# Active Labour Market Policies & Stable Regular Employment

## Differential Effects of Varying Types of Training for Job-Seekers in Belgium

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**PRELIMINARY VERSION - PLEASE DO NOT CITE**

### Background

Since the introduction of Active Labour Market Policies (ALMPs) in the US, Europe and other OECD countries, training programs have consistently played a major role. Alongside others ALMPs such as job search assistance (JSA), Wage subsidies (WS) or Public Sector Employment programs, training is assumed to enhance jobseekers employment opportunities by increasing their human capital, be it in the form of basic competences, occupation-specific skills, or even improved social networks with potential employers and acquiring firm-specific knowledge and capabilities (Card et al., 2010; Card et al., 2015; Kluve, 2006; Kluve, 2010). This article suggests that the mixed nature of previous findings with respect to the effectiveness of training programs is at least partially related to the wide range of programs evaluated under this common denominator (Biewen et al., 2014; Biewen et al., 2007; Card et al., 2010; Fitzenberger et al., 2008; Hirshleifer et al., 2016; Hujer et al., 2006a, 2006b; Lalive et al., 2008; Richardson & Van Den Berg, 2001). The wide variety of training programs in the context of ALMPs is begging for an assessment of the effectiveness and direct comparison of such programs, depending on their design features. The Belgian setting provides an excellent yet understudied laboratory in this respect. Spending on ALMPs as a percentage of GDP is relatively high in comparison to other OECD countries (Andersen, 2012; OECD, 2019). In addition various types and subtypes of training programs are untargeted and in principal equally available to all unemployed job-seekers.

This study adopts a selection on observables approach to identify the effect of program participation in seven (sub)types of training on the hazard of entering stable regular employment (i.e. an employment spell of at least 1 year that is not part of an ALMP training program). Using dynamic propensity score matching (Sianesi, 2004), we identify average treatment effects on the treated (ATTs) in comparison to continued job search without participation in the training under consideration. In addition, as the ATTs of different types of training programs cannot be compared directly due to different types of profiles entering different types of training, we also directly compare the effectiveness of different types of training programs vis a vis one another in a multiple treatment framework (Sianesi, 2008). Although this framework has been applied to compare the effectiveness of different types of ALMPs (Sianesi, 2008), this study is the first to unpack training programs into

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different (sub)types and compare the effectiveness depending on their design features. In contrast to previous literature in which training programs are assumed a homogeneous treatment, this study considers a three-level hierarchical typology of training programs, in which training programs as a whole serve as the highest level. Next, training programs can be divided into Classroom Training (CT) and Workplace Training (WT) programs which involve work place introduction or experience. CT programs in turn contain Basic Classroom Training (BCT), which invests in the enhancement of personal skills to navigate the labour market (e.g. how to construct a cv or prepare for an interview) alongside Occupation-specific Classroom Training (OCT) geared towards a pre-defined occupation of interest. WT programs contain both Contractual Workplace Training (CWT) in which a participant is entitled to a temporary employment contract after the training program, as well as Free Workplace Training (FWT) programs after which no such employment contract is provided.

**Data & Method**

We use a 2005-2016 panel dataset for the working age population constructed from two main sources, the longitudinal monthly monitoring of job search and ALMP participation of unemployed individuals by the Employment Office (EO) and the longitudinal quarterly database of all working age individuals' labour market positions from the Crossroads Bank for Social Security. The use of this dataset was motivated by its longitudinal nature and rich linkage between multiple registers, which is particularly beneficial in a selection-on-observables approach. As to sample choice, we select all unemployment spells which start within the observation window and which are registered at the EO. This selection criterion is applied as most observed characteristics are available through the EO database and 95% of all unemployment spells are registered at the EO. This selection entails a sample of 43,369 unemployment spells experienced by 17,281 individuals. During these unemployment spells 425,553 person-quarters are observed.

This study focusses on the first training program an individual participates in within an unemployment spell, regardless of the length or success of participation. In line with previous ALMP evaluations, we assume that any later participation in other training programs, as well as the duration and success of participation in the first training program is endogenous. Hence, we start measuring the causal effect of the start of participation, implying that lock-in effects are considered a meaningful part of the effect (Sianesi, 2004; Vikström, 2017).

Multiple comparison states are used in the estimation of the causal effect under the conditional independence assumption (CIA). First, in one-by-one estimations of the ATT for different training programs, the treated group for training A is compared to a matched control group of unemployed job-seekers which did not participate in training A, and heterogeneous in terms of participation in other training programs. The treated group is followed until a transition is made to stable regular employment or censoring due to death, emigration, reaching age 65, or the end of the observation window. Individuals in the control group are also observed until a transition to stable regular employment or censoring, as long as they have not (yet) participated in training A during the unemployment spell. Second, in the direct comparison of the effectiveness of different types of training programs, the treated group for training A is compared to the treated group for training B. Both groups are observed until a transition to stable regular employment or censoring, provided that

individuals in treatment group A have not (yet) participated in treatment B and vice versa (Sianesi, 2008).

After matching unemployed job-seekers that start participation to matched control units that did not (yet) start participation at time t, from t+1 on both groups are compared in a discrete-time hazard model of the quarterly hazard of entering a regular employment spell that lasts for at least one year, using a complementary logarithmic link function (Singer & Willet, 2003). Note that as a result of conditioning the matching on time since the start of unemployment, this approach ensures that all treatment effects are based on a comparison of the observed outcome for the treated and their counterfactual outcome at the same time since the start of unemployment. The evaluation of the effectiveness of training programs in a discrete-time hazard model approach implies that unemployed job-seekers who have made the transition into a stable regular employment spell are – after that transition – no longer of interest as they are no longer part of the risk set for the event of interest. As a result, the potential differential selectivity of the risk set in the treated and matched control group over time is considered as an integral part of the treatment effect at the group-level.

In addition to the identification of ATTs in terms of the hazard to enter a stable regular employment spell, which are in line with the functioning of the EO and provide useful knowledge on the dynamic effectiveness of training programs depending on the time elapsed since the start of participation, we also further calibrate the group-level effects of participation in different (sub)types of training programs using life table functions. More specifically, effects of participation – which are allowed to vary by time since the start of participation – are applied to the baseline hazard function of the control group, in order to calculate *cumulative incidence* curves by participation. Whereas cumulative incidence curves indicate the proportion of the group that, over time, has entered at least one stable spell of regular employment, the difference in cumulative incidence for the treated and control group serves as a measure of *cumulative gain* over time.

