual obligation scheme where the recipient must comply with several requirements to be eligible for income transfers. The obligation will usually be participation in mandatory activation programs, where non-compliance will result in forfeited benefits.

Disability pension

Disability pension is a social assistance option available to those whose working ability has been permanently compromised partly or completely due to physical or mental issues. Only Danish citizens residing in Denmark are eligible for disability pension with the additional requirement that the individual must have resided for at least three full years in Denmark past the age of 15. Disability pension eligibility depends on several medical and social criteria. While the individual can present the caseworker with a compelling case; the individual cannot make a personal decision to go on disability pension without the approval of the authorities. Consequently, the caseworker can be seen as the gatekeeper to disability pension, as the caseworker will be the one relaying the case and application to the public authorities.

Data

The data used for the empirical analyses are gathered from two different sources. The experimental data containing information about the exact timing of experiment-prompted meetings is provided by the national labor market authorities. These data contain information about the type of meeting, e.g. group or individual, and reasons for exemptions from the meetings. Onto this data set I merge a rich register-based data set from the DREAM⁶ register. These data provide detailed information on individual background such as marital status, country of origin, age, and regularly scheduled meetings for the control group, as well as weekly labor market status, and activation assignments.

⁵As of June, 2016 the Danish krone converts to 0.13 Euro or 0.15 US dollars. Although intended for temporary use, benefits can be received indefinitely. All income transfers are taxable.

⁶DREAM is a register data base maintained by the labor market authorities containing detailed weekly information on all labor market participants.

The register data spans the period from early 2008 when the experiment was initiated until early 2012, which allows me to evaluate both short- and long-run effects of having participated in the experiment. Table 1 presents a descriptive summary of the individuals assigned to each group, while Table 2 provides an overview of each job center participating in the experiment, number of participants, and timing of the experiment. The reason for the differences in group sizes in Høje Taastrup and Aarhus is an agreement made with the two job centers that a maximum of 100 and 500 individuals respectively be assigned to the treatment group. Tables A4, A5, and A6 in the appendix provide an overview of the pre-treatment characteristics decomposed by municipality and treatment assignment. Table 1 shows that there are very few and insignificant differences in observable characteristics between the control and treatment groups indicating that the randomization has been conducted successfully. The table also demonstrates that women and non-western immigrants are over-represented in welfare reciprocity. Table 3 illustrates that the average number of meetings for the treated over the 26-week period only adds to around 10, which is far from the intended 26 meetings. The reason for this is the frequent exemptions from meetings due to either illness, disability pension, vacation, etc. Table 3 moreover makes clear that there are no large differences in terms of number of meetings attended over the course of the experiment by the different sub-groups in the treatment group.

Table 1: Comparison of treatment and control characteristics at start of experiment

	Control Mean	Treatment Mean	(T-C)	P-value
Age 29-39	0.382	0.403	0.021	0.204
Age 40-49	0.388	0.370	-0.018	0.283
Age 50-59	0.184	0.189	0.005	0.689
Age 60+	0.046	0.038	-0.008	0.204
Married	0.566	0.557	-0.009	0.553
Danish	0.628	0.659	0.031	0.054
Western	0.031	0.034	0.003	0.639
Non-western	0.341	0.307	-0.034	0.032
Women	0.564	0.567	0.003	0.864
Women aged 29-39	0.246	0.255	0.009	0.538
Women aged 40-49	0.218	0.208	-0.010	0.444
Women aged 50-59	0.080	0.087	0.007	0.493
Women aged 60+	0.020	0.018	-0.002	0.673
Married women	0.365	0.348	-0.017	0.292
Non-western immigrant women	0.224	0.203	-0.021	0.125
Western immigrant women	0.020	0.021	0.001	0.746
Men	0.436	0.433	-0.003	0.864
Men aged 29-39	0.137	0.148	0.011	0.312
Men aged 40-49	0.169	0.162	-0.007	0.577
Men aged 50-59	0.104	0.103	-0.001	0.912
Men aged 60+	0.026	0.019	-0.007	0.187
Married men	0.201	0.208	0.007	0.601
Non-western immigrant men	0.117	0.104	-0.013	0.230
Western immigrant men	0.012	0.013	0.001	0.732
Past public income transfer (weeks)	254.381	256.563	2.182	0.468
Past public income transfer, women (weeks)	262.678	262.297	-0.381	0.922
Past public income transfer, men (weeks)	243.633	249.050	5.417	0.246

Table 2: Observations by job center and group

Job center	Control group	Treatment group	Time of notification
Høje Taastrup	138	99	April 29
Lolland	282	282	March 28
Næstved	246	245	May 2
Bornholm	218	212	March 14
Middelfart	44	44	March 28
Nyborg	55	55	May 2
Sønderborg	199	198	June 3
Aarhus	638	500	April 15
Thisted	69	70	N/A
Total	1889	1705	

Note: In the analysis, I account for the differing starting dates by setting the week counter to equal 1 in the week in which the first experiment-prompted meeting takes place. This effectively means that some of the early starters might have been followed for few extra weeks, but in order to create a balanced panel, I follow all individuals for exactly 195 weeks after the start of the experiment, which is the longest available time frame for the whole population.

Table 3: Average number of meetings attended by sub-groups in treatment group

	Number of meetings
Age 29-39	9.24
Age 40-49	9.16
Age 50-59	9.10
Age 60+	8.33
Danish native	9.34
Western immigrant	10.20
Non-western immigrant	8.63
Women	9.23
Men	9.04
Past public income transfers \leq 104 weeks	8.59
Past public income transfers $>$ 104 weeks	9.21

Outcome variables

Based on the experiment and the available data, I construct a set of binary outcome variables that will be used for measuring the effect of the experiment. I divide them into primary outcomes of interest, and additional outcomes. The primary outcomes are:

1. *Employment*, which equals one if the individual is registered in regular employment following the start of the experiment.
2. *Self-sufficiency*, which equals one if the individual is registered out of any public income transfers following the start of the experiment.
3. *Welfare*, which equals one if the individual is registered as receiving welfare benefits following the start of the experiment.
4. *Disability pension*, which equals one if the individual is registered as receiving disability pension following the start of the experiment.

For the empirical analysis I also investigate the accumulated number of weeks spent in each of the outcome states. I choose these outcomes for the following reasons: The outcomes listed above directly serve to measure the overall success of the intervention. Ideally, the intervention would lead to the individuals spending more weeks in employment or self-sufficiency, whereas more weeks spent on social assistance and disability pension outcomes would suggest that the experiment has not been successful in leading the individuals away from public income transfers.

In order to present a more nuanced picture of the effects of the experiment, I construct additional outcomes that hold information on the ability of the individuals to engage in a variety of skill-enhancing programs. I specifically consider weeks spent in education, on sickness benefits, and in activation programs such as subsidized employment following the experiment.

4 Empirical strategy

Given that the experiment is conducted as a randomized trial, the identification is straightforward. Furthermore, by randomly assigning the treatment the potential bias of self-selection is effectively eliminated. A concept worth mentioning when considering a randomized trial is Rubin's Stable Unit Treatment Value Assumption (SUTVA). This assumption requires no spillovers between the treatment and control groups and further assumes that there is no effect for the remainder of society. The assumption is likely to be fulfilled in this setting, where there is no interaction among the participants from different groups. Moreover, the individuals from the control group were not aware that there

was an experiment in progress, and the treated were informed that they took part in a “pilot” study.⁷ While I assume no direct spillovers, the possibility that the treated may *negatively* and indirectly affect the control group still exists. By taking jobs from the pool of job offers leaving the control group with fewer job prospects, the treated may in fact render the control group worse off than if no experiment was conducted. I assume this negative indirect spillover effect to be negligible given the already weak possibilities of finding employment for this group.

Intention-to-treat effects

For intention-to-treat effects the model can be written as:

$$Y_i = \beta_{0i} + \beta_{Zi} \times \text{assigned treatment status} + \beta'x_i + U_i \tag{1}$$

where Y_i denotes the four main outcome variables and x_i denotes the covariates, which consist of age dummies, marital status, gender, country of origin, and unemployment history together with time and municipal fixed effects. This model has several advantages: First of all, its interpretation is simple and intuitively easy to grasp. It further allows for the evaluation of the whole treatment in its entirety. Given that the experiment is conducted as a randomized trial, the difference in means will serve for identification of the causal effect. This is also known as the intention-to-treat (ITT) effect, as it compares those who were assigned to treatment to those who were not.

5 Results

This section presents the empirical results from the ITT approach. In addition to the overall results, this section also presents results for additional labor market outcomes defined as sickness, activation, and education. Heterogeneous effects by gender, country of origin, age, and past time spent in unemployment are also presented. The section first presents a graphical view of the four main outcomes by treatment status for the entire sample followed by an OLS regression analysis, with and without interactions, and ITT effects on accumulated weeks in the four outcome states measured right after the end of the experiment, 52 weeks, 104 weeks, and 195 weeks after the experiment began. Next, the heterogeneous effects are introduced – first graphically, then by ITT regression tables.

