Improving employability for the least qualified unemployed. Lessons from a new French training program

——EEA, Rotterdam 2024

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Introduction

Motivation

- Shift out of the Beveridge curve after the economic recovery of the subprime crisis.
- Skill mismatches $\rightarrow$ Continuing Vocationnal Training (CVT) for job seekers.
- In 2020, individuals without any diploma faced an unemployment rate of 13.9% compared to 8% for all individuals.
- PIC: 15 billion euros between 2018 and 2023.

What does the literature say?

- A large literature on the effects of CVT on the return to regular employment and on earnings (Crépon et al., 2012; Card et al., 2018).
- Training program effectiveness varies based on individuals' characteristics: qualification level (Cavaco *et al.*, 2013), gender (Bergemann and Van den Berg, 2008), or age (Bonnal *et al.*, 1997).

Introduction

Research Question

Do more innovative training programmes for job seekers improve return to regular employment and working conditions?

Method

- Estimation of the average effect of IC training on trainees using multiple regression methods (OLS and probit models).
- Analyze of the heterogeneity of the effect for subgroups of job seekers.
- Robustness check considering matching estimators and placebo test.

Contributions

- Differentiate training programmes for job seekers based on the content of the training, its organization, and the teaching methods.
- Estimate the heterogeneity of the effect for different subgroups of job seekers.
- Provide targeting recommendations to make this policy more efficient.

Policy Context

A. Who is in charge?

- French regional councils and *Pôle Emploi/ France Travail*: operational implementation.
- The government set up programmes with specific goals and targeting some populations:
  - PIC (2018-2023): 15 billion euros, mainly targets young people and low education levels.
  - Half of the PIC budget is transferred to regional councils.
  - Innovation in training programmes
- Only one selection criteria : being a job seeker.

Policy Context

B. The Experimentation

- Name of the experimentation : IC.
- Training programmes without cutoff : usually they have to do first a preparation training programme and then a qualifying training programme
- Personalization of the training programme through an assessment at the beginning of the training and a personal advisor all along the training programme.
- Modularization of training.
- Each individual should have a different schedule based on their skills
- Training programme (diploma) vs Training pathway (skills)

Data and Method

A. Data

- A dataset including FORCE (DARES) and the Regional databases.
- 1,763 trainees, including 126 trained through the experiment IC.
- Only qualifying training in 2020 and 2021.
- Common training industry and French departments of residence between IC and job seekers who benefit from standard training.
- Observation of professional trajectories over 12 months after the end of training.
- Outcome variables: return to employment, earning income, and job contract duration.

Data and Method

A. Data

	Variable	Standard Training	IC Training	Difference	p.value
Gender	Percentage of Women	67.2%	57.9%	-9.30**	4.35%
Age	Age at Training Start	34.49	34.58	0.09	93.01%
Country of Birth	France	74.60%	84.10%	9.49***	0.65%
Status	RSA Recipient	21.40%	21.60%	-0.76	84%
	Disabled	5.50%	7.10%	+1.64	48.99%
Residence	Priority neighborhood	17.40%	16.70%	-0.69	84.17%
Level of education	High school diploma	21.2%	14.3%	-6.92**	3.69%
	Vocationnal diploma, middle school level	36.40%	45.20%	+8.81*	5.79%
	Middle school diploma	13.00%	14.30%	+1.27	69.64%
	No Diploma	17.20%	16.70%	-0.51	88.32%
Employment History	Number of Previous Jobs	1.11	1.06	-0.05	72.04%
	At least once employed since 2017	52.30%	51.60%	-0.73	87.42%
	Average Duration of Previous Jobs	379.32	461.34	82.03	52.62%
Duration of the training	in days	160.41	111.71	48.70***	<0.1%

Data and Method

B. Method

- Estimate the average effect of the training on job seekers who actually benefited from it:

$$\text{ATT} = \mathbb{E}\left(Y_{1i} - Y_{0i} \mid T_i = 1\right) \tag{1}$$

- As a control group, we only have information on job seekers who received standard training. *ATT* therefore measures the contribution of the IC scheme compared to standard training.
- Using OLS:

$$Y_i = \alpha + \beta T_i + \gamma X_i + \varepsilon_i \tag{2}$$

where Y is the outcome variable, X is the set of control variables, T is the treatment, and β is the estimator of $\widehat{\text{ATT}}$.