**Findings**

Three broad lessons can be learnt from this ALMP evaluation study. First, we show that – both when training is considered as a homogenous treatment (Figure 1) or when different (sub)types are considered separately (Figure 2-4) - all training programs – despite many idiosyncrasies - initially exhibit neutral or even negative short-term effects, and positive medium-term effects which disappear or even turn negative in the long run. In line with previous studies (Sianesi, 2004, 2008; Vikström, 2017), the fact that the effect of program participation varies considerably depending on the time since the start of participation underscores the need to adopt a dynamic approach to the ALMP evaluation problem. Results illustrating the cumulative impact of program participation on the incidence of a stable regular employment spell indicate that all programs reach substantial positive cumulative advantage for the participants over the non-participants, though the degree to which this cumulative advantage weakens over time, reflecting effects on the timing rather than the incidence of regular employment entry, varies.

Second, when assessing the effect of participation in the training programs one-by-one (Figure 2-4), all training programs exhibit substantial positive effects, yet the magnitude of the effects depends on the

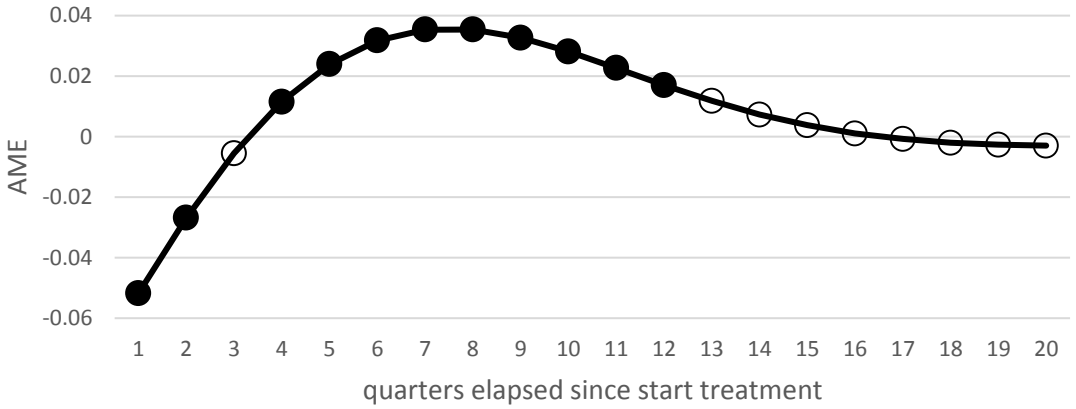
type of training and its participants considered. The positive ATTs are larger for participants in occupation-specific versus basic classroom training programs, but even more so for workplace training programs. These differences may result from differential effectiveness of programs, but also different profiles of participants in varying training types.

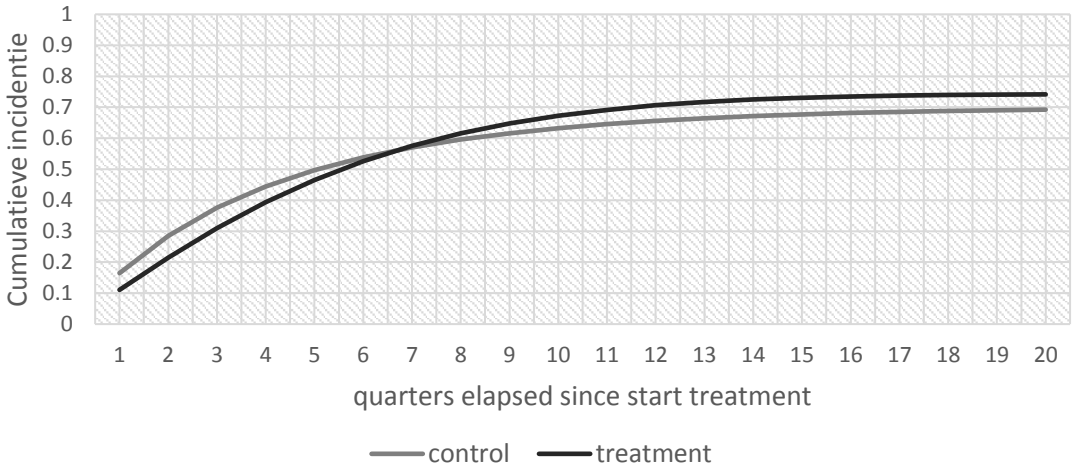
Third, the direct comparisons of different types of training (results not shown here) are informative on the degree to which participants in program A would have performed better if they had participated in program B. A direct comparison between classroom training and workplace training indicates that the latter entails a faster transition to stable regular employment, whereas participation in classroom programs yields a higher cumulative incidence of stable employment in the long run. Results directly comparing basic classroom training and occupation-specific classroom training show that those who participated in the latter would perform considerably worse if they would have enrolled in former type of training, whereas those who followed basic programs would have experienced similar employment probabilities under occupation-specific training participation. Finally, the comparison of contractual workplace training and free workplace training indicates that a regular short-term employment contract as a part of the training program has a considerable positive short-term impact on the hazard to enter a stable regular employment spell.

Available ALMP evaluations have repeatedly reported that programs most closely resembling regular employment (e.g. wage subsidies or internships) are most effective in stimulating the transition from unemployment to regular employment, and often more effective than other broad ALMPS types such as training programs (Card et al., 2010; Card et al., 2015; Gerfin & Lechner, 2002; Gerfin et al., 2005; Nekby, 2008; Rinne, 2012; Sianesi, 2008). This study adds to this body of literature by unpacking training into two types and four subtypes, and our results suggest that also when comparing different types of training programs, the types most closely approximating regular employment also generate the most convincing positive effects.

**APPENDIX A - Figures**

**Figure 1** – The effect of participation in training as an ALMP on the transition from unemployment to stable regular employment: average marginal effects (top), Cumulative incidence by treatment status (middle), cumulative gain from participation (bottom), Belgium 2005-2016