Overall effects

Figure 2 shows the direct effects of the experiment on the four previously defined main outcomes. The fraction in each outcome state over time is practically identical for the treatment and control groups except for disability pension, where the level for the treatment group is consistently higher. There is also a slight indication that the share receiving social benefits is lower for the this group, but the effect

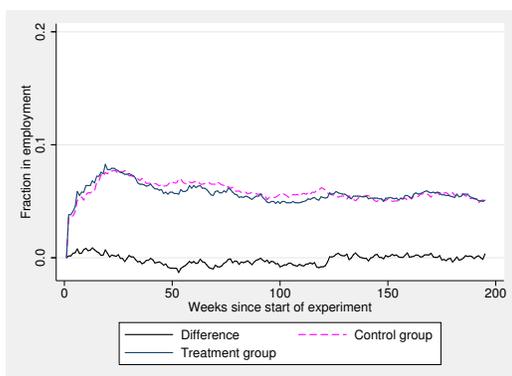
⁷The program was compulsory and as such, w recipients could not refuse taking part. In reality, however, they could avoid participating in some of the meetings due to e.g. illness.

is for the most part negligible. Table 4 presents an OLS analysis on the four main outcomes including an indicator for being in the treatment group (Treated). Table 5 presents a similar model including a number of interaction terms of treatment with other characteristics together with municipal fixed effects. Both models further include monthly fixed effects. The main model shows a clear tendency to transition into disability pension when assigned to the treatment group. The results from the interacted model further suggest that male participants are more likely to find employment and less likely to go on disability pension though the effects are very small. Non-western immigrants furthermore have a slightly higher probability of going on disability pension, than native Danish participants in the treatment group. Older participants are also more likely to go on disability pension compared to younger participants.

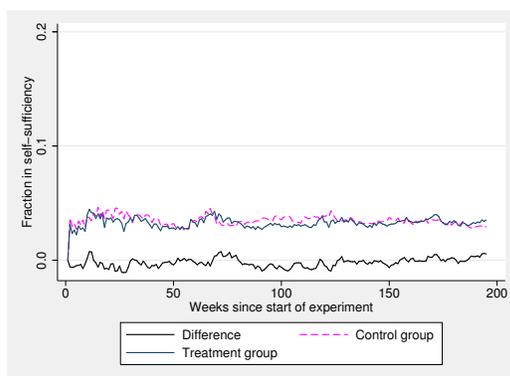
As for the cumulative effects on employment and self-sufficiency, Table 6 presents a negative trend suggesting that the treated over the 195 weeks that have elapsed since the experiment have spent around 0.5 weeks less in regular employment compared to the control group and about 0.4 weeks less in self-sufficiency. These effects, however, are not significant. For ease of comparison and interpretation, all estimates are also reported as percentages of the control group mean. This means that if an effect is reported as e.g. 7% after 26 weeks, it shows that the estimate is 7% larger than the control group average at this specific time. These results clearly demonstrate that there is no over-all positive effect arising from this experiment. As for disability pension, the treatment group accumulates more weeks (4-5) in this state compared to the control group. Table 6 and Figure 2 furthermore make clear that this difference in outcomes between treated and controls presents itself approximately one year after the beginning of the experiment.

Figure 2: Direct effects of treatment

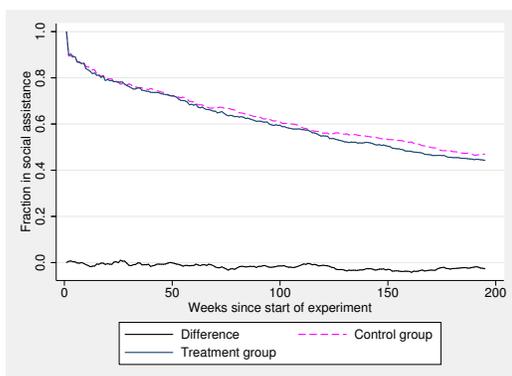
(a) Employment



(b) Self-sufficiency



(c) Welfare



(d) Disability pension

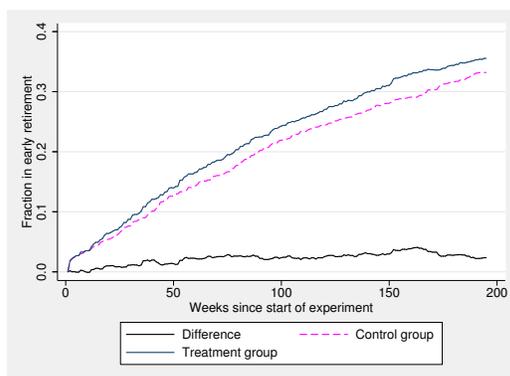


Table 4: Pooled OLS estimates on main outcomes I (with time fixed effects)

	Employment	Self-sufficiency	Welfare	Disability pension
Treated	-0.003 (0.006)	-0.002 (0.004)	-0.024** (0.011)	0.028*** (0.010)
Male	0.001 (0.006)	0.011*** (0.004)	-0.025** (0.012)	0.009 (0.011)
Married	-0.002 (0.007)	0.007 (0.005)	-0.038*** (0.013)	0.014 (0.012)
Danish native	-0.005 (0.017)	-0.018 (0.015)	-0.009 (0.035)	0.049* (0.029)
Non-western immigrant	-0.016 (0.018)	-0.022 (0.016)	0.054 (0.036)	0.040 (0.030)
Age 29-39	0.068*** (0.007)	0.005 (0.012)	0.200*** (0.028)	-0.028 (0.024)
Age 40-49	0.057*** (0.006)	-0.011 (0.012)	0.157*** (0.028)	0.055** (0.024)
Age 50-59	0.027*** (0.006)	-0.012 (0.012)	0.096*** (0.029)	0.135*** (0.026)
Mun: Høje Taastrup	0.008 (0.015)	0.035*** (0.012)	0.029 (0.037)	-0.073** (0.036)
Mun: Lolland	0.030** (0.014)	0.014* (0.008)	0.120*** (0.032)	-0.159*** (0.031)
Mun: Næstved	0.026* (0.014)	0.005 (0.008)	0.101*** (0.033)	-0.146*** (0.032)
Mun: Bornholm	0.021 (0.014)	0.006 (0.009)	0.008 (0.034)	-0.018 (0.033)
Mun: Middelfart	0.013 (0.021)	0.005 (0.011)	-0.006 (0.048)	-0.030 (0.047)
Mun: Nyborg	-0.006 (0.017)	-0.011 (0.008)	-0.189*** (0.043)	0.226*** (0.047)
Mun: Sønderborg	0.026* (0.015)	0.006 (0.009)	0.056* (0.034)	-0.102*** (0.033)
Mun: Aarhus	0.020 (0.013)	0.008 (0.008)	-0.068** (0.031)	0.021 (0.032)
R^2	0.01	0.01	0.10	0.13
N	700,830	700,830	700,830	700,830

* $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$

Note: The standard errors are clustered at the individual level.

Table 5: Pooled OLS estimates on main outcomes II (with time fixed effects)

	Employment	Self-sufficiency	Welfare	Disability pension
Treated	-0.050 (0.035)	0.007 (0.038)	0.041 (0.083)	0.010 (0.069)
Male * Treated	0.025** (0.012)	-0.006 (0.008)	0.010 (0.024)	-0.020 (0.022)
Age 29-39 * Treated	-0.004 (0.013)	-0.006 (0.025)	0.044 (0.056)	-0.053 (0.048)
Age 40-49 * Treated	0.008 (0.013)	-0.010 (0.024)	0.050 (0.056)	-0.061 (0.049)
Age 50-59 * Treated	0.001 (0.012)	0.002 (0.025)	0.036 (0.059)	-0.032 (0.053)
Danish * Treated	0.029 (0.034)	-0.011 (0.031)	-0.119* (0.069)	0.096* (0.057)
Non-western * Treated	0.047 (0.034)	-0.003 (0.031)	-0.125* (0.070)	0.110* (0.060)
Married * Treated	0.001 (0.014)	0.014 (0.009)	0.008 (0.027)	-0.037 (0.023)
Male	-0.011 (0.009)	0.014** (0.006)	-0.029* (0.017)	0.020 (0.015)
Married	-0.003 (0.010)	0.000 (0.007)	-0.042** (0.018)	0.033** (0.016)
Danish	-0.019 (0.030)	-0.012 (0.023)	0.048 (0.053)	0.003 (0.045)
Non-western	-0.039 (0.030)	-0.020 (0.023)	0.114** (0.054)	-0.013 (0.046)
Age 29-39	0.069*** (0.010)	0.008 (0.016)	0.182*** (0.039)	-0.005 (0.031)
Age 40-49	0.053*** (0.008)	-0.006 (0.016)	0.137*** (0.039)	0.081*** (0.031)
Age 50-59	0.026*** (0.009)	-0.013 (0.016)	0.081** (0.041)	0.148*** (0.034)
Mun: Høje Taastrup	0.008 (0.015)	0.035*** (0.012)	0.028 (0.037)	-0.072** (0.036)
Mun: Lolland	0.030** (0.014)	0.014* (0.008)	0.119*** (0.032)	-0.158*** (0.031)
Mun: Næstved	0.026* (0.014)	0.006 (0.008)	0.099*** (0.033)	-0.144*** (0.032)
Mun: Bornholm	0.020 (0.014)	0.007 (0.009)	0.006 (0.033)	-0.016 (0.033)
Mun: Middelfart	0.013 (0.021)	0.005 (0.011)	-0.009 (0.048)	-0.027 (0.047)
Mun: Nyborg	-0.006 (0.017)	-0.011 (0.008)	-0.190*** (0.043)	0.227*** (0.047)
Mun: Sønderborg	0.027* (0.015)	0.007 (0.009)	0.055 (0.034)	-0.101*** (0.033)
Mun: Aarhus	0.019 (0.013)	0.009 (0.008)	-0.069** (0.031)	0.022 (0.032)
R^2	0.01	0.01	0.10	0.13
N	700,830	700,830	700,830	700,830

