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ORIGINAL ARTICLE

The impact of periodic interviews on unemployment duration: Evidence from the 2017 Finnish reform

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Abstract

In 2017, a Finnish policy reform intensified the Public Employment Services' practice of periodically interviewing unemployed jobseekers. This study used high-quality administrative data to analyse the effect of interviews on unemployment duration. We used a difference-in-differences approach that exploited regional variations in treatment intensity. Our results show that a 10 percentage point increase in interview probability increased the monthly hazard rate of employment by 3.1 per cent, with the effect being strongest among jobseekers aged 25–34 and jobseekers with a low education level. Also, our results demonstrate a strong effect on participation in active labour market programmes.

KEYWORDS

active labour market policy, job search assistance, monitoring, treatment intensity, unemployment duration

JEL CLASSIFICATION

J64, J68

1 | INTRODUCTION

Job search assistance (JSA) and monitoring are important parts of the Public Employment Services (PES) and active labour market programmes (ALMPs). The existing evidence indicates positive effects of JSA on re-employment, particularly when combined with monitoring (Card

et al., 2010, 2018; Kluve, 2010; Vooren et al., 2019). JSA seems to be one of the most effective means of promoting employment. However, several studies have documented considerable displacement effects for those left without JSA (see Cheung et al., 2019; Crepon et al., 2013; Ferracci et al., 2014; Gautier et al., 2018). The evidence of displacement effects suggests that the effectiveness of JSA may be overestimated. The treatment evaluation literature typically compares participants' outcomes with those of non-participants, with the stable unit treatment value assumption (SUTVA) being a common assumption. The SUTVA states that an individual's outcome should not depend on other individuals' treatment statuses (Ferracci et al., 2014). This assumption might be violated for many reasons: the job-finding rates of non-treated individuals may decrease if treated individuals increase their search efforts. Neglecting these equilibrium effects can lead to biased estimates. If the SUTVA is violated, the proportion of individuals treated in the same area becomes relevant (Gautier et al., 2018).

This study contributes to the literature on JSA and monitoring by analysing the impact of nationwide reform in a way that takes local displacement effects on non-treated jobseekers into account. We studied the effects of a large-scale Finnish policy reform in 2017 that intensified the PES's practice of periodically interviewing unemployed jobseekers. These periodic interviews are a combination of JSA and job search monitoring. The reform was an exogenous shock that increased interview probabilities. It affected the entire country such that the intensity of treatment varied across areas. We used regional variations in interview probabilities to estimate the policy-relevant treatment effects on unemployment duration. The estimated effects were calculated as the sum of the positive treatment effects on the treated and the negative displacement effects on the non-treated.

Using administrative data containing comprehensive information on individuals' unemployment and employment periods, interviews, and background variables, we focused on a population of workers who became unemployed in January and February of 2015–17. We used a difference-in-differences approach with varying treatment intensities and estimated the causal effect of the interviews on the exit rates to employment, ALMPs and outside the labour force. Our results show that the intensification of interviews caused an increase in the transition rates to employment. A 10 percentage point increase in the regional share of unemployed jobseekers interviewed during 3 months of consecutive unemployment increased the monthly exit rate to employment by $\sim$3.1 per cent. This positive effect is in line with the previous literature, but its magnitude is smaller compared with studies that ignored displacement effects. In addition, our results show a strong effect of interviewing on participation in ALMPs. Although the imposition of sanctions increased after the reform, it appears to have not increased the total flow out of the labour force. We also found evidence of heterogeneous effects. The treatment effects on employment hazards were particularly high for jobseekers aged 25–34, jobseekers with a low education level or jobseekers whose field of education was services. According to the results, interviewing these groups is particularly beneficial. We also found that treatment effects on ALMP hazards were particularly strong for jobseekers aged 55–62 and for the highly educated.

We performed several analyses to demonstrate the validity of the identification strategy. First, we conducted a formal test for the common trend assumption. Second, we showed that the areas that experienced either the highest or lowest treatment intensities exhibited parallel trends. Third, we revealed that these areas had similar economic and demographic conditions. Fourth, treatment intensity had low correlations with relevant regional characteristics.

We also considered possible mechanisms behind the treatment effects, including increased JSA, stricter monitoring and threat effects. The reform intensified interviews and increased their volume to support job searches and boost job search intensity. It also led to tighter monitoring of job searches, and the imposition of sanctions increased. The reform likely had

considerable threat effects, also affecting unemployed jobseekers who were not interviewed. Moreover, the reform increased ALMP transitions and may have also increased the operating effectiveness of the PES.

This paper is organized as follows. In Section 2, we describe the Finnish system of periodically interviewing unemployed jobseekers and the reform that commenced in 2017. Section 3 presents the data and the empirical strategy. Section 4 provides descriptive analysis, including a formal test for the parallel trend assumption. Section 5 reports the results, and Section 6 concludes the article.

2 | PERIODIC INTERVIEWS IN FINLAND AND THE 2017 REFORM

In Finland, PES offices have conducted periodic interviews with unemployed jobseekers for several decades to support them in their job searches (Valtakari et al., 2019). In interviews, caseworkers check jobseekers' job search information and assess the need for services, after which they offer suitable jobs, training and other services to the jobseekers. According to Valtakari et al. (2019), ~74 per cent of all interviews are conducted by telephone, whereas ~18 per cent are face-to-face, with the remainder being conducted as distance meetings online. Face-to-face interviews are typically offered to jobseekers with the weakest job search capabilities. Interviews last, on average, about 24 min (Valtakari et al., 2019). The concrete result of each interview is the creation (or updating) of an employment plan. Interviews are mandatory, and failure to attend them or the violation of the employment plan may lead to the interruption of an individual's unemployment benefits for 15–60 days (Sundvall & Mayer, 2018). This sanction period provides financial incentives for jobseekers to participate in the interviews and pursue their employment plans.

In January 2017, the Finnish government reformed its policy to intensify the implementation of interviews.[1] This reform was aimed at increasing job search activity, helping unemployed jobseekers find work more quickly, preventing long-term unemployment and accelerating the filling of vacancies (Valtakari et al., 2019). According to the government's new policy, an interview must be organized for an individual whose unemployment has continued for 3 months and every 3 months thereafter, unless the interview is obviously unnecessary given the jobseeker's situation (Valtakari et al., 2019).[2] The former legislation defined the frequency of periodic interviews less precisely.

Figure 1 shows how the reform caused a large exogenous change in the scale of the interviews at the national level. Before the reform, <20 per cent of unemployed jobseekers had been interviewed during the previous 3 months of consecutive unemployment. After the 2017 reform, the share of unemployed jobseekers interviewed increased to over 50 per cent.

In early 2017, large regional differences were evident in the changes in interview probabilities (see Table 1). We used this regional variation to study the effects of interviews on unemployment duration.[3] It is important to consider the reasons for the observed regional differences, primary among them being different management styles in different employment offices. In some offices, the quantitative implementation of periodic interviews was immediately established as a major goal, whereas in other offices, the number of interviews increased more slowly and gradually. According to Heikki Räisänen, the research director of the Ministry of Economic Affairs and Employment (MEE),[4] the most important factor was regions' policies: how important the goal of intensifying interviews had been considered and when an interview

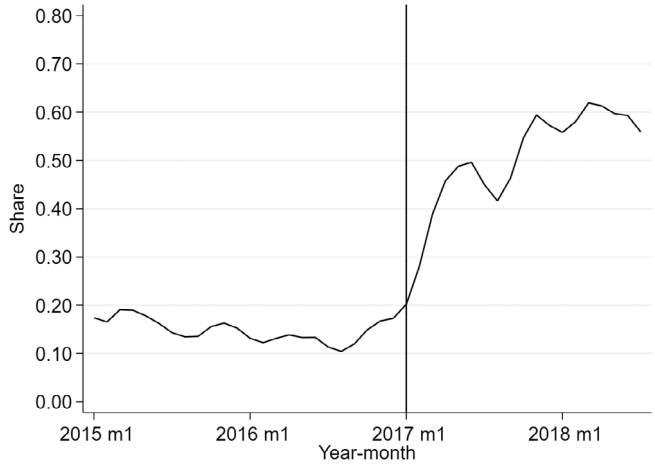

FIGURE 1 Share of unemployed jobseekers interviewed during the previous 3 months. Cross-section on the 28th day of the month, unemployment spells of 90–365 days.