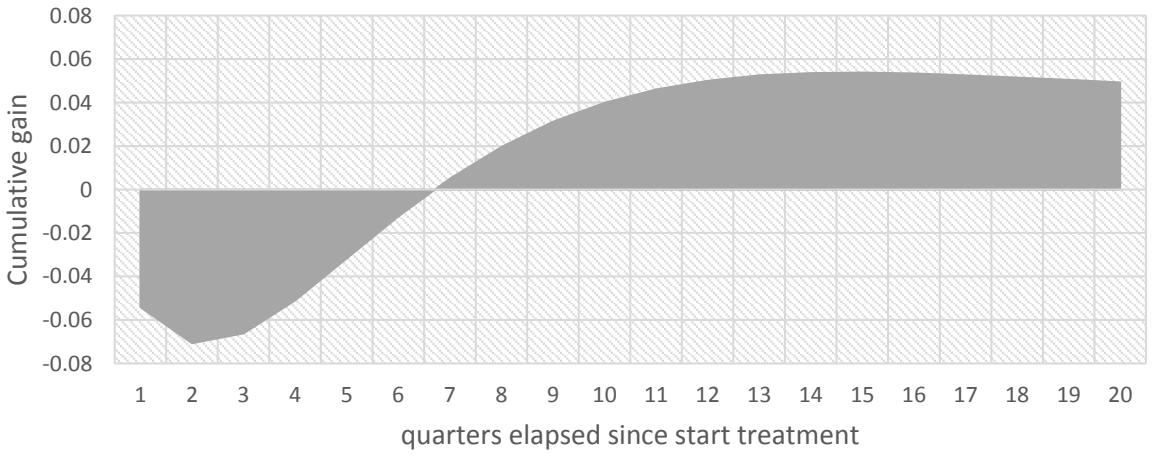
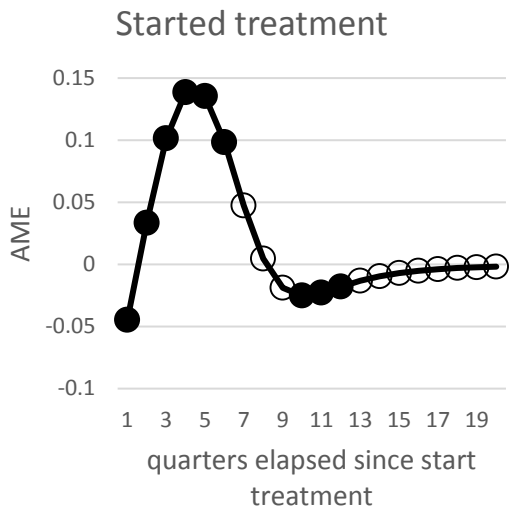
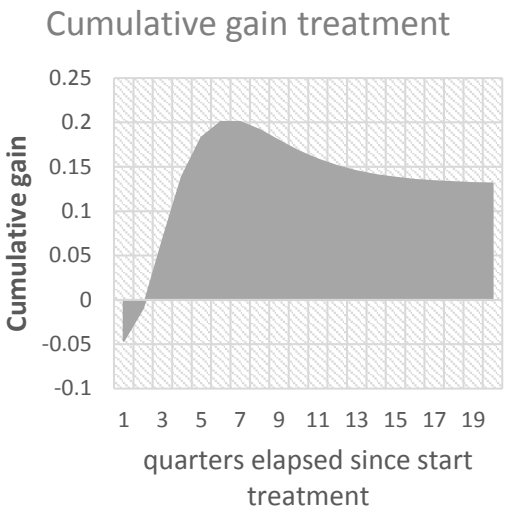



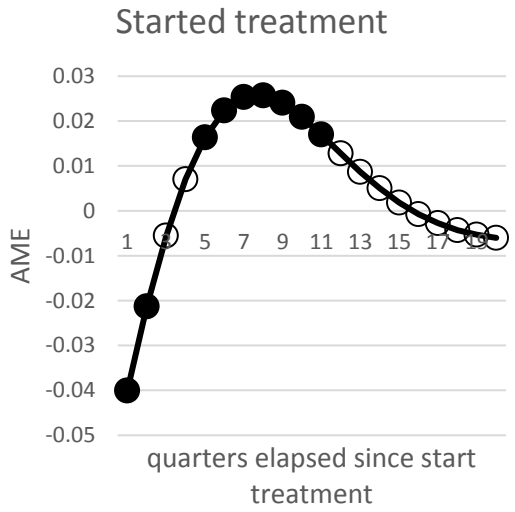
**Figure 2** – The effect of participation in workplace training and classroom training as an ALMP on the transition from unemployment to stable regular employment: average marginal effects (left), cumulative gain from participation (right), Belgium 2005-2016