* $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$

Table 6: Estimates of primary outcomes with and without covariates

	Employment		Self-sufficiency		Welfare		Disability pension	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Effect after 26 weeks	0.107	0.063	-0.106	-0.117	-0.085	-0.126	0.117	0.195
	(0.176)	(0.176)	(0.112)	(0.113)	(0.267)	(0.267)	(0.158)	(0.158)
<i>Std. effects</i>	6.83%	4.02%	-10.83%	-11.95%	-0.39%	-0.58%	10.64%	17.73%
Effect after 52 weeks	0.006	-0.068	-0.198	-0.220	-0.198	-0.419	-0.244	0.692*
	(0.342)	(0.342)	(0.215)	(0.219)	(0.215)	(0.560)	(0.560)	(0.381)
<i>Std. effects</i>	0.18%	-2.04%	-10.46%	-11.62%	-0.48%	-1.02%	-6.54%	18.55%
Effect after 104 weeks	-0.253	-0.412	-0.311	-0.327	-1.108	-1.641	1.726*	2.302**
	(0.653)	(0.655)	(0.425)	(0.432)	(1.197)	(1.182)	(0.960)	(0.930)
<i>Std. effects</i>	-3.89%	-6.33%	-8.44%	-8.87%	-1.47%	-2.18%	13.32%	17.77%
Effect after 195 weeks	-0.302	-0.571	-0.416	-0.447	-3.477	-4.979**	4.334**	5.756***
	(1.156)	(1.164)	(0.775)	(0.787)	(2.320)	(2.240)	(2.126)	(2.019)
<i>Std. effects</i>	-2.64%	-4.98%	-6.13%	-6.58%	-2.82%	-4.04%	11.26%	14.96%
Covariates included	NO	YES	NO	YES	NO	YES	NO	YES
<i>N</i>	3,594	3,594	3,594	3,594	3,594	3,594	3,594	3,594

* $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$

Note: The reported effect is the effect of being assigned to treatment. Standardized effects are effect sizes in percentages of control group means. Covariates entail age dummies, marital status, gender, ethnicity, unemployment history, and municipal fixed effects.

Effects by country of origin

Examining the effects by country of origin is relevant as there may be large differences in the effects depending on the origin of the individual. Non-western immigrants are furthermore highly overrepresented among the recipients of social assistance. Tables 7 and 8 present the regression results for Danish natives and non-western immigrants respectively, while Figure 3 displays the differences in fractions in each of the four outcome states. Both the tables and the figure clearly demonstrate that immigrants are likely to transition to disability pension faster than the native Danes. The effect is significant even right at the end of the experiment for the immigrants, which is further illustrated by the large gap between the treatment and control groups in Figure 3. Native Danes experience a similar gap, but it occurs at a later stage. Both the tables and the figure makes clear that immigrants are slightly more likely to transition into disability pension than native Danes.

Table 7: Estimates for Danish natives with and without covariates

	Employment		Self-sufficiency		Welfare		Disability pension	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Effect after 26 weeks	0.198 (0.223)	0.154 (0.225)	-0.267* (0.138)	-0.271* (0.139)	-0.208 (0.328)	-0.228 (0.330)	0.036 (0.183)	0.111 (0.183)
<i>Std. effects</i>	12.12%	9.42%	-25.79%	-26.17%	-0.96%	-1.05%	3.55%	10.94%
Effect after 52 weeks	0.100 (0.431)	0.006 (0.436)	-0.507* (0.266)	-0.502* (0.268)	-0.462 (0.689)	-0.577 (0.690)	0.292 (0.461)	0.510 (0.451)
<i>Std. effects</i>	2.85%	0.17%	-24.35%	-24.11%	-1.12%	-1.40%	8.08%	14.11%
Effect after 104 weeks	-0.329 (0.831)	-0.526 (0.840)	-0.860 (0.529)	-0.782 (0.532)	-1.581 (1.477)	-2.158 (1.455)	1.710 (1.170)	2.293** (1.117)
<i>Std. effects</i>	-4.70%	-7.52%	-21.10%	-19.19%	-2.11%	-2.87%	13.63%	18.27%
Effect after 195 weeks	-1.005 (1.472)	-1.322 (1.487)	-1.436 (0.935)	-1.368 (0.945)	-3.380 (2.865)	-5.273* (2.754)	4.885* (2.614)	6.092** (2.456)
<i>Std. effects</i>	-7.98%	-10.50%	-19.93%	-18.98%	-2.75%	-4.30%	13.19%	16.45%
Covariates included	NO	YES	NO	YES	NO	YES	NO	YES
<i>N</i>	2,309	2,309	2,309	2,309	2,309	2,309	2,309	2,309

* $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$

Note: The reported effect is the effect of being assigned to treatment. Standardized effects are effect sizes in percentages of control group means. Covariates entail age dummies, marital status, gender, ethnicity, unemployment history, and municipal fixed effects.

Table 8: Estimates for non-western immigrants with and without covariates

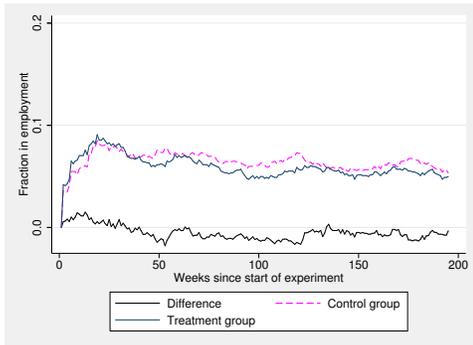
	Employment		Self-sufficiency		Welfare		Disability pension	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Effect after 26 weeks	-0.123	-0.228	0.252	0.217	-0.059	-0.190	0.436	0.575*
	(0.300)	(0.313)	(0.209)	(0.202)	(0.479)	(0.490)	(0.312)	(0.324)
<i>Std. effects</i>	-8.46%	-15.69%	29.99%	25.23%	-0.27%	-0.88%	36.70%	48.41%
Effect after 52 weeks	-0.323	-0.458	0.401	0.384	-0.271	-0.728	1.198	1.536**
	(0.591)	(0.617)	(0.385)	(0.382)	(1.005)	(1.033)	(0.733)	(0.762)
<i>Std. effects</i>	-10.49%	-14.87%	26.14%	25.03%	-0.65%	-1.75%	31.39%	40.24%
Effect after 104 weeks	-0.018	-0.276	0.618	0.700	-1.203	-1.960	2.582	3.170*
	(1.113)	(1.163)	(0.733)	(0.752)	(2.148)	(2.193)	(1.772)	(1.794)
<i>Std. effects</i>	-0.32%	-4.97%	21.26%	24.08%	-1.58%	-2.57%	19.17%	23.54%
Effect after 195 weeks	1.675	1.286	1.387	1.651	-5.411	-7.060*	5.403	6.552*
	(1.961)	(2.045)	(1.400)	(1.439)	(4.146)	(4.132)	(3.849)	(3.793)
<i>Std. effects</i>	18.50%	14.20%	23.86%	28.40%	-4.29%	-5.59%	13.27%	16.10%
Covariates included	NO	YES	NO	YES	NO	YES	NO	YES
<i>N</i>	1,168	1,168	1,168	1,168	1,168	1,168	1,168	1,168

* $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$

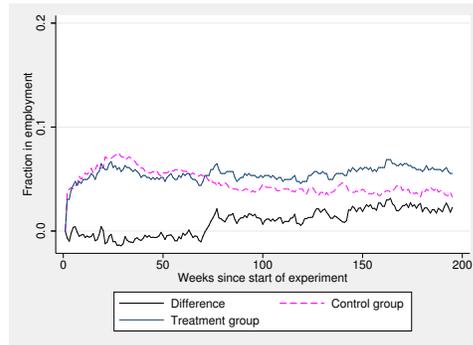
Note: The reported effect is the effect of being assigned to treatment. Standardized effects are effect sizes in percentages of control group means. Covariates entail age dummies, marital status, gender, ethnicity, unemployment history, and municipal fixed effects.