TABLE 1 Change in the share of unemployed jobseekers interviewed during 3 months of consecutive unemployment by REO area.

Area ID	REO area	Share interviewed 2016 (1)	Share interviewed 2017 (2)	Treatment intensity (3)
10	Central Finland	8.3	60.6	52.3
14	Kainuu	22.1	72.4	50.3
3	Satakunta	12.5	52.4	40.0
5[a]	Pirkanmaa	7.3	46.2	38.8
1	Uusimaa	8.2	46.7	38.5
8[a]	North-Savo	8.2	44.6	36.4
7	South-Savo	10.7	42.8	32.1
4	Hame	16.8	45.2	28.4
2	Varsinais-Suomi	12.5	40.7	28.2
11	South Ostrobothnia	28.6	55.2	26.6
12	Ostrobothnia	15.0	39.6	24.6
15	Lappi	12.8	37.0	24.3
9	North Karelia	15.0	38.2	23.2
6	Southeast Finland	12.5	32.1	19.7
13[a]	North Ostrobothnia	26.4	42.0	15.6

Note: Share of unemployed jobseekers interviewed during the previous 3 months, an average of the cross-section on the 28 March–September. Unemployment spells of 90–365 days.
Abbreviations: MEE, Ministry of Economic Affairs and Employment; REO, regional employment office.
[a]The common trend assumption does not hold; see Section 4.1.
Source: MEE; our own calculations; see also Figure A1.

had been considered unnecessary. According to Valtakari et al. (2019), the resources related to the number of unemployed jobseekers were very similar in all regions. In Section 3.2, we show that the treatment intensity was exogenous to the relevant regional characteristics.

According to Valtakari et al. (2019), there was no clear indication that the intensification of interviews would have displaced resources from other PES activities (e.g., counselling services, competence development services and managing employer contacts). Rather, as Valtakari et al. (2019) reported, the intensification of interviews increased the personal workload of the PES caseworkers and weakened their well-being at work. The authors reported that many caseworkers felt incapable of conducting sufficiently high-quality interviews and offering relevant solutions to jobseekers. Thus, the reform probably weakened the quality of interviews and employment plans. According to Valtakari et al. (2019), there were differences between regional employment offices (REOs) in terms of how the reform affected the caseworkers' well-being and workload. The authors reported that REOs had office-specific differences in working methods and practices related to conducting interviews.

3 | DATA AND METHODS

3.1 | Data sets

We used Finnish administrative data containing comprehensive individual-level information on unemployment spells, interviews and demographic background characteristics. The main data source was the Employment Services Register of the MEE. Since registration at an employment office is a requirement for receiving unemployment benefits, the database contains information on practically all unemployment spells. Each unemployment spell is combined with information on interview days, employment spells and individual background variables. Periodic interviews are recorded in the MEE's database as employment plans or their updates. Detailed information on the characteristics of individuals and employment spells was obtained from the FOLK database maintained by Statistics Finland. The FOLK data contain individual-level information on demographic, educational, occupational and family characteristics.

Our sample consisted of the Finnish population that entered unemployment in the period covering 2015–17. We limited the analysis to jobseekers between 20 and 62 years of age. We excluded temporarily laid-off individuals and restricted the sample to new unemployment spells that had been preceded by an employment spell of at least 30 days. This ensured that the sample consisted of individuals whose status changed from employed to unemployed at time zero. Thus, we excluded individuals with long non-employment spells (e.g., individuals entering unemployment after a period in ALMPs or who were outside the labour force).

Our post-reform observations consisted of unemployment spells that began in January–February 2017 since the reform came into force at the beginning of 2017 and the regional differences were initially at their highest. Excluding unemployment spells that began later in 2017 ensured that our results were unaffected by the activation model, which was launched at the beginning of 2018.[5] Owing to the high seasonal variation in unemployment exit rates, a comparable pre-reform period consisted of unemployment spells that started in January and February of 2015–16.

In Section 5, long unemployment spells were right-censored from 10 months onwards because the reform affected longer unemployment spells that started in 2016.[6] Therefore, we followed unemployment spells that started in 2015 until the end of 2015, unemployment spells that started in 2016 until the end of 2016, and unemployment spells that started in 2017 until the end of 2017. Thus, the pre-reform observations had low interview probabilities

throughout their unemployment spells, whereas the post-reform observations had higher interview probabilities.

3.2 | Methods

We analysed the effects of intensifying interviews by using regional variations in the implementation of the reform. The reform was followed by large regional variations in the implementation of interviews. Mainland Finland has 15 REOs, which are organized geographically, with each REO serving several municipalities (see Figure A1). In early 2017, large regional differences were evident in the changes in interview probabilities. Table 1 shows the share of unemployed jobseekers interviewed in different REO areas in 2016 and 2017. The probability of being interviewed during 3 months of continuous unemployment increased from 2016 to 2017 in every area (see column 3). The change was highest in Central Finland (52.3 percentage points) and lowest in North Ostrobothnia (15.6 percentage points).

We studied the causal impact of intensifying interviews on unemployment duration using a difference-in-differences design with varying (non-binary) treatment intensities. Several studies have exploited regional variations in treatment intensity (e.g., Angrist & Pischke, 2009; Card, 1992; Ferracci et al., 2014; Frölich & Lechner, 2010; Räsänen & Mäkelä, 2021). In our study, treatment intensity was measured by the percentage point change in the share of unemployed jobseekers interviewed during 3 months of continuous unemployment, from March–September 2016 to March–September 2017. Thus, the treatment intensity proxied the extent to which the probability of being interviewed increased in each area from 2016 to 2017. Like Räsänen and Mäkelä (2021), we assumed that interview shares were constant throughout the pre-treatment period. This assumption was supported as the interview shares were almost constant in 2015–16, and the changes in interview shares in the pre-treatment period were small relative to the changes during the treatment period. The treatment intensity varied across the 15 REO areas, ranging from 16 to 52.

The outcome variable was unemployment duration, measured in months. An unemployment spell is defined as a sequence of time during which a person is an unemployed jobseeker in the MEE's register. We separately examined the effects of treatment intensity on the exit rates to employment, ALMPs and outside the labour force. The employment hazards included all transitions to employment relations that lasted for at least 30 days. The employment hazards take into account that jobseekers may be temporarily in ALMPs or outside the labour force. The 30-day condition guarantees that new employment relations did not end very soon. ALMPs include employment with wage subsidies, labour market training, coaching and work trials, rehabilitation work and self-motivated studies with unemployment benefits. Although individuals participating in ALMPS often receive unemployment benefits, they are no longer classified as unemployed by the MEE register.

The empirical hazard function for individual i whose unemployment started in area s in period m is:

$$\theta_{ism}(t) = \lambda(t)\exp\left\{x_i\beta + \tau_m + \gamma_s + \delta * \text{TreatmentIntensity}_s * I(\text{YEAR} \geq 2017)\right\} \quad (1)$$

where $\lambda(t)$ is a time-varying baseline hazard function depending on the elapsed unemployment duration t estimated using the Cox proportional hazards model, x is a vector of time-invariant

individual characteristics measured at the start of the unemployment spell, τ_m are indicators for the time of unemployment entry (year-month) and γ_s are indicators for the REO areas. $I(\text{YEAR} \geq 2017)$ is an indicator that the unemployment spell started after 1 January 2017, and TreatmentIntensity is the regionally varying treatment intensity.