- Estimation on subgroups by education level for heterogeneity.
- Robustness of results using matching methods and placebo test.

Results - Overall ATT on Employment Return

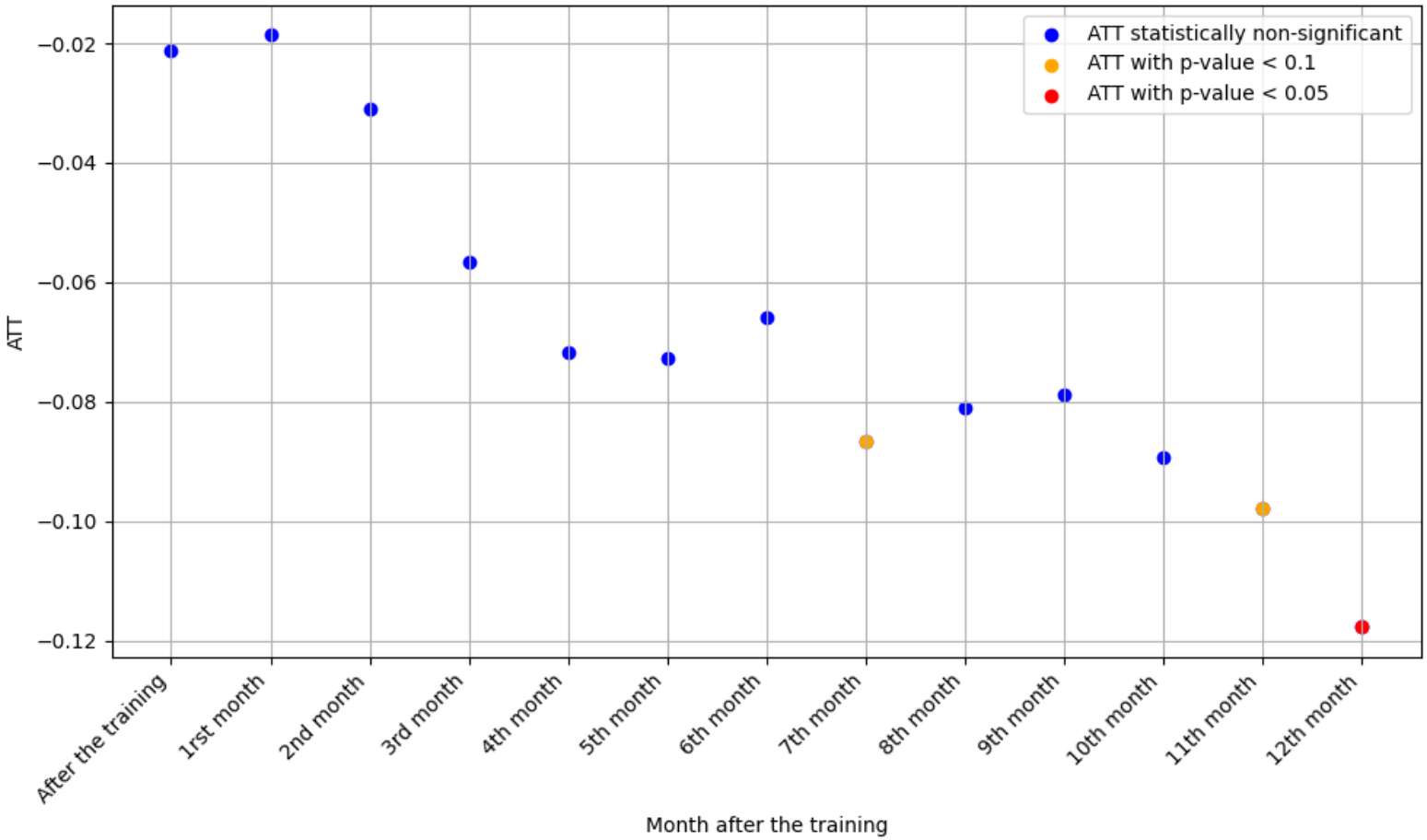

Figure 1: ATT Estimation - Probability of Being Employed After Experimental Training.