Figure 3: Effects on outcomes by country of origin

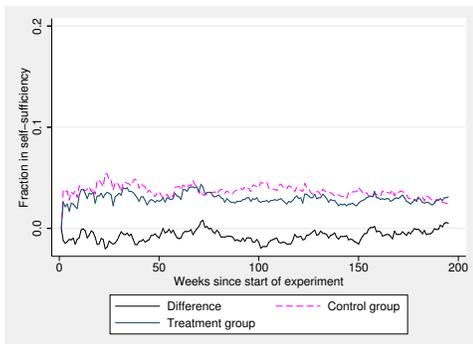
(a) Employment, Danes



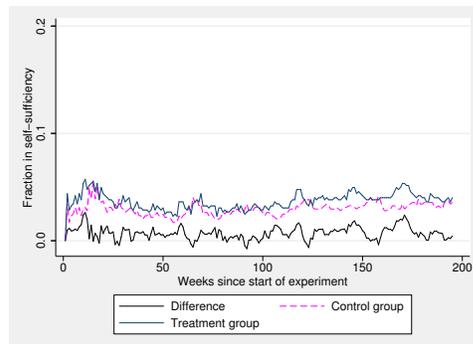
(b) Employment, Immigrants



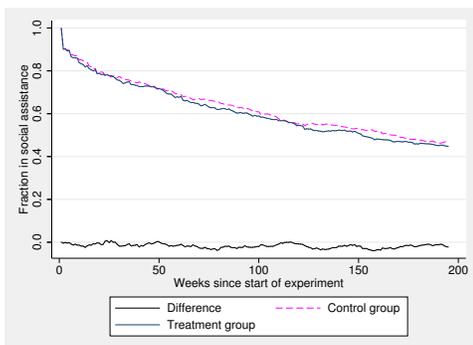
(c) Self-sufficiency, Danes



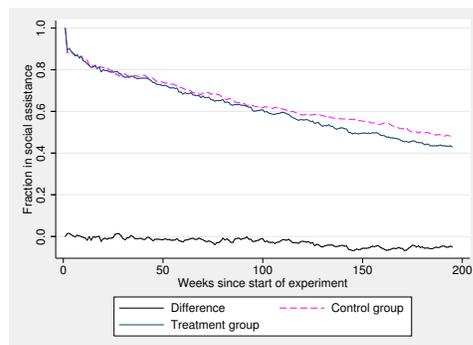
(d) Self-sufficiency, Immigrants



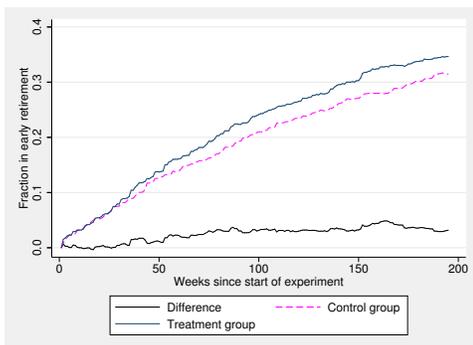
(e) Welfare, Danes



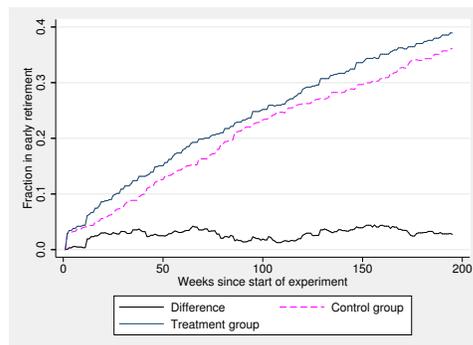
(f) Welfare, Immigrants



(g) Disability pension, Danes



(h) Disability pension, Immigrants



Effects by age group

Tables 9 and 10 show the regression results from the stratification by age groups. The younger (29 to 39-year-olds) in general spend less time in disability pension compared to older (40-65). Table 10 further shows that older individuals will transition into disability pension much faster following the experiment compared to the younger individuals, who are less likely to exit the state of social assistance receipts. The results consequently suggests that the younger group at large stays in their current state, as there are also no significant effects on employment or self-sufficiency.

Table 9: Estimates for individuals aged 29-39 with and without covariates

	Employment		Self-sufficiency		Welfare		Disability pension	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Effect after 26 weeks	0.013	-0.086	-0.067	-0.072	-0.082	-0.014	-0.022	0.016
	(0.300)	(0.298)	(0.190)	(0.190)	(0.406)	(0.407)	(0.185)	(0.185)
<i>Std. effects</i>	0.63%	-4.14%	-5.86%	-6.29%	-0.38%	-0.06%	-3.16%	2.30%
Effect after 52 weeks	-0.401	-0.547	-0.338	-0.356	0.088	0.189	0.247	0.324
	(0.571)	(0.568)	(0.361)	(0.363)	(0.834)	(0.838)	(0.460)	(0.460)
<i>Std. effects</i>	-9.01%	-12.29%	-14.66%	-15.44%	0.21%	0.46%	11.16%	14.63%
Effect after 104 weeks	-1.483	-1.750	-0.457	-0.458	-0.525	-0.433	1.512	1.699
	(1.086)	(1.079)	(0.693)	(0.697)	(1.750)	(1.754)	(1.182)	(1.173)
<i>Std. effects</i>	-17.02%	-20.08%	-10.40%	-10.43%	-0.67%	-0.56%	19.29%	21.67%
Effect after 195 weeks	-2.294	-2.755	-0.384	-0.403	-3.563	-3.606	4.714*	5.223*
	(1.921)	(1.914)	(1.254)	(1.251)	(3.374)	(3.351)	(2.774)	(2.738)
<i>Std. effects</i>	-15.08%	-18.11%	-4.73%	-4.96%	-2.67%	-2.70%	18.51%	20.51%
Covariates included	NO	YES	NO	YES	NO	YES	NO	YES
<i>N</i>	1,557	1,557	1,557	1,557	1,557	1,557	1,557	1,557

* $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$

Note: The reported effect is the effect of being assigned to treatment. Standardized effects are effect sizes in percentages of control group means. Covariates entail age dummies, marital status, gender, ethnicity, unemployment history, and municipal fixed effects.

Table 10: Estimates for individuals aged 40-65 with and without covariates

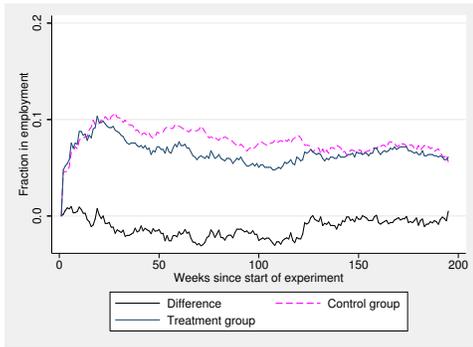
	Employment		Self-sufficiency		Welfare		Disability pension	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Effect after 26 weeks	0.156	0.158	-0.145	-0.157	-0.079	-0.191	0.247	0.328
	(0.210)	(0.209)	(0.134)	(0.138)	(0.354)	(0.352)	(0.239)	(0.240)
<i>Std. effects</i>	13.17%	13.34%	-16.67%	-18.05%	-0.36%	-0.88%	18.15%	24.10%
Effect after 52 weeks	0.273	0.266	-0.108	-0.138	-0.516	-0.816	0.726	0.951*
	(0.416)	(0.416)	(0.260)	(0.267)	(0.755)	(0.748)	(0.577)	(0.574)
<i>Std. effects</i>	11.02%	10.74%	-6.66%	-8.51%	-1.26%	-1.99%	15.06%	19.73%
Effect after 104 weeks	0.610	0.584	-0.230	-0.293	-1.706	-2.426	2.151	2.722**
	(0.797)	(0.806)	(0.531)	(0.547)	(1.628)	(1.596)	(1.409)	(1.377)
<i>Std. effects</i>	13.07%	12.51%	-7.16%	-9.12%	-2.34%	-3.32%	12.73%	16.11%
Effect after 195 weeks	1.085	1.059	-0.507	-0.586	-3.913	-5.809*	4.684	6.087**
	(1.414)	(1.437)	(0.973)	(1.012)	(3.138)	(3.010)	(3.025)	(2.885)
<i>Std. effects</i>	13.37%	13.05%	-8.82%	-10.19%	-3.40%	-5.05%	9.56%	12.42%
Covariates included	NO	YES	NO	YES	NO	YES	NO	YES
<i>N</i>	2,037	2,037	2,037	2,037	2,037	2,037	2,037	2,037

* $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$

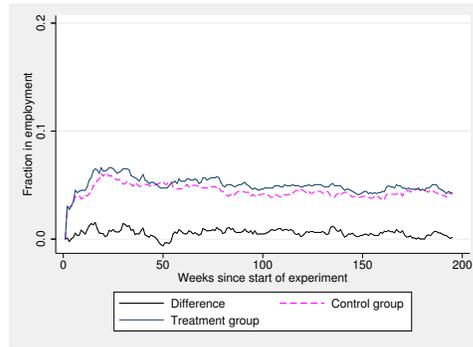
Note: The reported effect is the effect of being assigned to treatment. Standardized effects are effect sizes in percentages of control group means. Covariates entail age dummies, marital status, gender, ethnicity, unemployment history, and municipal fixed effects.