The coefficient of the interaction term (δ) shows the average effect of a 1 percentage point increase in treatment intensity on the monthly hazard rates. Using regional variation yields policy-relevant effects by automatically considering the displacement effects on non-treated individuals. Following Crepon et al. (2013), P is the regional probability of treatment, and T is the individual's treatment status. Assume that individuals assigned to the control group are never treated, so $T(0) = 0$. There are three potential outcomes of $y(P, T)$: $y(0, 0)$ is the potential outcome when no treatment takes place in the area, $y(1, 0)$ is the potential outcome when untreated in a treatment area, and $y(1, 1)$ is the potential outcome when treated. The displacement effect is defined as the externality imposed on a non-treated individual in a treated area. Following Crepon et al. (2013), the average displacement effect is $AE = E(y(1, 0) - y(0, 0))$. A simple comparison between a treatment group and a comparison group yields the treated in treated zone effect (TTZ), which overestimates the effectiveness of a policy instrument. Based on previous literature, assume a positive 'treated in treated zone' effect (TTZ >0) and a negative displacement effect on the non-treated (AE <0). Our model cannot disentangle the direct and displacement effects. However, our model does identify the policy-relevant treatment effect, which is the sum of a positive treatment effect on the treated and a negative displacement effect on the non-treated: $\text{TT} = \text{TTZ} + \text{AE} < \text{TTZ}$.

The key identifying assumption is that without the treatment, unemployment duration trends would be identical in all areas; with the treatment, a deviation from this common trend is induced (Angrist & Pischke, 2009, p. 230). We analyse the common trend assumption in Section 4.1. Heterogeneity across REO areas was captured by the area-fixed effects (γ_s), and the time-fixed effects (τ_m) absorbed common shocks. Weak regional mobility of the Finnish labour force decreased the potential bias that might arise from spillover effects (Räsänen & Mäkelä, 2021).

To account for observable differences in the composition of different areas, the model includes a large set of covariates. We controlled for gender, age (5 categories), education level (6 categories), field of education (12 categories), previous occupation (6 categories), number of unemployment months in the past 2 years (8 categories), disability, non-Finnish background and family status. All covariates were measured at the beginning of the unemployment period and were treated as time-invariant regressors within an unemployment spell. Also, we controlled for the regional unemployment rate, the regional output growth and the regional vacancy rate at the travel-to-work area level (at the end of year $y - 1$). Travel-to-work areas (67) are defined by the Finnish Ministry of the Interior as entities formed from municipalities, the criteria for which are municipal cooperation, workers commuting and transport connections. An REO area may encompass several travel-to-work areas, while each area belongs to just one REO area.

4 | DESCRIPTIVE ANALYSIS

In this section, we show that the requirements for the difference-in-differences approach were fulfilled. Our identification strategy required that the regions with different treatment intensities had parallel trends in outcomes during the pre-treatment period and that their composition was stable. Moreover, we examined whether the treatment intensity was exogenous to the relevant regional characteristics.

4.1 | Common trends

The key identifying assumption of our approach was that the exit rates would have followed the same parallel trends in all REOs, without the reform (i.e., the common trend assumption). We conducted a formal test for the common trend assumption. Using data from 2015 and 2016, we estimated a duration model with dummies for all REOs, a dummy for the year 2016, and interactions between the 2016 dummy and REO dummies.

The joint tests of the coefficients of the interaction terms were significant (see Tables 2 and A1). Thus, in certain REOs, the pre-trends differed from those in the other REOs. In the employment hazard model, the interaction term for North Ostrobothnia (REO 13) was significant at the 1 per cent level. This area experienced considerably negative output growth of about −3 per cent in 2015–16 and very strong output growth of 7 per cent in 2017, whereas the averages for other REOs were 0 per cent in 2015–16 and 2 per cent in 2017. In the ALMP hazard model, the interaction terms were significant for North Savo (REO 8) and Pirkanmaa (REO 5) at the 5 per cent level. In North Savo, ALMP hazards increased considerably more than in other areas from 2015 to 2016. For Pirkanmaa, the coefficient of the interaction term was negative. Pirkanmaa had extensive employment experiments in 2015 and 2017. According to Valtakari et al. (2019), in Pirkanmaa, the implementation of periodic interviews differed from other REOs, focusing more on customized and individual service.

Because of this, we excluded these three REOs from our analyses. After omitting these three REOs, the joint tests of the coefficients of the interaction terms were insignificant (see Tables 2 and A2). Thus, the exit rates developed similarly in the remaining 12 REOs in 2015–16.

Next, we examined the existence of common trends by dividing our data into three groups according to the magnitude of the treatment intensity: (19, 24.5), (24.5, 39) and (39, 53). The first treatment group (the bottom three REOs) included 8506 observations, the second (the middle six REOs) included 27,366 observations and the third (the top three REOs) included 7005 observations. We were particularly interested in groups that experienced either the highest or lowest treatment intensities. Thus, Figures 2–4 provide descriptive evidence for the top and bottom three REOs.

TABLE 2 *F*-test results for interaction terms measuring common trends.

	Hazard to 30 d employment	Hazard to ALMPs	Hazard to outside the labour force
All REOs ($N = 39{,}049$)	48.63 (0.000)	50.91 (0.000)	9.95 (0.766)
Without REOs 5, 8 and 13 ($N = 29{,}545$)	17.05 (0.106)	13.57 (0.258)	7.15 (0.787)
Without REOs 5, 8 and 13; Controls ($N = 29{,}545$)	15.85 (0.147)	14.81 (0.191)	8.92 (0.629)

Note: *F*-test results for D2016 × REO interactions. The *p*-values are reported in parentheses. New unemployment spells that started in January and February of 2015–16. Estimates for hazard rates from unemployment to employment, ALMPs and outside the labour force using data from 2015 and 2016 are reported in Tables A1 and A2. The Cox proportional hazards model was used. Long unemployment spells were right-censored from 10 months onwards. The models included indicators for REO areas, a dummy for the year 2016, and D2016*REO interactions. The models in the last row included the same control variables as the models in Table 5. According to Table A1, the pre-trends in Pirkanmaa (REO 5), North Savo (REO 8) and North Ostrobothnia (REO 13) differed from those of the other REOs.

Abbreviations: ALMPs, active labour market programmes; REOs, regional employment offices.

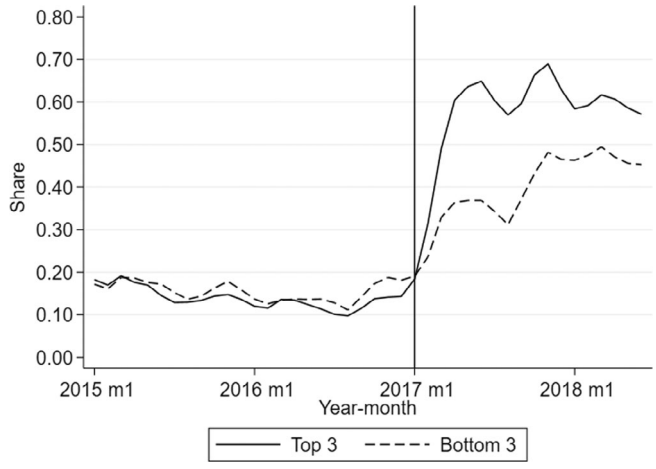

FIGURE 2 Share of unemployed jobseekers interviewed during the previous 3 months by treatment group. Unemployment spells of 90–365 days. The top three regional employment offices (REOs) with the highest treatment intensities and the bottom three REOs with the lowest treatment intensities are shown in Table 1.