Results - Overall ATT on Working Conditions

Table 1: ATT Estimates of Experimental Training on Working Conditions.

Variable	Estimate	p-value
Job search duration	-11.73	0.465
Number of days worked in the first months after training		
3 months	-2.96	0.351
6 months	-6.96	0.302
12 months	-14.70	0.273
Amount of salary received in the first months after training		
3 months	-163	0.296
6 months	-429	0.186
12 months	-785	0.220

Duration in days, amount in euros, number of days and amount of salary over the entire period considered.

Results - ATT by Education Level on Employment Return

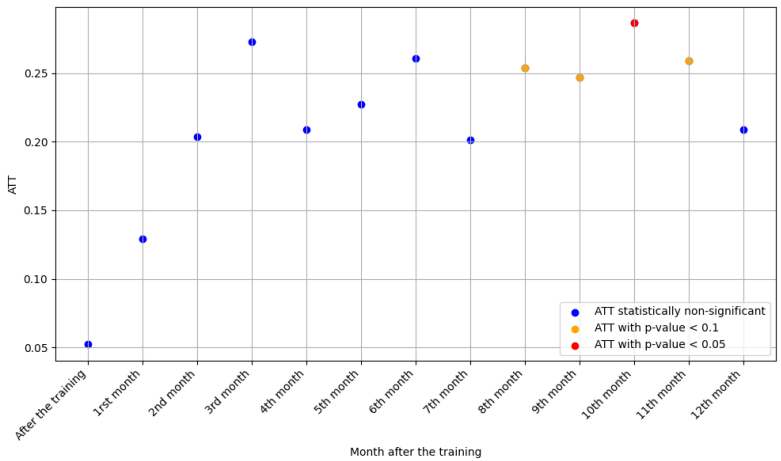

Figure 2: ATT Estimate for Those Without Diplomas - Probability of Employment After Experimental Training.

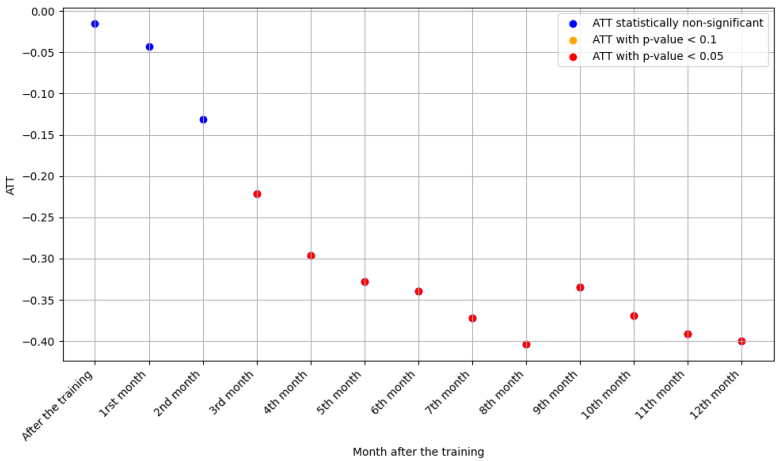

Figure 3: ATT Estimate for Individuals with a High School Diploma (BAC) - Probability of Employment After Experimental Training.

Results - ATT by Education Level on Working Conditions

Table 2: ATT Estimates of Experimental Training on Working Conditions - No Diploma

Variable	Estimation	p-value
Job Search Duration	-49.66	0.129
Number of Days Worked 3 months	8.84	0.398
Number of Days Worked 6 months	26.96	0.227
Number of Days Worked 12 months	70.72*	0.101
Income Amount 3 months	349	0.467
Income Amount 6 months	982	0.330
Income Amount 12 months	3,425*	0.064

Table 3: ATT Estimates of Experimental Training on Working Conditions - High school diploma Level