Figure 4: Effects on outcomes by age group, under and over 40

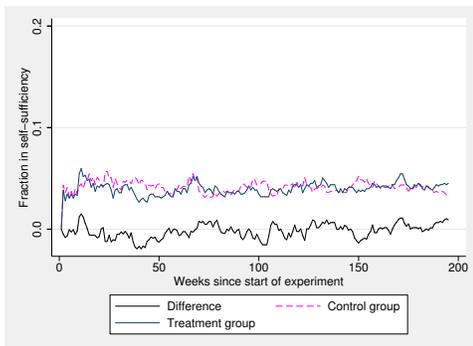
(a) Employment, age under 40



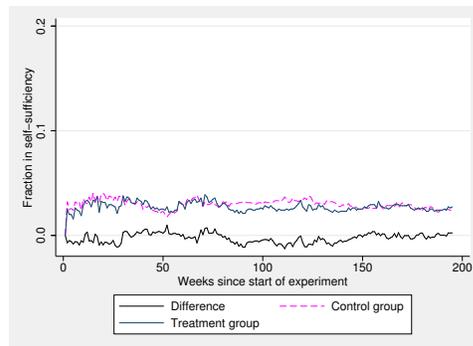
(b) Employment, age over 40



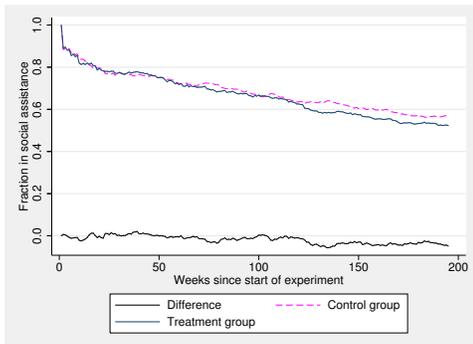
(c) Self-sufficiency, age under 40



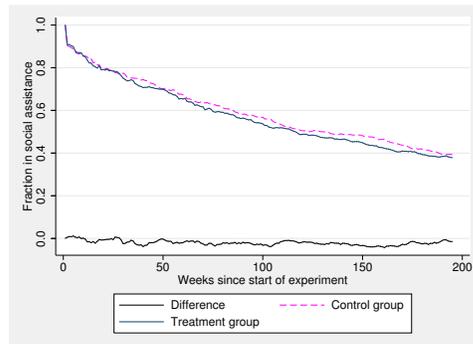
(d) Self-sufficiency, age over 40



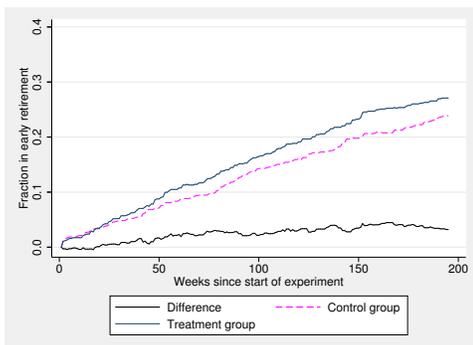
(e) Welfare, age under 40



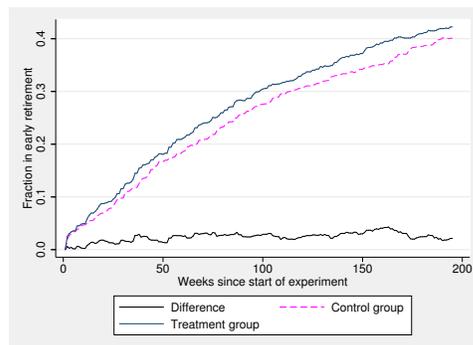
(f) Welfare, age over 40



(g) Disability pension, age under 40



(h) Disability pension, age over 40



Effects by past unemployment duration

Though the minimum requirement for participation in this project was 26 weeks spent on social assistance, the majority of the participants have been on public income transfers of some sort for several years. 30% of the participants had more than 5 years of previous public income receipts, and only around 5% had less than a year. An interesting aspect is therefore the analysis of the effect of the program depending on past duration of social assistance receipts, as there is a strong state dependence of unemployment. Tables 11 and 12 present regression results for individuals with less than 2 years and more than 2 years on social assistance before entering the experiment. The results clearly show that the longer time spent on public income transfers prior to entering the experiment, the more likely it is that the individual will transition into receiving disability pension. Moreover, the results make clear that for individuals with no more than two years spent on social assistance, there are no significant effects from participating in the experiment. It also follows that individuals with longer spells on public income transfers will have experienced more discouragement shocks, further reinforcing the transition out of the labor market.

Table 11: Estimates for individuals with at most 104 weeks on public income transfers with and without covariates

	Employment		Self-sufficiency		Welfare		Disability pension	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Effect after 26 weeks	-0.783	-1.065	0.380	0.084	0.053	0.728	0.043	0.014
	(0.753)	(0.800)	(0.444)	(0.470)	(0.995)	(1.045)	(0.455)	(0.475)
<i>Std. effects</i>	-21.97%	-29.88%	35.05%	7.75%	0.27%	3.77%	4.34%	1.41%
Effect after 52 weeks	-1.536	-1.828	0.570	0.119	0.844	2.021	-0.215	-0.335
	(1.435)	(1.492)	(0.850)	(0.913)	(1.946)	(2.001)	(1.110)	(1.137)
<i>Std. effects</i>	-21.15%	-25.17%	25.59%	5.34%	2.34%	5.59%	-6.13%	-9.54%
Effect after 104 weeks	-2.794	-2.561	1.835	1.170	0.290	1.861	-0.236	-0.669
	(2.669)	(2.916)	(1.615)	(1.686)	(3.862)	(3.927)	(2.766)	(2.861)
<i>Std. effects</i>	-20.60%	-18.88%	71.94%	29.69%	0.44%	2.82%	-1.97%	-5.58%
Effect after 195 weeks	-2.766	-1.928	1.481	0.656	-0.353	0.839	-0.525	-1.256
	(4.929)	(5.519)	(2.957)	(3.132)	(7.119)	(7.310)	(6.146)	(6.248)
<i>Std. effects</i>	-12.00%	-8.37%	17.58%	7.79%	-0.33%	0.78%	-1.51%	-3.61%
Covariates included	NO	YES	NO	YES	NO	YES	NO	YES
<i>N</i>	385	385	385	385	385	385	385	385

* $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$

Note: The reported effect is the effect of being assigned to treatment. Standardized effects are effect sizes in percentages of control group means. Covariates entail age dummies, marital status, gender, ethnicity, unemployment history, and municipal fixed effects.

Table 12: Estimates for individuals with more than 104 weeks on public income transfers with and without covariates

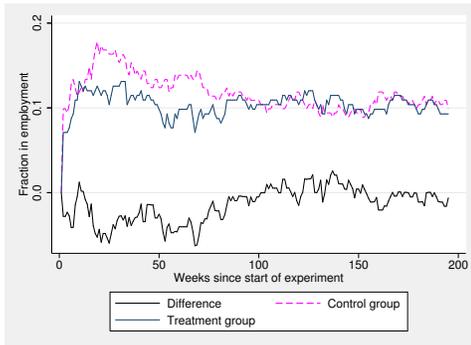
	Employment		Self-sufficiency		Welfare		Disability pension	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Effect after 26 weeks	0.213	0.165	-0.165	-0.170	-0.100	-0.151	0.126	0.208
	(0.175)	(0.173)	(0.114)	(0.115)	(0.272)	(0.272)	(0.168)	(0.168)
<i>Std. effects</i>	16.03%	12.42%	-17.08%	-17.59%	-0.45%	-0.69%	11.32%	18.68%
Effect after 52 weeks	0.190	0.099	-0.291	-0.310	-0.372	-0.573	0.555	0.795**
	(0.340)	(0.339)	(0.218)	(0.222)	(0.579)	(0.578)	(0.410)	(0.404)
<i>Std. effects</i>	6.62%	3.45%	-15.70%	-16.72%	-0.89%	-1.37%	14.78%	21.17%
Effect after 104 weeks	0.049	-0.164	-0.569	-0.586	-1.271	-1.900	1.963*	2.582***
	(0.653)	(0.654)	(0.434)	(0.441)	(1.253)	(1.233)	(1.023)	(0.985)
<i>Std. effects</i>	0.87%	-2.90%	-15.57%	-16.03%	-1.66%	-2.49%	15.02%	19.76%
Effect after 195 weeks	-0.012	-0.391	-0.645	-0.668	-3.844	-5.566**	4.920**	6.429***
	(1.145)	(1.150)	(0.792)	(0.802)	(2.447)	(2.349)	(2.263)	(2.134)
<i>Std. effects</i>	-0.12%	-3.88%	-9.78%	-10.13%	-3.07%	-4.44%	12.64%	16.52%
Covariates included	NO	YES	NO	YES	NO	YES	NO	YES
<i>N</i>	3,209	3,209	3,209	3,209	3,209	3,209	3,209	3,209

* $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$

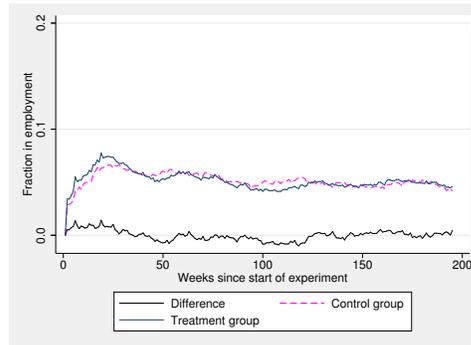
Note: The reported effect is the effect of being assigned to treatment. Standardized effects are effect sizes in percentages of control group means. Covariates entail age dummies, marital status, gender, ethnicity, unemployment history, and municipal fixed effects.