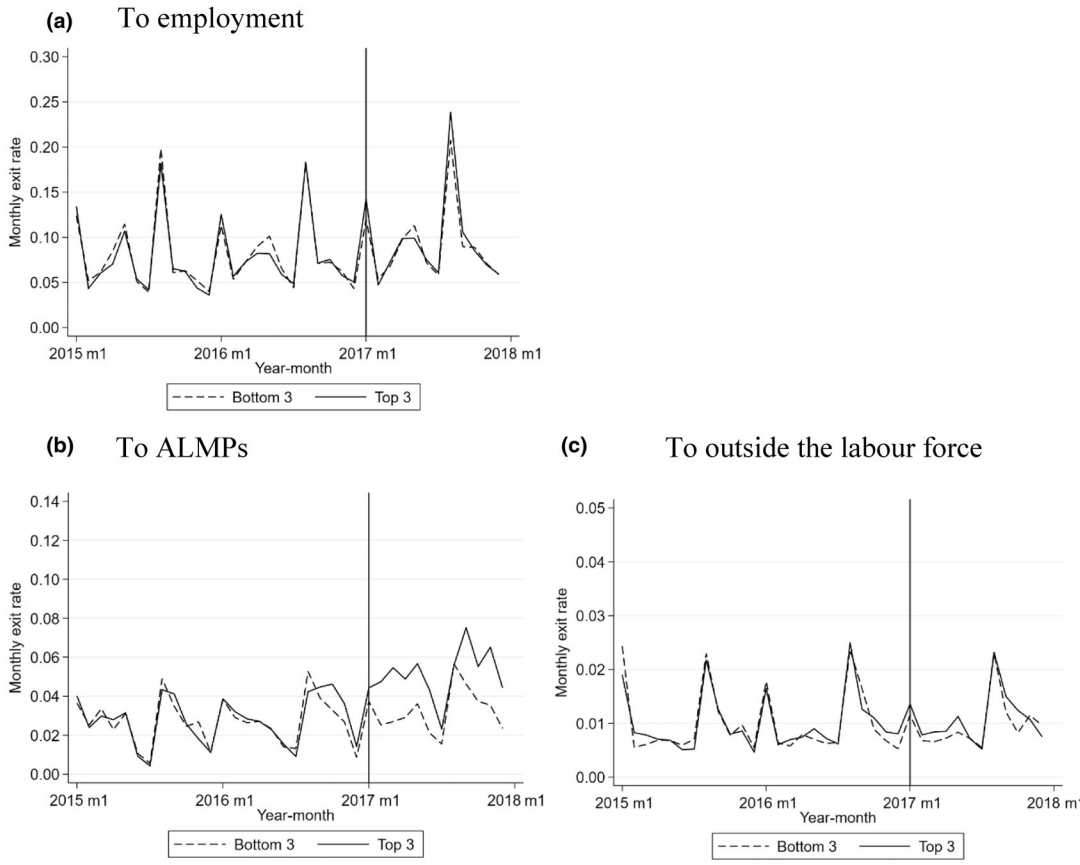

FIGURE 3 Monthly exit rates from unemployment to employment, active labour market programmes (ALMPs) and outside the labour force by treatment group. On the first day of the month, unemployment spells of 1–365 days, preceded by a work period of at least 30 days. (A) To employment. (B) To ALMPs. (C) To outside the labour force.

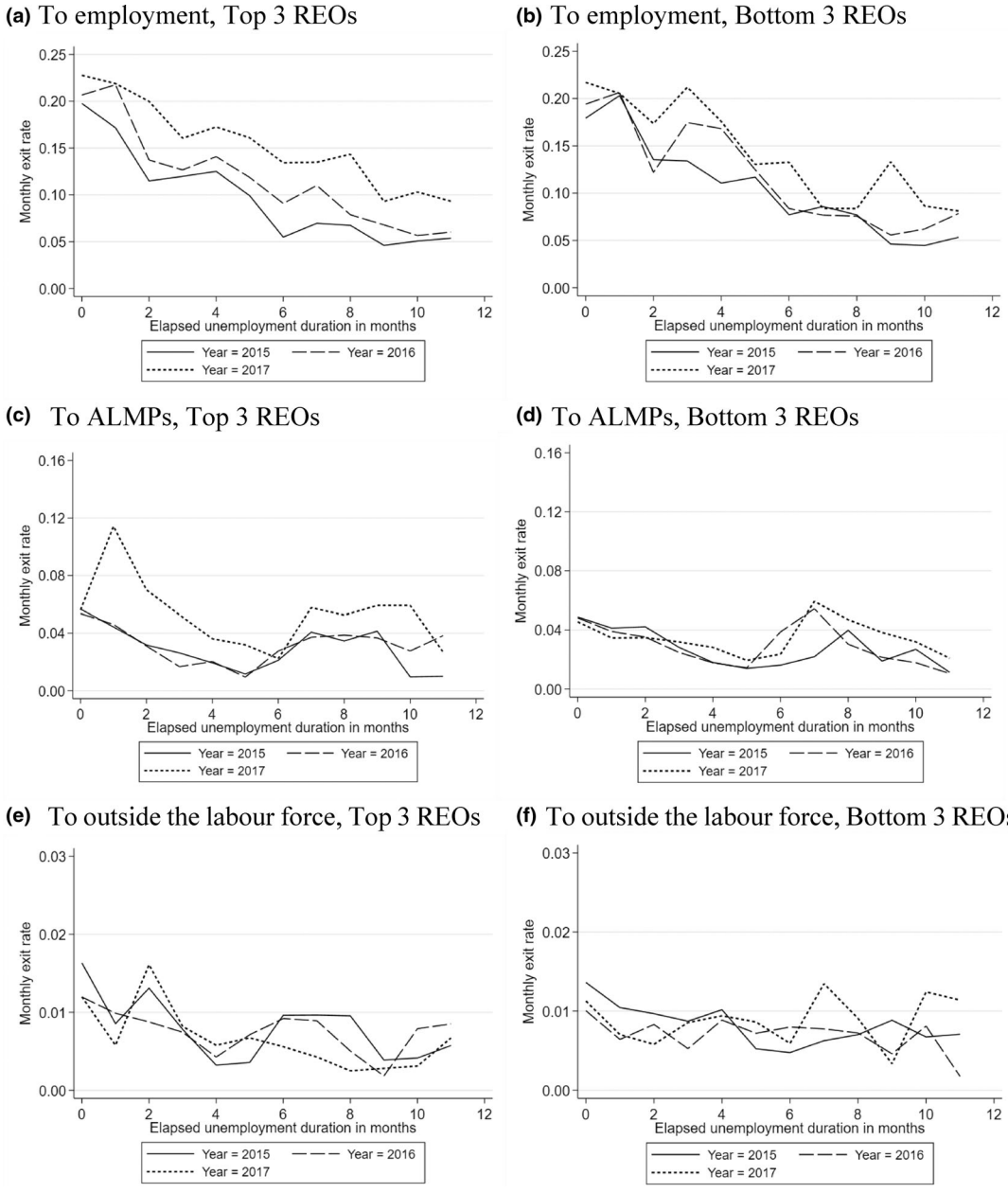

FIGURE 4 Empirical hazard rates by treatment group in 2015–17. The data consist of new unemployment spells that started in January and February of 2015–17 and were preceded by a work period of at least 30 days. The top three regional employment office (REO) areas with the highest treatment intensities and the bottom three REO areas with the lowest treatment intensities are shown in Table 1. (A) To employment, Top 3 REOs. (B) To employment, Bottom 3 REOs. (C) To active labour market programme (ALMPs), Top 3 REOs. (D) To ALMPs, Bottom 3 REOs. (E) To outside the labour force, Top 3 REOs. (F) To outside the labour force, Bottom 3 REOs.