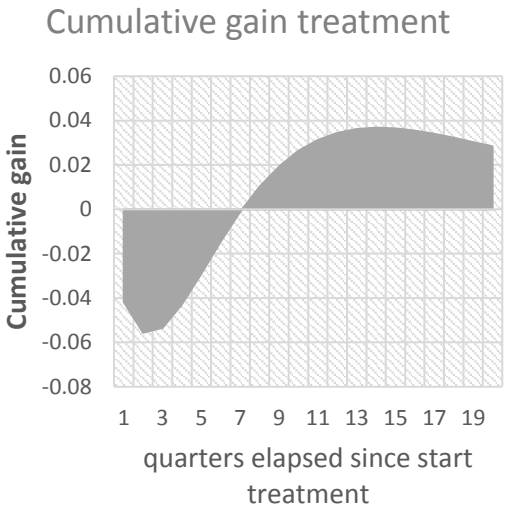
A. Workplace training




B. Classroom training

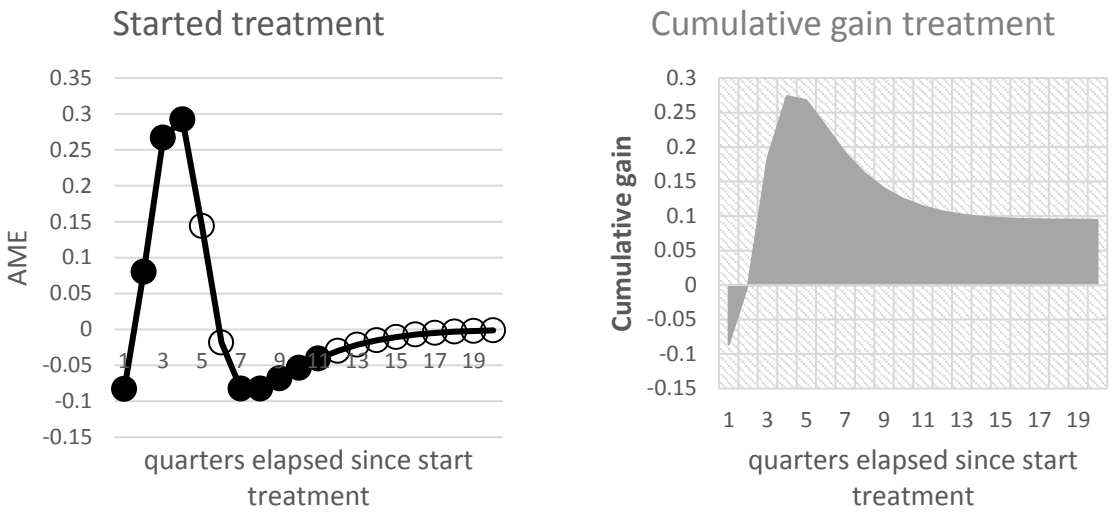


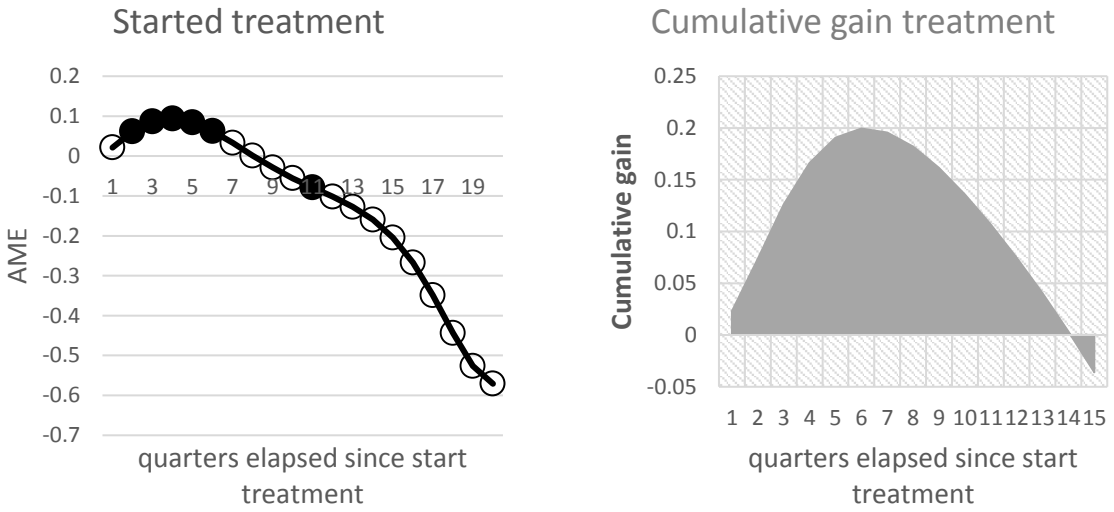

*Source: ASD-Panel, 2005-2016 Belgium*

**Figure 3** – The effect of participation in 2 types of workplace training as an ALMP on the transition from unemployment to stable regular employment: average marginal effects (left), cumulative gain from participation (right), Belgium 2005-2016

A. Individual Vocational Training (IVT)



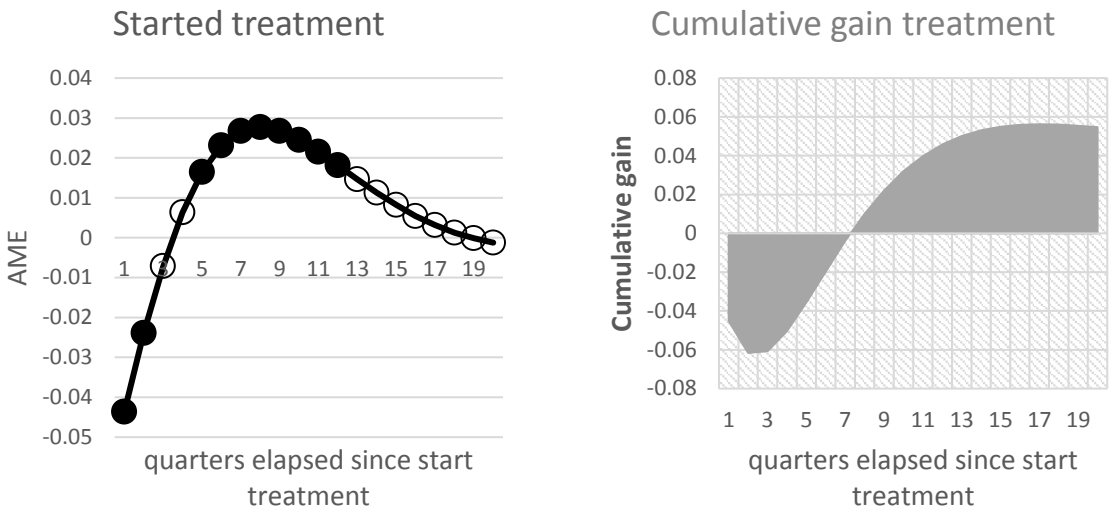

B. Other types of workplace training



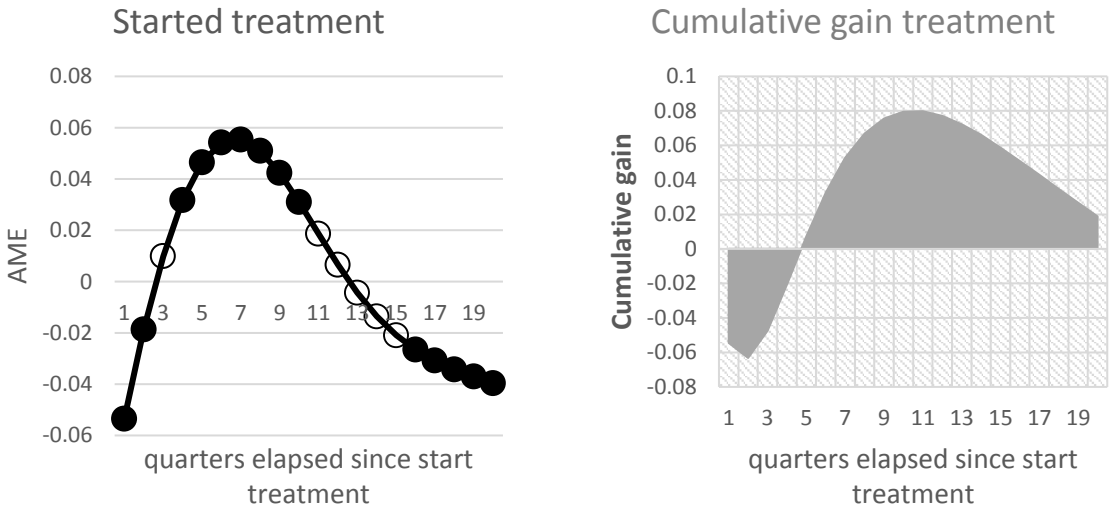

*Source: ASD-Panel, 2005-2016 Belgium*

**Figure 4** – The effect of participation in 2 types of classroom training as an ALMP on the transition from unemployment to stable regular employment: average marginal effects (left), cumulative gain from participation (right), Belgium 2005-2016

A. Basic classroom training programs




B. Occupation-specific classroom training




*Source: ASD-Panel, 2005-2016 Belgium*

**APPENDIX B - Matchingvariables**

In line with the original application by Sianesi (2004) which draws on the results of a survey among job-seekers and caseworkers on the determinants of program participation, this study benefits from a related research project in the sense that the determinants of participation were unveiled in qualitative research, more specifically non-participant observations of interactions between job-seeker and caseworker as well as post-meeting in-depth interviews with both parties. These results inform this study on the set of factors to consider and – providing that they also affect employment hazards – the set of determinants to operationalise or proxy based on rich linked administrative data.