Variable	Estimation	p-value
Job Search Duration	-56.22	0.145
Number of Days Worked 3 months	-6.94	0.374
Number of Days Worked 6 months	-31.92**	0.046
Number of Days Worked 12 months	-87.31***	0.000
Income Amount 3 months	-210	0.597
Income Amount 6 months	-1,697**	0.046
Income Amount 12 months	-4,174***	0.002

Robustness

- Similar results with propensity score estimators (PSM with 5 or 10 nearest neighbors estimators).
- The PS is estimated using a probit or linear probability model and SD were estimated by bootstrap with 200 replications.
- Balancing tests : Rosenbaum and Rubin (1985).
- Placebo test : End of the simulated training the 1rst Janury 2017 (1,445 individuals with 98 IC, more than 75% of our initial sample)

Month	ATT (pvalue)
Month 2	0.009 (0.697)
Month 3	-0.011 (0.537)
Month 4	-0.014 (0.540)
Month 5	-0.019 (0.393)
Month 6	0.008 (0.824)
Month 7	0.011 (0.786)
Month 8	-0.007 (0.851)
Month 9	-0.017 (0.668)
Month 10	-0.034 (0.390)
Month 11	-0.036 (0.367)
Month 12	-0.036 (0.367)

Table 4: Placebo test

Conclusion

Conclusion

- A rather negative medium-term effect of the experimental training compared to standard training on employment.
- A positive effect on employment and working conditions of the experimental training for job seekers without any diploma, but negative for individuals with high school diploma.
- Individualization or adding basic skills to a standard training programme?
- Impact on more qualified individuals being directed towards training designed for those facing difficulties
- Better targeting of participants in the experimental training could improve policy effectiveness.
- Limitation of sample size and actual pedagogical innovation implemented.

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Results - Overall ATT on Employment Return