Figure 5: Effects on outcomes by past time spent on public income transfers

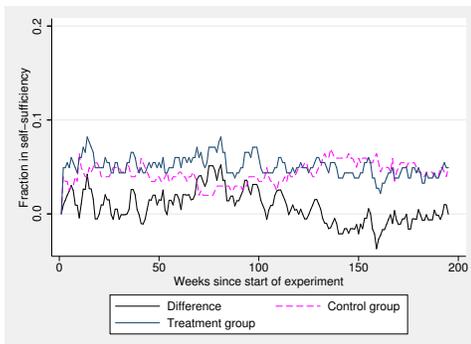
(a) Employment, short past spell



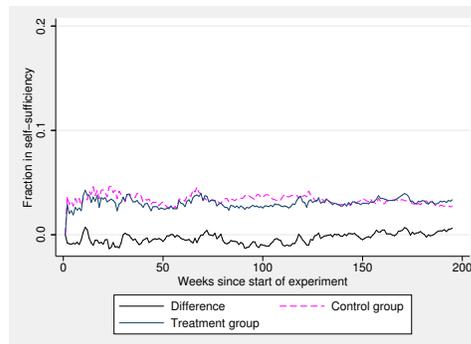
(b) Employment, long past spell



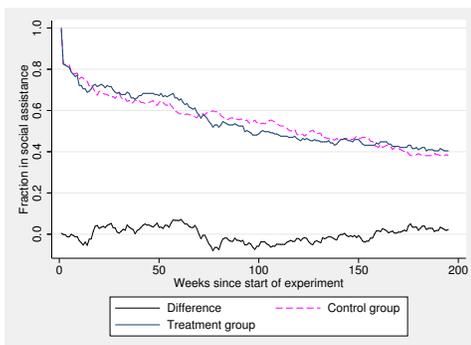
(c) Self-sufficiency, short past spell



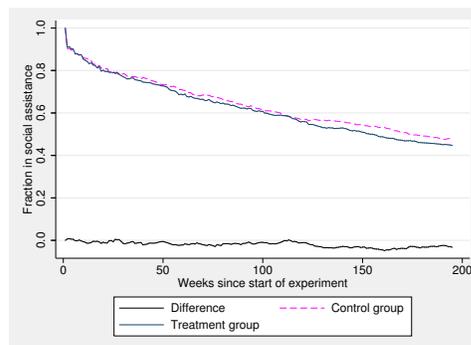
(d) Self-sufficiency, long past spell



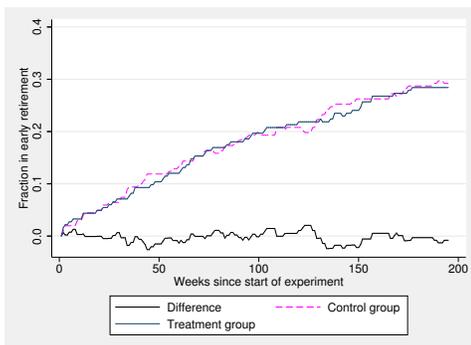
(e) Welfare, short past spell



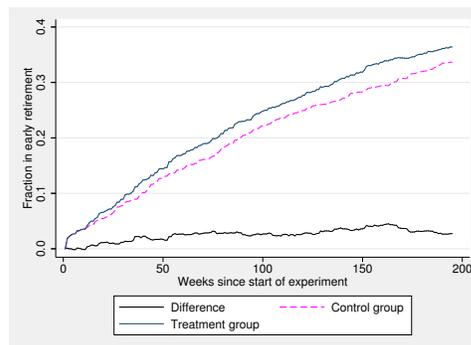
(f) Welfare, long past spell



(g) Disability pension, short past spell



(h) Disability pension, long past spell



Additional outcomes

This subsection evaluates whether there are any effects on additional labor market outcomes such as education, sickness, and activation. The motivation behind this analysis is the fact that the experiment may have prompted participants in the treatment group into any other state that requires leaving one's home during the day, which may help prevent social marginalization. In the negative scenario it may also be that the experiment may cause sick-listing in order to avoid any future interventions. Table A2 in the appendix makes clear that there is no significant effect on weeks spent in education and sickness. There is an effect for activation, but it does not change significantly after the end of the experiment, suggesting that the experiment does not contribute to an increased spell in the activation program after the experiment has ended.

Robustness checks

All the regression tables presented in the result section have included a column for results without and with covariates, in order to test the robustness of the effects to the inclusion of the individual covariates. The results and standard errors, however, are not impacted strongly by the inclusion of individual covariates, and the direction of the treatment effect is mostly unchanged. Since the municipality of Høje Taastrup was the only job center to have only group meetings (see Table A1 in the appendix), results omitting this municipality are shown in Table A3. This was furthermore the municipality, where the largest difference between the control and treatment groups was reported, cf. Table 2. Table A3 presents no significant changes in outcomes when omitting this municipality. Additionally, since the experiment was conducted in nine different municipalities with a substantial degree of autonomy, there will probably be differences in the outcomes by municipality. Figures A2 and A3 in the appendix illustrate these differences. The municipalities Aarhus, Bornholm and Høje Taastrup appear to have the largest transition of participants into disability pension. Worth noting is also that Næstved has the lowest transition into disability pension, which may be explained by the fact that this was the only municipality where all of the meetings were outsourced to private consultancy firms.

6 Discussion and conclusion

In this paper I have investigated how social assistance recipients may be (re)introduced to the labor market by examining the short- and long-run effects of a randomized experiment. Applying OLS regression analysis for estimation, I have identified the intention-to-treat effects of the experiment. With an increased meeting intensity as the treatment, the results show no over-all positive effects of the experiment on four main labor market outcomes; employment, self-sufficiency, welfare, and disability pension. On the contrary, the participants at large appear to transition into disability pension.

Among the participants in the treatment group, there are strong discrepancies in the effect sizes by both age, country of origin, and time spent on public income transfers before the beginning of the experiment. Native Danes accumulate more weeks than immigrants; and individuals with more than two years on income transfers before the experiment accumulate significantly more weeks on disability pension compared to those with less than two years on income transfers prior to the experiment. Overall, the findings suggest that, as a result of the experiment, more people enter disability pension.

Though caseworker specific information is not available in the data, caseworker behavior is definitely an issue worth addressing. Based on the responses provided in a qualitative evaluation of the intervention⁸, caseworkers can roughly be assumed to take on one of two different viewpoints. Either, they may believe that the whole experiment is insufficient and not adequately tailored to the target group; or, they may believe that (re-)employment of the social assistance recipients is a matter of frequent contact and counseling. The results strongly point toward the former, suggesting that caseworkers are inclined to give up on the participants by granting them disability pension.⁹

The findings in this paper suggest that while intensified meetings may be a valuable and affordable tool when dealing with the insured unemployed, there may still be a lack of protocol for the more vulnerable groups in the labor market. As previously stated, this specific segment is oftentimes faced with problems exceeding unemployment, and they will in many cases also have social or mental issues. These problems in combination will likely make complying with standard rules more challenging, and the weak group in the labor market consequently does not benefit from such standardized treatment. Moreover, this experiment took place during the first half of 2008 around the onset of a recession, which may have contributed to the adverse effects also in the time following the experiment. Unfortunately it's impossible to assess how much of the negative effect is caused by an economic downturn.

Overall, the results suggest that the treated individuals to some extent may have been stressed

⁸Conducted by consultancy firm Rambøll

⁹A Swiss study by Behncke et al. (2007) is an interesting example of how attitudes of caseworkers may contribute to negative effects of an intervention.

into disability pension, and that the experiment consequently have had adverse effects, which were obviously not intended. The large number of exemptions from meetings during the course of the experiment supports this argument. Another explanation may also be that some individuals have simply used the more frequent meetings as a chance for speeding up their case for disability pension, as the caseworker essentially acts as the gatekeeper in the application process.

Clearly, the policy lesson to be learned from the results presented in this study is that there can be no “one-size-fits-all” approach when it comes to the weaker parties in the labor market. What has proven successful for UI-eligible unemployed individuals with much stronger ties to the labor market, has proven ineffective to this particular group of unemployed. Rather than shortening the interval between meetings and focusing on the employment possibilities, the group analyzed in this paper may benefit more from a thorough background check, and a potential diagnosis, before measures toward employment can be taken.

References

- Behncke, S., M. Frölich, and M. Lechner (2007). Targeting labour market programmes-results from a randomized experiment. *University of St. Gallen, Department of Economics, Discussion Paper* (2007-37).
- Besley, T. and S. Coate (1992). Workfare versus welfare: Incentive arguments for work requirements in poverty-alleviation programs. *American Economic Review* 82(1), 249–261.
- Björklund, A. and T. Eriksson (1998). Unemployment and mental health: Evidence from research in the Nordic countries. *Scandinavian Journal of Social Welfare* 7(3), 219–235.
- Bolvig, I., P. Jensen, and M. Rosholm (2003). The employment effects of active social policy. *IZA Discussion Paper Series* (No. 736).
- Boockmann, B. and T. Brändle (2015). Coaching, counseling, case-working: Do they help the older unemployed out of benefit receipt and back into the labor market? *IZA Discussion Paper Series* (No. 8811).
- Card, D. and D. R. Hyslop (2005). Estimating the effects of a time-limited earnings subsidy for welfare-leavers. *Econometrica* 73(6), 1723–1770.
- Card, D. and D. R. Hyslop (2009). The dynamic effects of an earnings subsidy for long-term welfare recipients: Evidence from the self sufficiency project applicant experiment. *Journal of Econometrics* 153(1), 1–20.
- Card, D., J. Kluge, and A. Weber (2015). What works? a meta analysis of recent active labor market program evaluations. Working Paper 21431, National Bureau of Economic Research.
- Dahlberg, M., K. Johansson, and E. Mörk (2009). On mandatory activation of welfare recipients. *IZA Discussion Paper Series* (No. 3947).
- Dorsett, R. and A. J. Oswald (2014). Human well-being and in-work benefits: A randomized controlled trial. *IZA Discussion Paper Series* (No. 7943).
- Dyke, A., C. J. Heinrich, P. R. Mueser, K. R. Troske, and K. S. Jeon (2006). The effects of welfare to work program activities on labor market outcomes. *Journal of Labor Economics* 24(3), pp. 567–607.
- Graversen, B. K. and J. C. Van Ours (2008). How to help unemployed find jobs quickly: Experimental evidence from a mandatory activation program. *Journal of Public Economics* 92(10), 2020–2035.
- Jahn, E. and M. Rosholm (2013). Is temporary agency employment a stepping stone for immigrants? *Economics Letters* 118(1), 225–228.

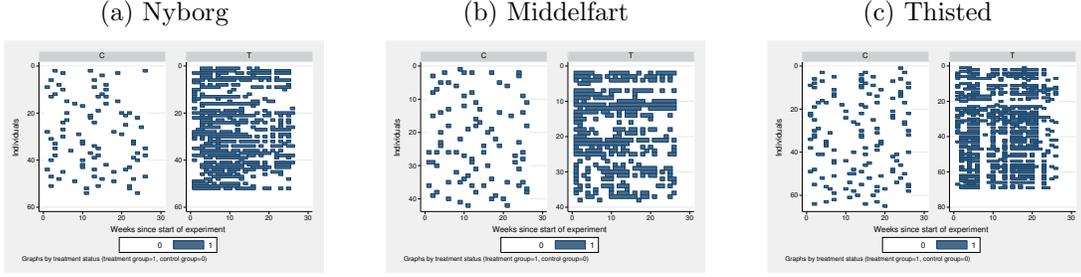
- Kluve, J. (2010). The effectiveness of European active labor market programs. *Labour economics* 17(6), 904–918.
- Lorentzen, T. and E. Dahl (2005). Active labour market programmes in Norway: Are they helpful for social assistance recipients? *Journal of European Social Policy* 15(1), 27–45.
- Maibom, J., M. Rosholm, and M. Svarer (2016). Experimental evidence on the effects of early meetings and activation. *The Scandinavian Journal of Economics*.
- Moffitt, R. A. (1996). The effect of employment and training programs on entry and exit from the welfare caseload. *Journal of policy analysis and management* 15(1), 32–50.
- Vikström, J., M. Rosholm, and M. Svarer (2013). The effectiveness of active labor market policies: Evidence from a social experiment using non-parametric bounds. *Labour Economics* 24, 58–67.
- Winkelmann, L. and R. Winkelmann (1998). Why are the unemployed so unhappy? Evidence from panel data. *Economica* 65(257).