From this work, it appears that five broad groups of factors determine whether an unemployed job-seeker participates in training, but also which type of training is selected in interaction between job-seeker and caseworker. First, a job-seekers skills and credentials play an important role. From both the caseworker's and the job-seeker's perspective, a lack of skills required to materialise labour market goals will lead to a higher likelihood of participating in training, or specific training programs in case labour market goals are well-defined. As language proficiency and educational credentials were identified as determining factors, this study uses level and field of education, as well as proficiency in Dutch, French, German and English as matching variables. Additionally, information on the attainment of driver's licenses is included.

Second, in addition to future employment outcomes as a result of skills and credentials, job-seekers' distance to the labour force was also identified as a crucial factor in the selection of training programs. From the perspective of the caseworker, job-seekers remotely distanced from the labour market – meaning that they have little experience in paid work, exhibit repeated unemployment spells or have previously worked under public employment ALMP schemes – are more likely to require training or assistance. Similarly, job-seekers with more experience may also feel less need to take up training instead of continuing the job search in open unemployment. In addition to distance to the labour force, the relation with the labour force is also found to depend on other factors such as the level of unemployment benefits received and previous wages which may reflect reservation wage, previous working hours, and whether an individual has ever worked in the system of service vouchers or low-skilled public employment as an ALMP. The latter factors may exhibit signalling effects both for caseworkers as well as potential employers. Consequently, the application of the dynamic matching procedure presented in this article adopts the number of the unemployment spell, cumulative work experience, last working hours, last wage, and whether a job-seeker has ever worked in the system of service vouchers or low-skilled public employment as an ALMP.

Third, an unemployed job-seeker's preferences and motivation play an important part in the selection of training programs, as well as future employment probabilities. It is noteworthy that the assessment of both occurs in interactions between the job-seeker and the caseworker. The EO considers the definition of clear whilst realistic labour market goals a necessary fist step towards employment entry, whereas a lack of motivation to identify and pursue specific labour market goals is likely to affect job-seekers ALMP trajectories as well as future employment outcomes. With respect to job-seekers preferences, this study includes information on preferred working hours and working regimes. This time-varying information is available as all job-seekers are required to complete their online profile on the EO platform. With respect to overall motivation to work, this study uses the amount of online preference fields used with respect to working hours and regimes (max. 3) as a proxy for motivation.

In addition to this proxy, a lack of motivation to enter regular employment is very likely to be reflected by the type of measures adopted in the JSA. Continued unemployment after receiving many automatic job referrals may for instance reflect unresponsive behaviour, whereas information on manual job referrals, mandatory job applications/interviews and transmissions by the caseworker sketches a relatively detailed picture of the interaction between both parties. The caseworker is free to decide whether or not to send manual job referrals, and whether or not the job-seeker comes across as motivated is assumed to play an important role. Furthermore, the prescribed procedure of mandatory job applications/interviews explicitly takes motivation into account. After a first step in which job requirements are matched with job-seekers' characteristics, the second step consists of a referral meeting in which the caseworker establishes whether the job-seeker is sufficiently motivated to apply/interview for a job. Whenever this does not seem the case, the caseworker might cancel the mandatory application/interview in order to safeguard relations with potential employers.

Fourth, in addition to measures of JSA adopted during the unemployment spell of interest, previous contact with ALMPs is also likely to affect both the likelihood of starting a training program as well as subsequent employment probabilities. From both the perspective of the job-seeker and caseworker, previous experiences with particular programs is likely to affect future participation. Consequently, the application of dynamic propensity score matching in this study controls for previous contact with JSA and its measures (automatic job referrals, manual job referrals, mandatory job applications/interviews, transmissions), but also all training types.

Finally, the matching procedure also includes basic background variables which may be distributed differentially between treated and non-treated groups and are likely to impact future employment outcomes: age, gender, calendar year, migration background, parity, whether any children are under three, partnering status, whether partner is employed, and whether the job-seeker has any history of physical limitations or handicaps preventing labour force participation.

**Table 1**: Distributions of matchingvariables for treated, control and matched control groups – Training (any type)

| | Treated | unmatched control | diff (sig.) | matched control | diff (sig.) |
|---|---|---|---|---|---|
| female (%) | 45.08 | 48.48 | *** | 45.76 | |
| age (Mean) | 29.67 | 31.34 | *** | 29.75 | |
| year | 2010.44 | 2010.96 | *** | 2010.49 | |
| **migration background** | | | | | |
| . no migration background | 10.83 | 9.44 | | 11.06 | |
| . European 1st gen | 3.28 | 3.28 | | 3.16 | |
| . European 2nd gen | 15.88 | 13.81 | | 16.35 | |
| . Non-European 1st gen | 39.15 | 38.85 | | 38.04 | |
| . Non-European 2nd gen | 30.85 | 34.61 | *** | 31.40 | |
| **Children** | | | | | |
| . None | 51.89 | 43.99 | | 52.01 | |
| . 1 | 17.35 | 18.15 | * | 17.82 | |
| . 2 | 16.69 | 18.46 | | 16.24 | |
| . 3 or more | 14.08 | 19.40 | *** | 13.93 | |
| any younger than 3 | 17.89 | 23.18 | *** | 16.90 | |
| **Partner** | | | | | |
| . No partner | 62.84 | 58.16 | | 62.87 | |
| . Non-employed | 13.09 | 15.53 | *** | 12.53 | |
| . Employed low wage | 12.27 | 13.97 | *** | 12.73 | |
| . Employed high wage | 11.81 | 12.34 | | 11.86 | |
| **Educational level** | | | | | |
| . Low | 49.54 | 53.41 | *** | 48.68 | |
| . Mid | 37.16 | 34.16 | | 37.48 | |
| . High | 11.21 | 10.88 | | 11.49 | |
| . Unknown | 2.08 | 1.55 | | 2.34 | |
| **Educational field** | | | | | |
| . Generic programmes and qualifications | 22.17 | 25.92 | *** | 22.33 | |
| . Education | 0.62 | 1.16 | *** | 0.63 | |
| . Arts and humanities | 5.46 | 5.29 | | 5.31 | |
| . Social sciences, journalism and information | 1.48 | 1.34 | | 1.52 | |
| . Business, administration and law | 18.26 | 17.58 | | 17.84 | |
| . Natural sciences, mathematics and stati | 0.82 | 0.80 | | 1.09 | |
| . ICT | 1.00 | 0.61 | | 0.89 | |
| . Engineering, manufacturing and construc | 26.34 | 25.43 | | 25.41 | |
| . Agriculture, forestry, fisheries and ve | 0.46 | 0.35 | | 0.46 | |
| . Health and welfare | 7.53 | 7.68 | | 7.94 | |
| . Services | 10.87 | 9.74 | | 11.25 | |
| . Unknown | 4.98 | 4.09 | | 5.33 | |
| **Language: Dutch** | | | | | |
| . No registered | 2.99 | 2.77 | | 2.42 | * |
| . Little knowledge | 12.23 | 14.58 | *** | 11.47 | |
| . Good knowledge | 31.91 | 31.96 | | 32.08 | |
| . Very good knowledge | 52.88 | 50.70 | | 54.03 | |
| **Language: French** | | | | | |
| . No registered | 38.38 | 36.93 | | 36.77 | * |
| . Little knowledge | 26.50 | 26.50 | | 27.04 | |
| . Good knowledge | 21.38 | 21.35 | | 22.74 | |
| . Very good knowledge | 13.75 | 15.21 | *** | 13.44 | |
| **Language: English** | | | | | |
| . No registered | 36.77 | 39.40 | *** | 34.93 | * |
| . Little knowledge | 23.72 | 23.84 | | 23.50 | |
| . Good knowledge | 27.36 | 25.94 | | 28.81 | |
| . Very good knowledge | 12.15 | 10.82 | | 12.75 | |
| **Language: German** | | | | | |
| . No registered | 81.42 | 82.10 | | 80.55 | |
| . Little knowledge | 14.31 | 13.62 | | 14.75 | |