Figure 2 shows that, before the reform, the interview probabilities were stable and slightly lower in the top three REOs than in the bottom three REOs. Figure 2 also shows how abrupt

the change was in the top three REOs in early 2017. In turn, in the bottom three REOs, the interview probability increased less and more gradually during 2017.

Figure 3 depicts the time series of the monthly exit rates from unemployment to employment, ALMPs and outside the labour force for unemployment spells in the top and bottom three REOs from 2015 to 2017. The average exit rates were similar for all outcomes of interest until the end of 2016, providing support for the parallel trend assumption. The reform affected all ongoing unemployment spells from January 2017 onwards, with treatment intensity being highest in the top REOs. Consistent with this, the exit rates from unemployment to ALMPs increased in the top three REO areas compared with the bottom three REOs in 2017. In 2017, the monthly exit rates to employment were slightly higher in the top three REOs than in the bottom three REOs, whereas they had been slightly lower before 2017.

4.2 | Empirical hazard rates

Our study sample consisted of new unemployment spells that started in January and February of 2015–17. Figure 4 shows empirical hazard rates as a function of elapsed unemployment duration for the years 2015, 2016 and 2017. Three monthly exit rates are depicted for the top and bottom three REOs: to employment (Figure 4A,B), to ALMPs (Figure 4C,D) and to outside the labour force (Figure 4E,F).

Figure 4A,B shows the total hazards to employment relations that last for at least 30 days. The panels take into account that jobseekers may be temporarily in ALMPs or outside the labour force. The 30-day condition guarantees that employment relations did not end very soon. The panels show that the probability of employment transition decreases with unemployment duration. For example, Kyyrä et al. (2019) and Busk (2016) reported similar results. Before the reform, the monthly hazards were about 10–22 per cent for durations of <5 months and about 5–10 per cent for durations over 6 months. After the reform, the exit rate to employment increased more in the top three REOs than in the bottom three REOs. Thus, Figure 4 suggests larger employment effects than Figure 3, which documented only direct employment transitions during a month for individuals who were unemployed on the first day of each month.

Figure 4C,D shows that, before the reform, the monthly hazards to ALMPs were about 2–6 per cent. After the reform, there was a large upward shift in ALMP hazards in the top three REOs. Table A3 shows that in the top three REOs, coaching and work trials as exit destinations particularly increased. Figure 4E,F reports the exit rates to outside the labour force. They show that the probability of transition to outside the labour force was very low compared with the probability of employment and ALMP transitions. The exit rate to outside the labour force did not increase in the top REOs after the reform.

Thus, this descriptive evidence indicates that after the reform, higher treatment intensities were associated with higher transition rates from unemployment to employment and ALMPs. The comparison shows that the exit rates were similar in the top and bottom REOs in the pre-experiment period of 2015–16. After the reform, the exit rates to employment and ALMPs increased more in the top three REOs than in the bottom three REOs. However, these differences in the raw empirical hazard rates cannot be interpreted as causal effects since they may have been driven by differences in observed and unobserved characteristics.

4.3 | Regional and individual characteristics

The key identifying assumption of the empirical model is that regional differences in treatment intensity are exogenous to any relevant regional characteristics. To study the endogeneity issue, we, like Räsänen and Mäkelä (2021), computed correlations between the treatment intensity and pre-reform characteristics of the areas (see Table 3). The treatment intensity was not correlated with the regional pre-reform unemployment rate, employment rate, vacancy rate or economic growth. The correlation between the treatment intensity and pre-reform level of the interviews was weak. Moreover, we found weak correlations between treatment intensity and the fractions of young and old unemployed jobseekers. All of the correlations were statistically insignificant. This indicates that the pre-reform characteristics and economic performance of an area did not explain the magnitude of treatment intensity (i.e., how much interviews increased in this area).

Table 4 presents descriptive statistics on the main variables used in the empirical analysis. Column 1 presents the averages for the entire sample, whereas the other columns present the group averages for the three treatment groups. The top and bottom three REOs were similar in size and had very similar economic and demographic conditions. The only clear observable difference between the groups concerned treatment intensity. Before the reform, the average share of unemployed jobseekers interviewed during 3 months of continuous unemployment was 12 per cent, whereas after the reform, it was 46 per cent. The fraction of jobseekers interviewed increased by 48 percentage points in the top three REOs and 22 percentage points in the bottom three REOs. In the middle six REOs, the regional unemployment rate was lower, with more highly educated jobseekers and immigrants. These differences were driven by the Helsinki Metropolitan Area, which is located in the REO Uusimaa, one of the middle six REOs. However, since we used a difference-in-differences approach, it was more important that the changes in the composition of these groups were small (Uusitalo & Verho, 2010). Table A4 shows that the changes in group characteristics were small and similar across all groups.

TABLE 3 Correlations between treatment intensity and regional characteristics.

Treatment intensity	Correlation	*p*-Value
Unemployment rate, 2015–16 (labour force aged 15–74)	0.14	0.508
Employment rate, 2015–16 (population aged 15–64)	−0.10	0.632
Annual output growth, 2015–16	0.11	0.299
Vacancy rate, 2015–16	0.01	0.950
Fraction of jobseekers over 55, 2015–16	0.20	0.351
Fraction of jobseekers under 25, 2015–16	−0.14	0.523
Pre-treatment level of interviews (interview share, 2015–16)	−0.13	0.549

Note: Correlations between treatment intensity and regional characteristics at the REO area level. Treatment intensity refers to a percentage point change in interviews (2016–17). The three REO areas that did not meet the common trend assumption were excluded from the data: Pirkanmaa (REO 5), North Savo (REO 8) and North-Ostrobothnia (REO 13).

TABLE 4 Summary statistics by treatment group.

Variable name	All 12 REOs (1)	Bottom 3 REOs (2)	Middle 6 REOs (3)	Top 3 REOs (4)
Interviewed during 3 months (%), 2016	12.3	13.2	12.2	11.8
Interviewed during 3 months (%), 2017	45.6	35.2	45.3	59.5
Treatment intensity, %-points	33.3	22.0	33.1	47.7
Regional unemployment rate (%)	14.4	17.6	12.7	17.0
Regional vacancy rate (%)	0.95	0.78	1.00	0.97
Regional economic growth (%)	0.74	1.28	0.40	1.43
Age				
20–24	0.12	0.13	0.12	0.12
25–34	0.27	0.25	0.28	0.25
35–44	0.21	0.20	0.21	0.19
45–54	0.21	0.22	0.21	0.22
55–62	0.19	0.21	0.17	0.21
Female	0.57	0.58	0.57	0.59
Immigrant	0.08	0.06	0.10	0.04
Disability	0.09	0.09	0.07	0.10
Education level				
Secondary	0.52	0.58	0.48	0.58
Lowest tertiary	0.08	0.08	0.08	0.08
Lower tertiary	0.14	0.15	0.14	0.13
Master's degree or higher	0.12	0.08	0.15	0.09
Other, unknown	0.14	0.12	0.15	0.12
Number of observations	42,877	8506	27,366	7005

Note: Data contain new unemployment spells that started in January and February of 2015–17 and were preceded by a work period of at least 30 days. Column 2: Unemployment spells in the bottom three REO areas with the lowest treatment intensities. Column 3: Unemployment spells in the middle six REO areas. Column 4: Unemployment spells in the top three REO areas with the highest treatment intensities. The REO areas are shown in Table 1.
Abbreviation: REO, regional employment office.

5 | RESULTS

5.1 | Homogeneous effects

Table 5 reports estimates on transitions to employment (column 1), transitions to ALMPs (column 2), and transitions to outside the labour force (column 3). The first row in Table 5 shows coefficient estimates for Treatment Intensity $\times$ $I(\text{YEAR} \geq 2017)$. The treatment effect on employment hazards was statistically significant at the 1 per cent level: a 10 percentage point increase in the interview probability increased the rate of transition to employment by

TABLE 5 Baseline results by outcome.