Appendix

Table A1: Execution of the experiment by job center

Job center	Meeting type	Effort
Høje Taastrup	Group	Coaching & counseling
Næstved	Individual	Coaching group workshops
Lolland	Individual & group workshops	Counseling
Bornholm	Individual	Counseling
Middelfart	Group effort & individual meetings	Education & counseling
Nyborg	Individual	Counseling
Sønderborg	Individual	Counseling
Aarhus	Group effort & individual meetings	Coaching & education
Thisted	Group effort & individual meetings	Coaching & education

Figure A1: Timing of meetings by select job center and treatment status



Note: These panels show that meetings occur both faster and more frequently for the treatment group. 0 denotes “no meetings”, and 1 denotes “meeting”.

Table A2: Estimates of secondary outcomes with and without covariates

	Education		Sickness		Activation/sub. empl.	
	(1)	(2)	(3)	(4)	(5)	(6)
Effect after 26 weeks	-0.128	-0.091	0.058	0.054	1.885***	1.793***
	(0.099)	(0.097)	(0.046)	(0.047)	(0.343)	(0.336)
<i>Std. effects</i>	-20.23%	-14.38%	66.40%	61.82%	22.32%	21.23%
Effect after 52 weeks	0.076	0.123	0.166	0.147	2.138***	1.907***
	(0.170)	(0.167)	(0.112)	(0.112)	(0.589)	(0.576)
<i>Std. effects</i>	6.75%	10.93%	55.21%	48.89%	13.89%	12.39%
Effect after 104 weeks	0.320	0.373	0.165	0.114	2.191**	1.507
	(0.307)	(0.304)	(0.248)	(0.246)	(1.007)	(0.969)
<i>Std. effects</i>	15.50%	18.07%	16.11%	11.13%	8.06%	5.54%
Effect after 195 weeks	0.575	0.629	0.080	0.048	2.078	0.882
	(0.391)	(0.388)	(0.398)	(0.396)	(1.496)	(1.436)
<i>Std. effects</i>	21.78%	23.83%	3.66%	2.20%	5.15%	2.19%
Covariates included	NO	YES	NO	YES	NO	YES
<i>N</i>	3,594	3,594	3,594	3,594	3,594	3,594

* $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$

Note: The reported effect is the effect of being assigned to treatment. Standardized effects are effect sizes in percentages of control group means. Covariates entail age dummies, marital status, gender, ethnicity, unemployment history, and municipal fixed effects.

Table A3: Estimates of primary outcomes excluding the Høje Taastrup municipality

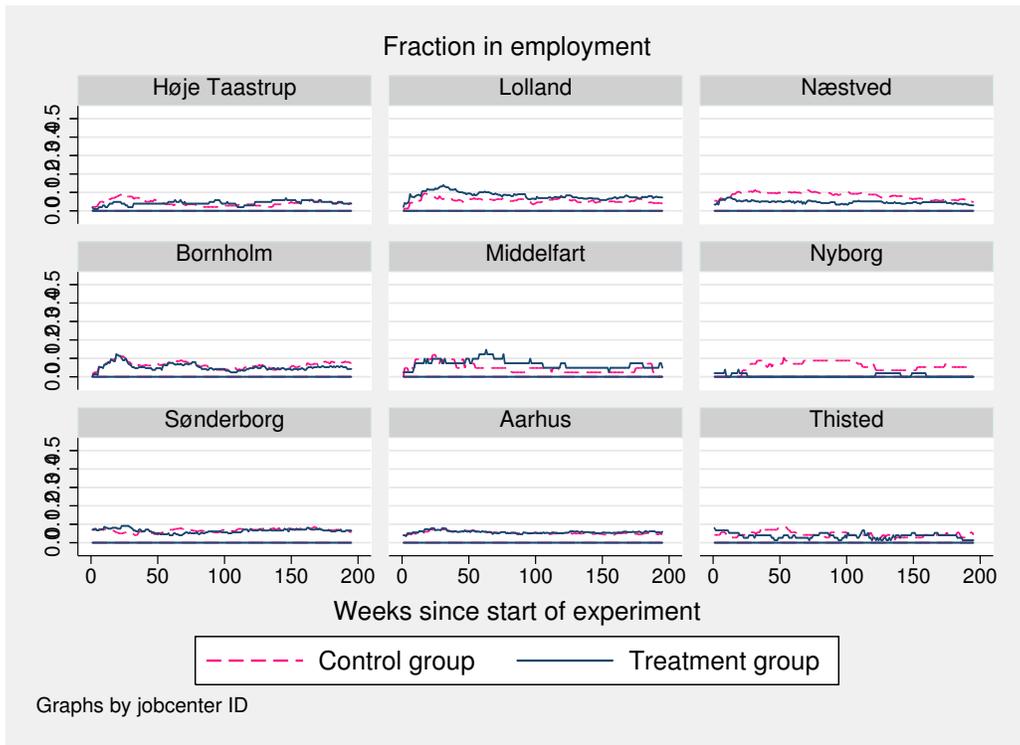
	Employment (1)	Self-sufficiency (2)	Social assistance (3)	Disability pension (4)
Effect after 26 weeks	0.115 (0.185)	-0.150 (0.114)	-0.115 (0.278)	0.151 (0.166)
<i>Std. effects</i>	7.32%	-15.72%	-0.53%	13.26%
Effect after 52 weeks	0.020 (0.359)	-0.250 (0.222)	-0.434 (0.581)	0.581 (0.395)
<i>Std. effects</i>	0.60%	-13.48%	-1.05%	15.34%
Effect after 104 weeks	-0.467 (0.686)	-0.316 (0.438)	-1.461 (1.225)	2.025** (0.960)
<i>Std. effects</i>	-7.01%	-8.84%	-1.94%	15.46%
Effect after 195 weeks	-0.680 (1.221)	-0.555 (0.788)	-4.667** (2.313)	5.515*** (2.082)
<i>Std. effects</i>	-5.80%	-8.56%	-3.80%	14.20%
Covariates included	YES	YES	YES	YES
<i>N</i>	3,349	3,349	3,349	3,349

* $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$

Note: The reported effect is the effect of being assigned to treatment. Standardized effects are effect sizes in percentages of control group means. Covariates entail age dummies, marital status, gender, ethnicity, unemployment history, and municipal fixed effects.

Figure A2: Municipal differences in accumulated states by assignment status

(a) Fraction in employment



(b) Fraction in self-sufficiency

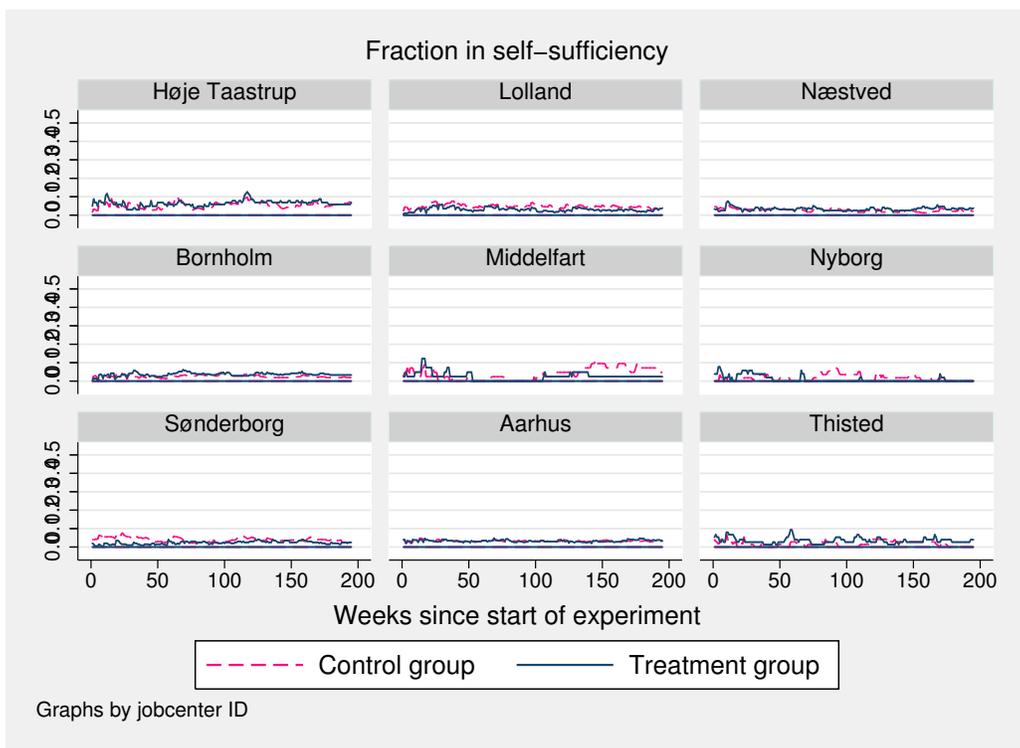
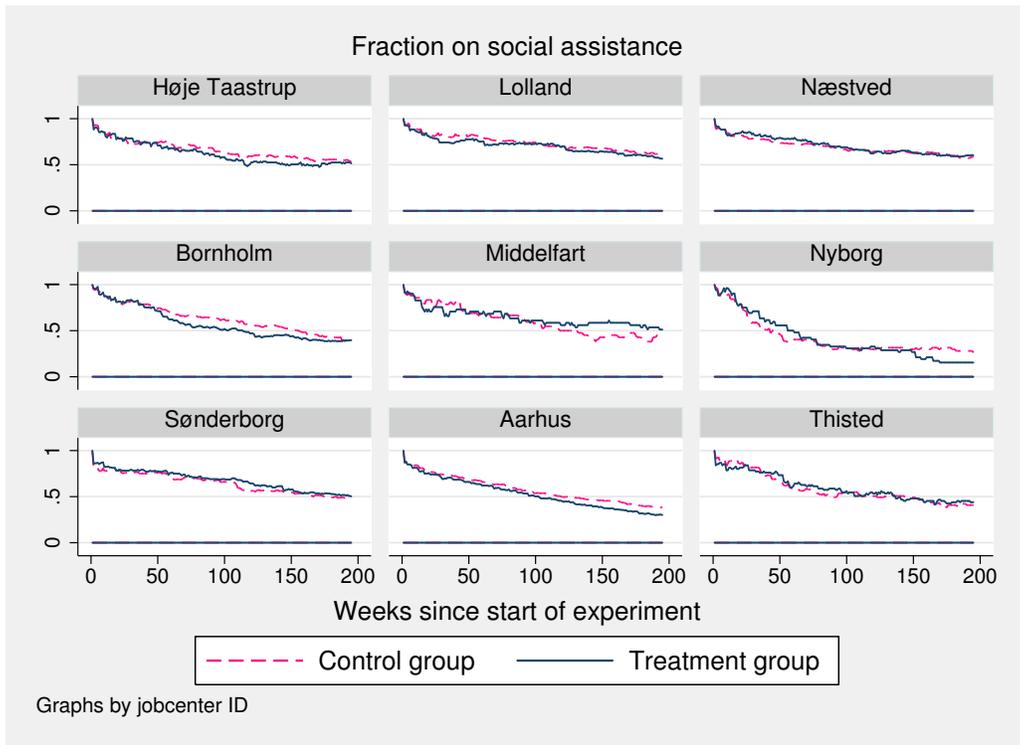