| | | | | | |
|---|---|---|---|---|---|
| . Good knowledge | 3.61 | 3.54 | | 4.04 | |
| . Very good knowledge | 0.66 | 0.75 | | 0.66 | |
| **Driver's license** | | | | | |
| . No registered | 33.31 | 31.09 | | 32.10 | |
| . Moped/motorcycle | 5.78 | 9.12 | *** | 5.44 | |
| . Car or larger vehicle | 60.91 | 59.79 | | 62.47 | |
| **Fysical limitation** | 7.68 | 7.17 | | 7.77 | |
| **Unemployment spell** | | | | | |
| . Spell number during obs | 2.09 | 2.41 | | 2.16 | |
| . Any benefits | 69.50 | 62.09 | | 69.31 | |
| . Amount of benefits | 470.80 | 392.52 | | 466.61 | |
| **ALMP participation during spell** | | | | | |
| . Start JSA | 84.14 | 39.61 | | 84.78 | |
| **Job referrals during spell** | | | | | |
| . Manual (by coach) | 0.12 | 0.15 | *** | 0.12 | |
| . Automatic (algorithm) | 1.49 | 1.88 | *** | 1.50 | |
| . Mandatory interview | 0.23 | 0.23 | | 0.23 | |
| . Santions | 0.02 | 0.04 | *** | 0.02 | |
| **Previous ALMP participation** | | | | | |
| . JSA (amount of quarters) | 11.02 | 11.53 | *** | 11.83 | |
| . CT (amount of quarters) | 3.21 | 2.28 | | 3.48 | |
| . WT (amount of quarters) | 0.61 | 0.50 | | 0.71 | |
| . Manual job referrals (number) | 0.99 | 1.18 | *** | 1.01 | |
| . Automatic  job referrals (number) | 30.38 | 41.15 | *** | 33.07 | |
| . Mandatory interviews (number) | 3.35 | 3.94 | *** | 3.55 | |
| . Santions (number) | 0.23 | 0.30 | *** | 0.24 | |
| **Previous LF Participation** | | | | | |
| . Cumulative quarters work | 26.72 | 30.00 | *** | 26.85 | |
| . Worked under art.60/61 | 0.02 | 0.01 | | 0.02 | |
| . Worked for service vouchers | 0.04 | 0.06 | *** | 0.04 | |
| . Last working hours: none | 19.30 | 14.58 | | 18.69 | |
| . Last working hours: < 50% | 4.35 | 5.26 | *** | 4.52 | |
| . Last working hours: 5-75% | 10.02 | 11.85 | *** | 9.81 | |
| . Last working hours: 80-100% | 63.96 | 65.29 | ** | 64.88 | |
| . Last employment: self-employed | 2.37 | 3.01 | ** | 2.10 | |
| . Last wage: none | 25.65 | 22.40 | | 24.27 | |
| . Last wage: < 500 | 20.39 | 20.42 | | 21.36 | |
| . Last wage: 500-1500 | 29.61 | 32.38 | *** | 30.65 | |
| . Last wage: > 1500 | 24.35 | 24.79 | | 23.72 | |
| **Preferences: working hours** | | | | | |
| . Part-time work | 1.32 | 0.40 | | 1.04 | |
| . Full-time work | 5.69 | 5.45 | | 5.08 | * |
| . Part-time or Full-time work | 71.03 | 69.38 | | 71.27 | |
| . No registered preference | 21.96 | 24.77 | *** | 22.61 | |
| **Preferences: working regime** | | | | | |
| . Daytime work | 97.00 | 97.82 | *** | 97.14 | |
| . Nighttime work | 10.04 | 9.65 | | 10.38 | |
| . Shifts | 48.26 | 46.57 | | 49.14 | |
| . Weekends | 21.98 | 23.04 | * | 21.98 | |
| . Other non-standard | 28.28 | 27.57 | | 28.79 | |
| **Amount of preference fields used** | 2.36 | 2.36 | | 2.38 | |