	Hazard to employment (1)	Hazard to ALMPs (2)	Hazard to outside the labour force (3)
Treatment Intensity × *I* (YEAR ≥ 2017)	0.0031*** (0.0011)	0.0188** (0.0081)	−0.0098 (0.0061)
Regional characteristics			
Unemployment rate	−0.0094 (0.0058)	−0.0261** (0.0118)	0.0059 (0.0139)
Output growth	−0.0032 (0.0026)	−0.0008 (0.0048)	−0.0035 (0.0055)
Vacancy rate	−0.0059 (0.0231)	−0.0236 (0.0508)	−0.0433 (0.0528)
Age (vs. 20–24)			
25–34	−0.204*** (0.021)	−0.108*** (0.040)	−0.564*** (0.062)
35–44	−0.364*** (0.038)	−0.293*** (0.040)	−0.776*** (0.098)
45–54	−0.485*** (0.061)	−0.433*** (0.052)	−0.590*** (0.090)
55–62	−0.937*** (0.076)	−1.260*** (0.073)	−0.551*** (0.093)
Immigrant	−0.272*** (0.021)	0.304*** (0.041)	−0.004 (0.089)
Disability	−0.370*** (0.038)	0.236*** (0.047)	0.801*** (0.073)
Education level (vs. upper secondary)			
Lowest tertiary	0.007 (0.020)	0.161*** (0.041)	0.088 (0.087)
Lower tertiary	0.159*** (0.019)	−0.061 (0.040)	−0.049 (0.063)
Master's degree or higher	0.190*** (0.027)	−0.290*** (0.050)	0.025 (0.106)
Other, unknown	0.056 (0.070)	0.045 (0.149)	0.063 (0.485)
N (unemployment spells)	42,877	42,877	42,877

Note: Estimates for hazard rates from unemployment to employment, ALMPs and outside the labour force. The Cox proportional hazards model was used. Long unemployment spells were right-censored from 10 months onwards. The model also includes indicators for REO areas (12), year-month indicators (6), indicators for the fields of education (12), previous occupation (6), family status (4) and the number of unemployment months during the previous 2 years (8). Standard errors were clustered at the travel-to-work area level (50 clusters). Significance levels: *** 1 per cent, ** 5 per cent and * 10 per cent. See also Table A5.

Abbreviations: ALMPs, active labour market programmes; REOs, regional employment offices.

3.1% (= (exp(10 × 0.0031) − 1) × 100%). The estimate was based on data on actual employment spells, so it was unaffected by changes in the accuracy of PES unemployment records, and the 30-day condition ensured that new employment relations did not end very soon.

This positive employment effect is in line with the previous literature on JSA, but its magnitude is smaller compared with studies that ignored displacement effects. Maibom et al. (2017) found that frequent meetings between newly unemployed workers and caseworkers increased employment. Graversen and van Ours (2008) investigated how an intense activation programme in Denmark affected unemployed workers' job-finding rates. Their analysis showed that the re-employment rate in the treatment group was 30 per cent higher than that in the control group. Gautier et al. (2018) evaluated the same activation programme, considering equilibrium effects. They found that participation in the activation programme increased the weekly rate of exit from unemployment by 17 per cent. Thus, while displacement effects are important, the effects of JSA remain positive. It should also be noted that the Finnish reform took place

during a boom rather than a recession. Cheung et al. (2019) found that displacement effects were smaller under good labour market conditions, with many job openings.

Our results showed a strong effect on the exit rate to ALMPs: a 10 percentage point increase in treatment intensity increased hazards to ALMPs by 21 per cent, the estimate being statistically significant at the 5 per cent level (column 2). This is in line with Valtakari et al. (2019), who documented that the 2017 Finnish reform had a major impact on participation in ALMPs. Helping unemployed jobseekers to exit more swiftly to ALMPs may increase their likelihood of employment in the future. However, the effects are not necessarily immediate. According to Card et al. (2010), many ALMPs with insignificant or even negative impacts after a year have significantly positive impact estimates after 2 or 3 years.

Manning (2009) found that a major change to the UK system of welfare support for the unemployed, with stricter enforcement of eligibility conditions, resulted in large flows out of claimant status but not into employment. Closely related, unemployment benefit sanctions have been reported to increase exits from unemployment outside the labour force (e.g., Arni et al., 2013; Busk, 2016). After the Finnish reform, the imposition of sanctions increased (see Table A10). However, our results indicated that the Finnish reform did not increase the total flow out of the labour force (column 3 in Table 5).

The control variables that described statistical relationships provided estimates consistent with prior evidence (see Busk, 2016; Kyyrä et al., 2019; Svarer, 2011; Uusitalo & Verho, 2010). First, the probability of transitions decreases with age. Second, higher education is associated with higher employment hazards and lower ALMP hazards. Third, having a disability that affects the ability to work is associated with lower employment transition rates and higher transition rates to ALMPs and outside the labour force. Fourth, immigrants have a lower re-employment hazard rate than native Finns but a higher ALMP hazard rate. Fifth, many unemployment months in year $y - 2$ were associated with lower employment hazards. Unemployment months in the preceding year seemed to matter less, probably because all of the individuals in the sample had some recent work experience. Sixth, a high regional unemployment rate was associated with lower exit rates to ALMPs. The estimates for regional economic growth and the regional vacancy rate were not statistically significant.

5.2 | Heterogeneous effects

Table 6 reports the heterogeneous treatment effects for the various subgroups. Treatment effects on employment hazards were particularly high for jobseekers aged 25–34 (column 1): a 10 percentage point increase in treatment intensity increased the rate of transition to employment by 5.8% ($= (\exp(10 \times 0.0056) - 1) \times 100\%$). For the other age groups, treatment effects on employment hazards were lower and not statistically significant. Moreover, treatment effects on employment hazards were particularly high for jobseekers with a low education level (5.4 per cent) and those whose field of education was services (8.1 per cent). In turn, treatment effects on re-employment hazards were low for the highly educated and for immigrants. Treatment effects on employment hazards were significant for women (3.3 per cent) but not for men. According to Bergemann and van den Berg (2008), the majority of studies on ALMPs have found more positive employment effects for women than for men.

As shown in Table 6, we used the average treatment intensity in a given REO area. As outlined in the Supporting information S1, we investigated the robustness of the results by providing additional estimations with group-specific treatment intensities. In Table A7, the estimation

TABLE 6 Results by subgroup and outcome.

	Hazard to employment (1)	Hazard to ALMPs (2)	Hazard outside the labour force (3)	Number of observations (4)
Baseline result	0.0031*** (0.0011)	0.0188** (0.0081)	−0.0098 (0.0061)	42,877
Male	0.0025 (0.0016)	0.0159** (0.0075)	−0.0148* (0.0079)	18,294
Female	0.0032** (0.0014)	0.0214** (0.0091)	−0.0070 (0.0066)	24,583
Immigrant	−0.0023 (0.0043)	0.0112 (0.0126)	0.0143 (0.0221)	3479
Age				
20–24	0.0042 (0.0038)	0.0103 (0.0066)	−0.0227** (0.0111)	5346
25–34	0.0056*** (0.0018)	0.0171 (0.0120)	−0.0091 (0.0105)	11,566
35–44	−0.0017 (0.0022)	0.0219* (0.0117)	0.0015 (0.0232)	8793
45–54	0.0028 (0.0025)	0.0120 (0.0086)	0.0050 (0.0111)	9194
55–62	0.0021 (0.0036)	0.0394*** (0.0095)	−0.0243 (0.0157)	7978
Education level				
Secondary	0.0053*** (0.0018)	0.0132** (0.0052)	−0.0043 (0.0062)	22,262
Lower tertiary	−0.0067** (0.0031)	0.0289** (0.0115)	−0.0325** (0.0149)	6001
Master's degree or higher	−0.0018 (0.0048)	0.0458** (0.0193)	−0.0161 (0.0310)	5300
Field of education services	0.0078** (0.0037)	0.0274*** (0.0085)	0.00446 (0.0113)	5317

Note: Coefficient estimates for Treatment Intensity × $I(\text{YEAR} \geq 2017)$ from separate models for the various subgroups. The Cox proportional hazards model was used. Long unemployment spells were right-censored from 10 months onwards. The treatment effects of a 1 percentage point increase in treatment intensity can be calculated as follows: $(\exp(\delta) - 1) \times 100\%$. The models included the same control variables as the models in Table 5. Standard errors, reported in parentheses, were clustered at the travel-to-work area level (50 clusters). Significance levels: *** 1 per cent, ** 5 per cent and * 10 per cent. Table A8 shows results with group-specific treatment intensities.