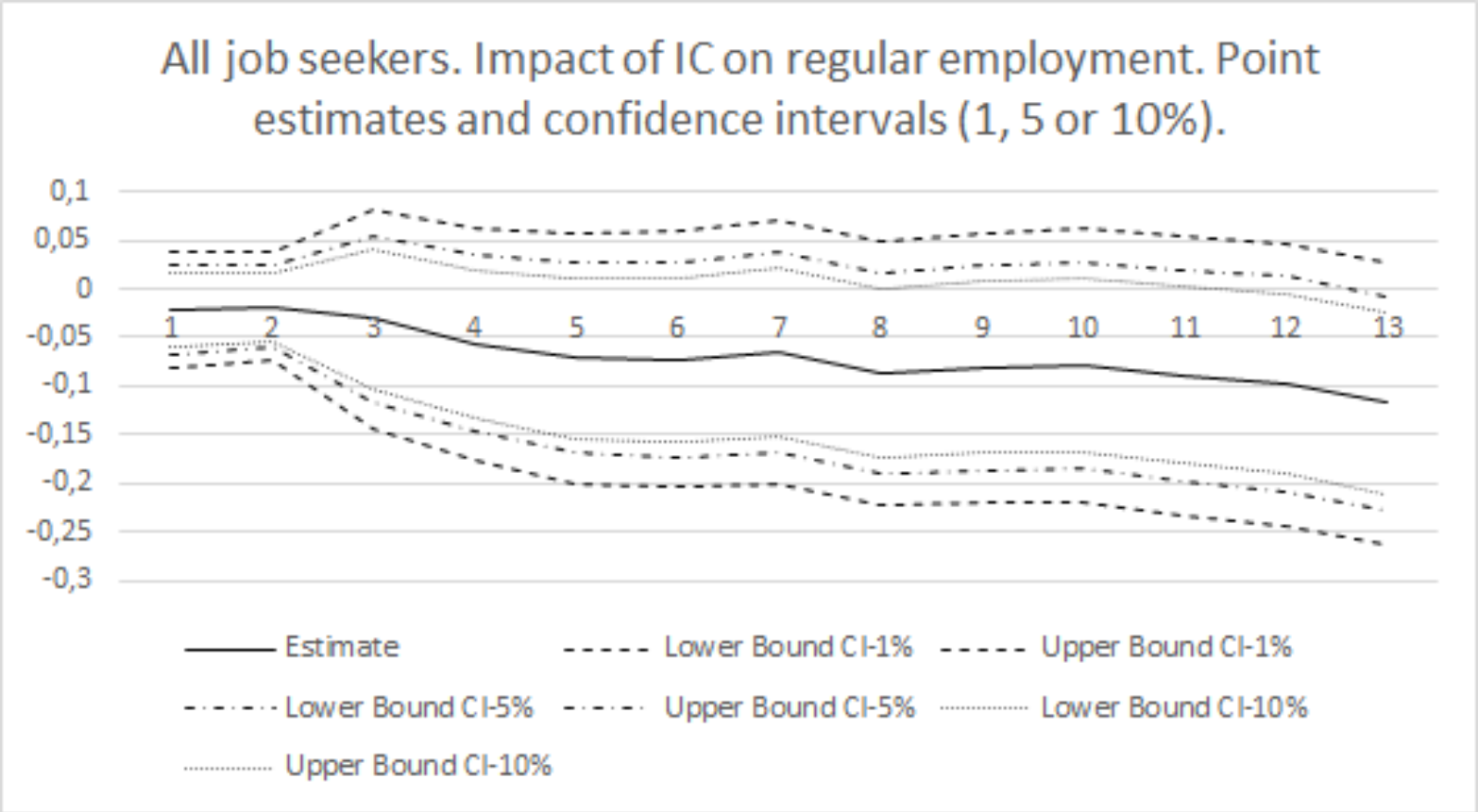

Figure 4: ATT Estimation - Probability of Being Employed After Experimental Training.

Results - ATT by Education Level on Employment Return

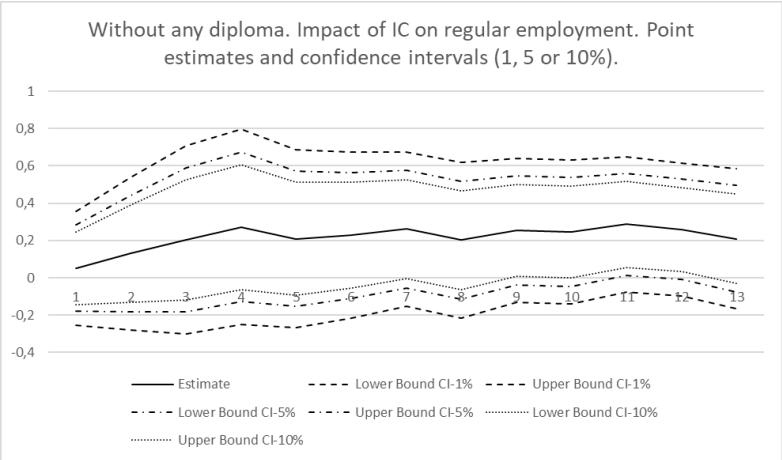

Figure 5: ATT Estimate for Those Without Diplomas - Probability of Employment After Experimental Training.

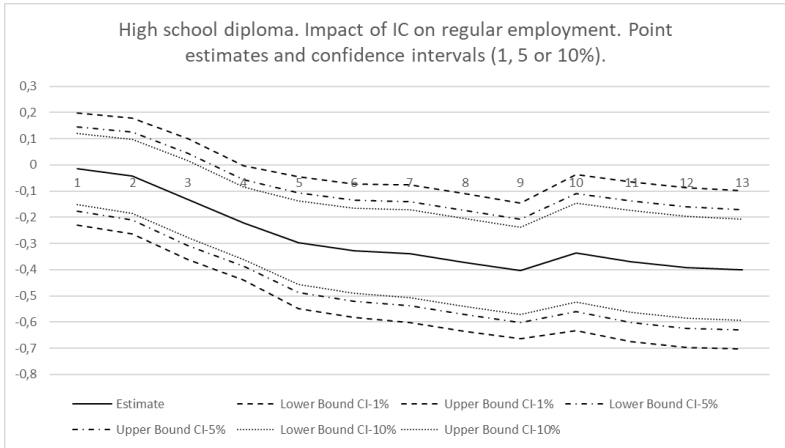

Figure 6: ATT Estimate for Individuals with a High School Diploma (BAC) - Probability of Employment After Experimental Training.