Figure A3: Municipal differences in accumulated states by assignment status

(a) Fraction on welfare



(b) Fraction on disability pension

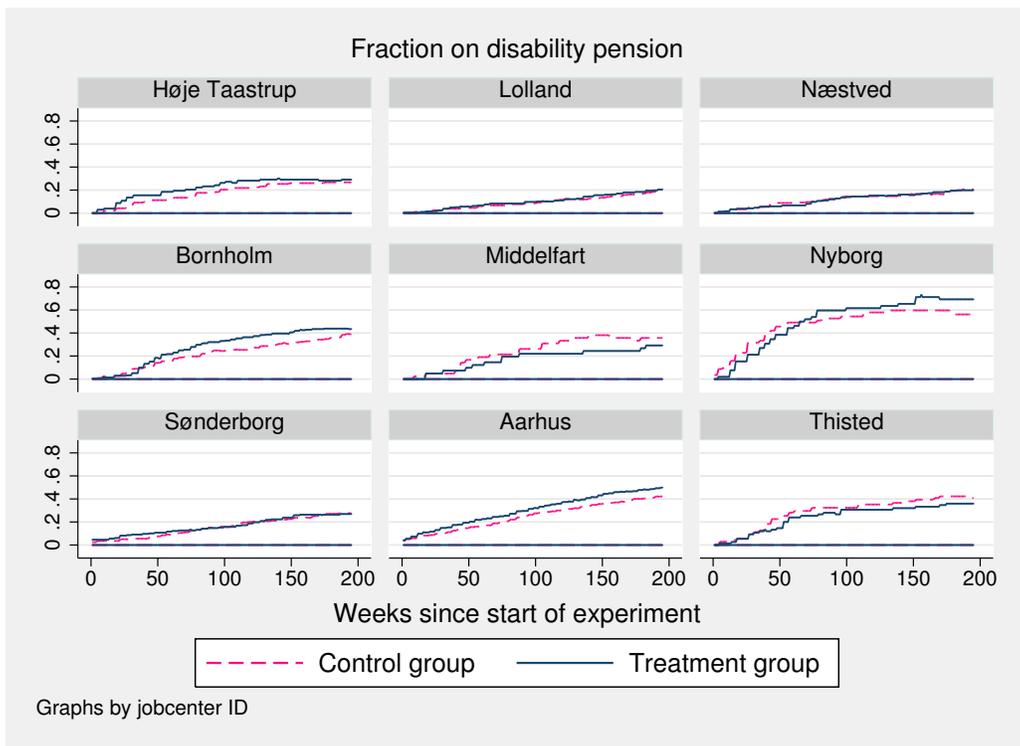


Table A4: Pre-treatment summary statistics by municipality I

	Control Mean	Treatment Mean	T-C	P-value
<i>Høje Taastrup</i>				
Men	0.401	0.437	0.035	0.580
Women	0.599	0.563	-0.035	0.580
Age 29-39	0.331	0.388	0.057	0.356
Age 40-49	0.401	0.301	-0.100	0.107
Age 50-59	0.232	0.291	0.059	0.300
Age 60+	0.035	0.019	-0.016	0.466
Married	0.627	0.621	-0.005	0.932
Danish	0.472	0.544	0.072	0.269
Western	0.035	0.029	-0.006	0.792
Non-western	0.493	0.427	-0.066	0.310
<i>Lolland</i>				
Men	0.458	0.476	0.018	0.668
Women	0.542	0.524	-0.018	0.668
Age 29-39	0.377	0.372	-0.005	0.897
Age 40-49	0.398	0.396	-0.002	0.960
Age 50-59	0.183	0.170	-0.013	0.685
Age 60+	0.042	0.630	0.020	0.278
Married	0.528	0.552	0.024	0.567
Danish	0.799	0.806	0.006	0.851
Western	0.018	0.021	0.003	0.779
Non-western	0.183	0.174	-0.009	0.767
<i>Næstved</i>				
Men	0.374	0.364	-0.010	0.830
Women	0.626	0.636	0.010	0.830
Age 29-39	0.382	0.407	0.024	0.587
Age 40-49	0.357	0.398	0.041	0.356
Age 50-59	0.210	0.165	-0.045	0.212
Age 60+	0.050	0.030	-0.021	0.250
Married	0.563	0.525	-0.038	0.412
Danish	0.739	0.733	-0.006	0.874
Western	0.025	0.038	0.013	0.423
Non-western	0.235	0.229	-0.006	0.868

Table A5: Pre-treatment summary statistics by municipality II

	Control Mean	Treatment Mean	T-C	P-value
<i>Bornholm</i>				
Men	0.455	0.514	0.059	0.227
Women	0.545	0.486	-0.059	0.227
Age 29-39	0.315	0.335	0.020	0.655
Age 40-49	0.329	0.373	0.044	0.343
Age 50-59	0.282	0.274	-0.008	0.852
Age 60+	0.075	0.019	-0.056	0.006
Married	0.451	0.368	-0.083	0.083
Danish	0.892	0.892	-0.001	0.987
Western	0.056	0.066	0.010	0.677
Non-western	0.052	0.042	-0.009	0.656
<i>Middelfart</i>				
Men	0.405	0.415	0.010	0.928
Women	0.595	0.585	-0.010	0.928
Age 29-39	0.548	0.561	0.013	0.904
Age 40-49	0.286	0.317	0.031	0.759
Age 50-59	0.143	0.122	-0.021	0.782
Age 60+	0.024	0.000	-0.024	0.326
Married	0.381	0.488	0.107	0.332
Danish	0.833	0.829	-0.004	0.961
Western	0.000	0.024	0.024	0.314
Non-western	0.167	0.146	-0.020	0.802
<i>Nyborg</i>				
Men	0.491	0.365	-0.126	0.188
Women	0.509	0.635	0.126	0.188
Age 29-39	0.351	0.346	-0.005	0.959
Age 40-49	0.421	0.385	-0.036	0.702
Age 50-59	0.175	0.269	0.094	0.242
Age 60+	0.053	0.000	-0.053	0.095
Married	0.526	0.635	0.108	0.257
Danish	0.877	0.673	-0.204	0.010
Western	0.000	0.019	0.019	0.297
Non-western	0.123	0.308	0.185	0.018

Table A6: Pre-treatment summary statistics by municipality III

	Control Mean	Treatment Mean	T-C	P-value
<i>Sønderborg</i>				
Men	0.457	0.371	-0.087	0.080
Women	0.543	0.629	0.087	0.080
Age 29-39	0.447	0.447	-0.001	0.991
Age 40-49	0.387	0.350	-0.037	0.451
Age 50-59	0.126	0.173	0.047	0.190
Age 60+	0.040	0.030	-0.010	0.601
Married	0.588	0.543	-0.045	0.370
Danish	0.608	0.640	0.032	0.518
Western	0.025	0.041	0.015	0.389
Non-western	0.367	0.320	-0.047	0.326
<i>Aarhus</i>				
Men	0.44	0.445	0.005	0.866
Women	0.56	0.555	-0.005	0.866
Age 29-39	0.386	0.419	0.033	0.252
Age 40-49	0.412	0.379	-0.033	0.260
Age 50-59	0.159	0.154	-0.005	0.820
Age 60+	0.044	0.048	0.004	0.726
Married	0.625	0.641	0.016	0.589
Danish	0.406	0.431	0.025	0.391
Western	0.033	0.026	-0.007	0.508
Non-western	0.561	0.543	-0.019	0.532
<i>Thisted</i>				
Men	0.437	0.387	-0.050	0.543
Women	0.563	0.613	0.050	0.543
Age 29-39	0.423	0.453	0.031	0.710
Age 40-49	0.408	0.280	-0.128	0.103
Age 50-59	0.141	0.227	0.086	0.184
Age 60+	0.028	0.040	0.012	0.697
Married	0.507	0.573	0.066	0.425
Danish	0.831	0.827	-0.004	0.945
Western	0.070	0.040	-0.030	0.423
Non-western	0.099	0.133	0.035	0.516