Abbreviation: ALMPs, active labour market programmes.

of group-specific interview probabilities is illustrated. The table shows which groups had the highest interview rates in 2015–16, and the interaction terms show how interview rates changed in 2017. Before the reform, the interview rates were relatively higher among younger jobseekers, and highly educated jobseekers had lower interview rates. After the reform, interview rates increased particularly for the highly educated. In Table A8, we provide results with group-specific treatment intensities. Overall, the results were similar to those of Table 6. The results indicated that employment effects were strongest for individuals aged 25–34, women and individuals with a low education level. Thus, interviewing these groups was particularly beneficial. In turn, the smaller employment effects for older and highly educated workers were not driven by lower interview probabilities for these subgroups.

Column 2 in Table 6 reports the heterogeneous treatment effects on ALMP hazards, which were particularly high for jobseekers aged 55–62 (48 per cent) and for the highly educated (34 and 58 per cent). The results with group-specific treatment intensities were similar (see column 2 in Table A8). We documented that interview rates increased particularly for the highly

educated. For them, the intensifying of interviews resulted in a large flow to ALMPs but not into employment. However, it should be noted that many ALMPs with insignificant or even negative impacts after a year have significantly positive impact estimates after 2 or 3 years (Card et al., 2010).

According to our results, high treatment intensities were not associated with higher hazards outside the labour force for any subgroup. We found evidence (significant at 5 per cent) of negative treatment effects on hazards outside the labour force for individuals aged 20–24 and individuals with a lower tertiary education (column 3 in Table 6). This suggests that interviews may encourage some groups to continue their job searches and stay in the labour force.

5.3 | Robustness checks

We examined the robustness of our baseline results in various ways (see Table 7). First, we estimated the model without control variables (column 1), after which we gradually increased the number of control variables. Our results were robust to different specifications regarding control variables (see Table A6). Second, we limited the analysis to unemployed jobseekers aged 25–55 because the eligibility criteria for unemployment benefits are stricter for individuals under 25 years of age, whereas the elderly unemployed have special provisions for unemployment benefits (Ilmakunnas & Ilmakunnas, 2015; Kyyrä & Pesola, 2020). The estimates (column 2) were slightly lower but also less precise because the sample size was smaller. Third, we used data from all 15 REOs and estimated the baseline model (column 3). The treatment effect on ALMP hazards was lower, likely because the two REOs had different pre-trends.

Fourth, to complement the main results and alleviate the concern about anticipation effects for the 2016 cohort, we performed the estimations again, using only the 2015 cohort as a control group (Table 7 column 4). The results of this robustness check were similar, but the estimates were less precise because the sample size was smaller. The treatment effect on employment hazards was slightly stronger, whereas the effect on ALMPs hazards was weaker. Moreover, we found a significantly negative effect on the hazards to outside the labour force.

Fifth, while the variable of interest in the econometric analysis was a continuous measure of treatment intensity, column 5 reports the results of the duration analysis, in which the top three REOs were used as a treatment group and the bottom three REOs served as a comparison group. The results show that employment exit rates increased by 7.9% ((exp (0.0761) − 1) × 100%) in the top three REOs compared with the bottom three REOs. The exits to ALMPs increased by 67.4% ((exp(0.515) − 1) × 100%) in the top three REOs compared with the bottom three REOs.

Sixth, we considered the treatment effects on different outcomes (see Table A9). We found evidence of positive treatment effects on annual employment months: A 10 percentage point increase in treatment intensity increased the number of annual employment months and decreased the number of annual unemployment months by about 0.1 months (3 days). The effect on disposable income was not statistically significant.

Our analysis was based on the assumption that an increase in the number of interviews did not affect their quality. Although the government has provided financial support for the REOs to implement the reform, Valtakari et al. (2019) argued that the reform reduced the quality of the interviews. According to their study, the intensification of interviews increased the personal workload of the PES caseworkers and weakened their well-being at work. According to Hainmueller et al. (2016), caseload influences the effectiveness of JSA because it determines

TABLE 7 Homogeneous results by outcome: sensitivity checks.

	Without control variables (1)	Jobseekers aged 25–55 (2)	All 15 REOs (3)	2015 and 2017 Cohorts (4)	Top 3 vs. bottom 3 REOs (5)
Results by outcome					
To employment	0.0041*** (0.0012)	0.0024** (0.0012)	0.0029*** (0.0010)	0.0048*** (0.0014)	0.0761** (0.0315)
To ALMPs	0.0183** (0.0083)	0.0169* (0.0101)	0.0145* (0.0075)	0.0166* (0.0092)	0.515** (0.222)
To outside the labour force	−0.0125** (0.0057)	−0.0059 (0.0075)	−0.0014 (0.0049)	−0.0143** (0.0072)	−0.0803 (0.1740)
Controls					
Regional controls	No	Yes	Yes	Yes	Yes
Individual controls	No	Yes	Yes	Yes	Yes
REO area indicators	Yes	Yes	Yes	Yes	Yes
Year-quarter indicators	Yes	Yes	Yes	Yes	Yes
Clusters	50	50	67	50	24
N (unemployment spells)	42,877	30,453	56,412	28,619	15,511

Note: Columns 1–4: Coefficient estimates for Treatment Intensity × I(YEAR ≥ 2017) from separate models: Hazard rates from unemployment to employment, to ALMPs and outside the labour force. The treatment effects of a 1 percentage point increase in treatment intensity can be calculated as follows: (exp(δ) − 1) × 100%. Column 5: Coefficient estimates for Top3 × I (YEAR ≥ 2017) using only the data from the top and bottom three REOs. The Cox proportional hazards model was used. Long unemployment spells were right-censored from 10 months onwards. The models in Columns 2–5 included the same control variables as the models in Table 5. Standard errors, reported in parentheses, were clustered at the travel-to-work area level. Significance levels: ***1 per cent, **5 per cent and *10 per cent.

Abbreviations: ALMPs, active labour market programmes; REOs, regional employment offices.

how much time a caseworker can devote to each client. They found that unemployed jobseekers who were counselled in PES offices with lower caseloads were more successful in finding jobs.

Table A10 indicates that the average quality of the interviews may have deteriorated after the reform. In particular, the number of face-to-face meetings decreased considerably. According to Vehkasalo (2020), face-to-face counselling is more efficient than online or telephone counselling in reducing unemployment duration. The changes in the number of face-to-face meetings, vacancy referrals and wage support offers indicate that the quality of the interviews seems to have suffered more in the top three REOs, where the number of interviews increased the most. This suggests that our estimates might be biased downwards, meaning that the positive effects on the exit rates would be greater with a standardization of interview quality.