**Table 2**: Distributions of matchingvariables for treated, control and matched control groups – Workplace Training

| | Treated | unmatched control | diff (sig.) | matched control | diff (sig.) |
|---|---|---|---|---|---|
| female (%) | 41.35 | 48.36 | *** | 40.36 | |
| age (Mean) | 28.49 | 31.29 | *** | 28.73 | |
| year | 2011.48 | 2010.92 | | 2011.35 | |
| **migration background** | | | | | |
| . no migration background | 12.29 | 9.47 | | 11.20 | |
| . European 1st gen | 3.07 | 3.27 | | 2.40 | |
| . European 2nd gen | 21.15 | 13.82 | | 23.49 | |
| . Non-European 1st gen | 30.99 | 38.98 | *** | 30.78 | |
| . Non-European 2nd gen | 32.50 | 34.46 | * | 32.14 | |
| **Children** | | | | | |
| . None | 58.59 | 44.19 | | 58.80 | |
| . 1 | 15.31 | 18.14 | *** | 15.05 | |
| . 2 | 16.15 | 18.39 | ** | 15.89 | |
| . 3 or more | 9.95 | 19.27 | *** | 10.26 | |
| any younger than 3 | 14.58 | 23.05 | *** | 13.64 | |
| **Partner** | | | | | |
| . No partner | 67.29 | 58.27 | | 65.94 | |
| . Non-employed | 10.16 | 15.51 | *** | 9.11 | |
| . Employed low wage | 15.51 | 13.92 | *** | 13.97 | |
| . Employed high wage | 13.92 | 12.31 | | 11.98 | |
| **Educational level** | | | | | |
| . Low | 46.77 | 53.31 | *** | 44.58 | |
| . Mid | 41.93 | 34.24 | | 44.11 | |
| . High | 9.90 | 10.87 | | 10.10 | |
| . Unknown | 1.41 | 1.56 | | 1.20 | |
| **Educational field** | | | | | |
| . Generic programmes and qualifications | 17.76 | 25.81 | *** | 17.45 | |
| . Education | 0.68 | 1.14 | * | 0.57 | |
| . Arts and humanities | 4.27 | 5.31 | * | 5 | |
| . Social sciences, journalism and informa | 1.25 | 1.34 | | 1.35 | |
| . Business, administration and law | 17.34 | 17.62 | | 17.45 | |
| . Natural sciences, mathematics and stati | 1.09 | 0.79 | | 1.41 | |
| . ICT | 0.73 | 0.63 | | 1.04 | |
| . Engineering, manufacturing and construc | 31.25 | 25.45 | | 30.89 | |
| . Agriculture, forestry, fisheries and ve | 0.47 | 0.4 | | 0.36 | |
| . Health and welfare | 8.54 | 7.66 | | 9.32 | |
| . Services | 12.66 | 9.74 | | 11.88 | |
| . Unknown | 3.96 | 4.11 | | 3.28 | |
| **Language: Dutch** | | | | | |
| . No registered | 1.82 | 2.79 | ** | 1.3 | |
| . Little knowledge | 6.46 | 14.58 | *** | 6.15 | |
| . Good knowledge | 29.06 | 31.99 | ** | 29.84 | |
| . Very good knowledge | 62.66 | 50.64 | | 62.71 | |
| **Language: French** | | | | | |
| . No registered | 41.25 | 37 | | 40.21 | |
| . Little knowledge | 26.98 | 26.52 | | 28.54 | |
| . Good knowledge | 21.51 | 21.29 | | 21.3 | |
| . Very good knowledge | 10.26 | 15.19 | *** | 9.95 | |
| **Language: English** | | | | | |
| . No registered | 36.04 | 39.35 | ** | 35.05 | |
| . Little knowledge | 23.33 | 23.88 | | 24.01 | |
| . Good knowledge | 26.61 | 25.96 | | 26.30 | |
| . Very good knowledge | 14.01 | 10.82 | | 14.64 | |
| **Language: German** | | | | | |
| . No registered | 80.42 | 82.11 | * | 79.79 | |
| . Little knowledge | 15.47 | 13.62 | | 15.99 | |

| | | | | | |
|---|---|---|---|---|---|
| . Good knowledge | 3.44 | 3.52 | | 3.02 | |
| . Very good knowledge | 0.68 | 0.75 | | 1.20 | |
| **Driver's license** | | | | | |
| . No registered | 30.68 | 31.22 | | 28.54 | |
| . Moped/motorcycle | 8.23 | 8.96 | | 8.33 | |
| . Car or larger vehicle | 61.09 | 59.82 | | 63.13 | |
| **Fysical limitation** | 9.90 | 7.18 | | 9.27 | |
| **Unemployment spell** | | | | | |
| . Spell number during obs | 2.18 | 2.40 | *** | 2.18 | |
| . Any benefits | 68.80 | 62.44 | | 69.27 | |
| . Amount of benefits | 453.18 | 395.95 | | 455.45 | |
| **ALMP participation during spell** | | | | | |
| . Start basic CT | 10.83 | 4.61 | | 10.41 | |
| . Start occupation-specific CT | 33.39 | 5.47 | | 33.54 | |
| . Start JSA | 97.76 | 41.12 | | 97.81 | |
| **Job referrals during spell** | | | | | |
| . Manual (by coach) | 0.13 | 0.15 | | 0.14 | |
| . Automatic (algorithm) | 1.51 | 1.87 | *** | 1.53 | |
| . Mandatory interview | 0.28 | 0.23 | | 0.28 | |
| . Santions | 0.01 | 0.04 | *** | 0.01 | |
| **Previous ALMP participation** | | | | | |
| . JSA (amount of quarters) | 12.47 | 11.48 | | 12.54 | |
| . CT (amount of quarters) | 3.34 | 2.30 | | 3.48 | |
| . WT (amount of quarters) | 1.05 | 0.50 | | 1.22 | |
| . Manual job referrals (number) | 1.08 | 1.17 | | 1.10 | |
| . Automatic job referrals (number) | 36.67 | 40.64 | * | 35.52 | |
| . Mandatory interviews (number) | 3.56 | 3.92 | * | 3.63 | |
| . Santions (number) | 0.23 | 0.30 | *** | 0.22 | |
| **Previous LF Participation** | | | | | |
| . Cumulative quarters work | 30.12 | 29.82 | | 29.58 | |
| . Worked under art.60/61 | 0.94 | 1.14 | | 0.94 | |
| . Worked for service vouchers | 4.53 | 5.49 | * | 3.91 | |
| . Last working hours: none | 15.99 | 14.78 | | 14.22 | |
| . Last working hours: < 50% | 4.11 | 5.23 | * | 4.17 | |
| . Last working hours: 5-75% | 10.47 | 11.79 | * | 10.00 | |
| . Last working hours: 80-100% | 66.41 | 65.23 | | 69.01 | |
| . Last employment: self-employed | 3.02 | 2.98 | | 2.60 | |
| . Last wage: none | 22.66 | 22.55 | | 21.20 | |
| . Last wage: < 500 | 20.68 | 20.42 | | 21.77 | |
| . Last wage: 500-1500 | 31.56 | 32.26 | | 31.77 | |
| . Last wage: > 1500 | 25.10 | 24.78 | | 25.26 | |
| **Preferences: working hours** | | | | | |
| . Part-time work | 6.93 | 5.43 | | 5.42 | * |
| . Full-time work | 70.21 | 69.47 | | 72.97 | |
| . Part-time or Full-time work | 21.98 | 24.66 | ** | 20.99 | |
| . No registered preference | 0.89 | 0.43 | | 0.63 | |
| **Preferences: working regime** | | | | | |
| . Daytime work | 97.19 | 97.80 | * | 96.46 | |
| . Nighttime work | 11.77 | 9.64 | | 12.76 | |
| . Shifts | 51.15 | 46.61 | | 51.93 | |
| . Weekends | 25.99 | 22.95 | | 24.48 | |
| . Other non-standard | 23.07 | 27.67 | *** | 24.17 | |
| **Amount of preference fields used** | 2.37 | 2.36 | | 2.38 | |