5.4 | Possible mechanisms

We considered five possible channels behind the effects: (1) increased JSA, (2) stricter monitoring, (3) threat effects, (4) faster ALMP transitions and (5) enhanced operating effectiveness of the PES. Supporting information S1.

First, to support job searches and boost job search intensity, the reform intensified the interviews and increased their volume (see Figure 1, and Table A10). According to Valtakari et al. (2019), many jobseekers found that the interviews were motivating and supported their job searches. Existing evidence indicates the positive effects of JSA on re-employment (e.g., Card et al., 2010, 2018, Kluve, 2010, Vooren et al., 2019). Altmann et al. (2018) reported that encouraging unemployed jobseekers and providing them with information about the importance of active job searches can increase their prospects of finding a job. Belot et al. (2019) discovered that an online tool that provides tailored advice to jobseekers can broaden their searches and thereby increase the number of job interviews for which they are selected. According to our results, interviewing low-educated and young jobseekers is particularly beneficial.

Second, the reform led to tighter monitoring of job searches, and the imposition of sanctions increased (see Table A10). According to the literature, combining JSA with regular job search monitoring and sanctions for non-compliance seems to generate the most favourable outcomes (e.g., Hägglund, 2014; McGuinness et al., 2019; McVicar, 2008). Gorter and Kalb (1996) noted that counselling and monitoring encourage people to submit more applications. Arni and Schiprowski (2019) found that unemployment duration decreased by 3 per cent when job search requirements increased by one monthly job application. Like us, they found that the effects were heterogeneous and strongest among lower-skilled jobseekers. They reported that the number of imposed benefit sanctions rose by 12 per cent per required monthly application. Unemployment benefit sanctions have been reported to increase exits from unemployment to employment but also outside the labour force (e.g., Arni et al., 2013; Busk, 2016; Lalive et al., 2005; Svarer, 2011). Moreover, previous research has reported that sanctioned individuals often accept jobs with shorter durations and lower earnings than do non-sanctioned individuals (e.g., Arni et al., 2013; Van den Berg & Vikström, 2014).

Third, in addition to the direct treatment effect of the interviews, the reform likely had considerable threat effects, including a higher risk of being interviewed in the near future. The reform had been widely reported in the news beforehand. Previous studies have found that unemployed individuals are considerably more likely to find a job when facing the threat of having to participate in mandatory ALMPs (e.g., Rosholm & Svarer, 2008). Van den Berg et al.

(2009) reported a positive ex-ante effect on search effort and a negative effect on the reservation wage. This means that threat effects can make individuals search harder and accept lower-quality jobs. Threat effects affect all jobseekers, including individuals who are not interviewed. However, threat effects were likely to be similar in all REO areas because jobseekers were barely aware of regional differences in interview probabilities. Figure 4 shows that, in 2017, employment hazards also increased in the bottom three REOs, which may be at least partly because of threat effects.

Fourth, the reform increased ALMP transitions (see Tables 5 and 6). Helping unemployed jobseekers to exit more swiftly to ALMPs may increase their likelihood of employment. In Finland, ALMPs include employment with wage subsidies, labour market training, coaching and work trials, rehabilitation work and self-motivated studies with unemployment benefits. In the top three REOs, coaching and work trials as exit destinations particularly increased (see Table A3). Enhanced services, including training programmes and JSA, seem to be the most effective in the short run, whereas private sector wage subsidies have the greatest effects in the long term (e.g., Kluve, 2010; Sianesi, 2004; Vooren et al., 2019). The so-called lock-in effects are relevant: Some ALMPs can take quite a long time, and during the period of programme participation, participants may put less effort into a job search (Vooren et al., 2019).

Fifth, the reform may have increased the operating effectiveness of the PES. Valtakari et al. (2019) reported that, before 2017, there were large regional differences in the implementation of interviews, and these differences were related to how unemployed jobseekers were employed. They also reported that, after the reform, regional differences in the implementation of interviews decreased, which seems to have reduced the regional differences in the matching efficiency. Launov and Wälde (2016) highlighted that reforming the PES can reduce unemployment. They compared the effects of reducing unemployment benefits and reorganizing the PES's operations and found that the enhanced effectiveness of the PES explains more of the observed post-reform decline in unemployment than changing the monetary compensation scheme for unemployed workers.

6 | CONCLUSIONS

In 2017, a large-scale policy reform in Finland increased the frequency of interviews with unemployed jobseekers at local public employment offices. This paper contributes to the existing JSA literature by providing quasi-experimental evidence on the effects of periodic interviews. We used a difference-in-differences approach that exploited regional variations in treatment intensity and considered possible displacement effects on non-treated jobseekers.

The analysis yielded four key findings. First, the interviews had a robust effect on employment transitions. A 10 percentage point increase in the interview probability increased the monthly hazard rate of employment by ∼3.1 per cent. This positive employment effect is in line with the previous literature on JSA, but its magnitude is smaller compared with the studies that ignored displacement effects.

Second, our results showed a strong effect on the exit rate to ALMPs: a 10 percentage point increase in treatment intensity increased hazards to ALMPs by 21 per cent. Helping unemployed jobseekers to exit more swiftly to ALMPs may increase their likelihood of employment in the future. However, the effects are not necessarily immediate. Third, although the reform led to tighter monitoring and the imposition of sanctions increased, it appears to have not

increased the total flow out of the labour force. According to the previous research, stricter monitoring and sanctions may increase transitions to outside the labour force.

Fourth, we observed heterogeneous treatment effects for the various subgroups. Treatment effects on employment hazards were high for jobseekers aged 25–34 years and for jobseekers with a low education level. According to the results, interviewing these groups is particularly beneficial. We also found that treatment effects on ALMP hazards were particularly strong among jobseekers aged 55–62 and jobseekers with a high education level.

Possible channels behind these effects include increased JSA, stricter monitoring and threat effects. The reform intensified interviews and increased their volume to support job searches. It also led to tighter monitoring of job searches, and the imposition of sanctions increased. The reform likely had considerable threat effects, also affecting unemployed jobseekers who were not interviewed. Moreover, the reform increased ALMP transitions and may have also increased the operating effectiveness of the PES.

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CONFLICT OF INTEREST STATEMENT

The authors declare no conflicts of interest.

ENDNOTES

[1] In 2016, the cost for periodic interviews was 49.7 million euros. The 2017 budget allocated an additional 17 million euros to improve the efficiency of employment services (Valtakari et al., 2019).

[2] For comparison, in Denmark, JSA typically consists of meetings with a caseworker every three months (Gautier et al., 2018). In Sweden, jobseekers meet a caseworker on average once per quarter (Liljeberg & Söderström, 2017).

[3] In 2017, two other labour market reforms came into force: The cost-competitiveness package reduced labour costs of Finnish companies, and the maximum duration of unemployment insurance was cut from 500 to 400 days (Economic Policy Council, 2017). These reforms did not cause regional variations because the related practices were consistent across the country before and after these reforms. However, the reforms may have contributed to the Finnish economy: The volume of GDP increased by 0.5 per cent in 2015, 2.8 per cent in 2016 and 3.2 per cent in 2017 (see Statistics Finland, 2020. Official Statistics of Finland (OSF): Annual national accounts [e-publication]. ISSN = 1798–0623. Access method: http://www.stat.fi/til/vtp/2020/vtp_2020_2021-03-15_tie_001_en.html).

[4] Personal communication via email (7 October 2021).

[5] The activation model reduced unemployment benefits for jobseekers who had not done enough paid employment, participated in employment services or earned enough as a self-employed person. About one-third of all benefit recipients faced sanctions in 2018 (see Economic Policy Council, 2019).

[6] Moreover, the right-censoring ensured that cutting the maximum duration of unemployment insurance in 2017 did not affect our results.

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SUPPORTING INFORMATION

Additional supporting information can be found online in the Supporting Information section at the end of this article.

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