**Table 3**: Distributions of matchingvariables for treated, control and matched control groups – Individual Vocational Training (IVT)

| | Treated | unmatched control | diff (sig.) | matched | diff (sig.) |
|---|---|---|---|---|---|
| female (%) | 29.76 | 48.42 | *** | 28.15 | |
| age (Mean) | 27.56 | 31.28 | *** | 27.27 | |
| year | 2010.52 | 2010.94 | *** | 2010.64 | |
| **migration background** | | | | | |
| . no migration background | 13.84 | 9.46 | | 15.44 | |
| . European 1st gen | 3.30 | 3.27 | | 3.20 | |
| . European 2nd gen | 22.98 | 13.85 | | 23.73 | |
| . Non-European 1st gen | 24.58 | 39.00 | *** | 22.41 | |
| . Non-European 2nd gen | 35.31 | 34.42 | | 35.22 | |
| **Children** | | | | | |
| . None | 64.03 | 44.23 | | 68.36 | |
| . 1 | 15.25 | 18.13 | ** | 13.84 | |
| . 2 | 13.28 | 18.41 | *** | 11.86 | |
| . 3 or more | 7.44 | 19.23 | *** | 5.93 | |
| any younger than 3 | 14.88 | 23.00 | *** | 12.90 | |
| **Partner** | | | | | |
| . No partner | 67.51 | 58.33 | | 70.15 | |
| . Non-employed | 10.83 | 15.47 | *** | 9.32 | |
| . Employed low wage | 12.24 | 13.88 | * | 9.98 | * |
| . Employed high wage | 9.42 | 12.33 | ** | 10.55 | |
| **Educational level** | | | | | |
| . Low | 43.79 | 53.33 | *** | 42.09 | |
| . Mid | 44.26 | 43.25 | | 46.52 | |
| . High | 9.89 | 10.87 | | 9.60 | |
| . Unknown | 2.07 | 1.55 | | 1.79 | |
| **Educational field** | | | | | |
| . Generic programmes and qualifications | 17.51 | 25.77 | *** | 16.10 | |
| . Education | 0.66 | 1.13 | | 0.47 | |
| . Arts and humanities | 3.77 | 5.31 | * | 3.58 | |
| . Social sciences, journalism and informa | 1.60 | 1.34 | | 1.69 | |
| . Business, administration and law | 18.27 | 17.62 | | 21.00 | |
| . Natural sciences, mathematics and stati | 0.75 | 0.79 | | 0.13 | * |
| . ICT | 0.94 | 0.63 | | 0.47 | |
| . Engineering, manufacturing and construc | 36.16 | 25.44 | | 35.69 | |
| . Agriculture, forestry, fisheries and ve | 0.66 | 0.40 | | 1.13 | |
| . Health and welfare | 4.61 | 7.69 | *** | 4.61 | |
| . Services | 10.83 | 9.77 | | 11.39 | |
| . Unknown | 4.24 | 4.11 | | 3.67 | |
| **Language: Dutch** | | | | | |
| . No registered | 1.04 | 2.79 | *** | 1.32 | |
| . Little knowledge | 7.25 | 14.53 | *** | 5.56 | |
| . Good knowledge | 27.68 | 31.98 | ** | 24.11 | * |
| . Very good knowledge | 64.03 | 50.70 | | 69.02 | |
| **Language: French** | | | | | |
| . No registered | 40.11 | 37.02 | | 37.01 | |
| . Little knowledge | 26.46 | 26.52 | | 27.97 | |
| . Good knowledge | 23.73 | 21.29 | | 25.33 | |
| . Very good knowledge | 9.70 | 15.17 | *** | 9.70 | |
| **Language: English** | | | | | |
| . No registered | 34.93 | 39.33 | ** | 31.64 | |
| . Little knowledge | 23.26 | 23.88 | | 24.11 | |
| . Good knowledge | 27.59 | 25.96 | | 30.32 | |
| . Very good knowledge | 14.22 | 10.84 | | 13.94 | |
| **Language: German** | | | | | |
| . No registered | 79.28 | 82.11 | ** | 78.06 | |
| . Little knowledge | 16.95 | 13.62 | | 17.61 | |

| | | | | | |
|---|---|---|---|---|---|
| . Good knowledge | 2.92 | 3.53 | | 3.58 | |
| . Very good knowledge | 0.85 | 0.75 | | 0.75 | |
| **Driver's license** | | | | | |
| . No registered | 22.88 | 31.28 | *** | 22.79 | |
| . Moped/motorcycle | 7.25 | 8.97 | * | 8.85 | |
| . Car or larger vehicle | 69.87 | 59.75 | | 68.36 | |
| **Fysical limitation** | 4.80 | 7.23 | ** | 4.33 | |
| **Unemployment spell** | | | | | |
| . Spell number during obs | 2.00 | 2.40 | *** | 2.01 | |
| . Any benefits | 67.98 | 62.49 | | 68.17 | |
| . Amount of benefits | 447.13 | 396.39 | | 440.32 | |
| **ALMP participation during spell** | | | | | |
| . Start basic CT | 3.86 | 4.70 | | 4.42 | |
| . Start occupation-specific CT | 7.62 | 5.83 | | 14.31 | |
| . Start JSA | 98.96 | 41.45 | | 98.78 | |
| **Job referrals during spell** | | | | | |
| . Manual (by coach) | 0.13 | 0.15 | | 0.13 | |
| . Automatic (algorithm) | 1.45 | 1.87 | *** | 1.41 | |
| . Mandatory interview | 0.35 | 0.22 | | 0.32 | |
| . Santions | 0.01 | 0.04 | *** | 0.10 | |
| **Previous ALMP participation** | | | | | |
| . JSA (amount of quarters) | 9.94 | 11.51 | *** | 10.35 | |
| . CT (amount of quarters) | 2.24 | 2.31 | | 2.45 | |
| . WT (amount of quarters) | 0.82 | 0.50 | | 0.77 | |
| . Manual job referrals (number) | 0.93 | 1.17 | ** | 1.06 | |
| . Automatic job referrals (number) | 30.12 | 40.68 | *** | 35.40 | |
| . Mandatory interviews (number) | 3.40 | 3.91 | * | 3.68 | |
| . Santions (number) | 0.22 | 0.30 | *** | 0.22 | |
| **Previous LF Participation** | | | | | |
| . Cumulative quarters work | 26.73 | 29.86 | *** | 27.61 | |
| . Worked under art.60/61 | 0.56 | 1.15 | * | 0.66 | |
| . Worked for service vouchers | 1.51 | 5.51 | *** | 1.41 | |
| . Last working hours: none | 12.81 | 14.81 | * | 10.36 | * |
| . Last working hours: < 50% | 3.95 | 5.22 | * | 5.37 | |
| . Last working hours: 5-75% | 6.21 | 11.82 | *** | 6.12 | |
| . Last working hours: 80-100% | 73.73 | 65.17 | | 75.14 | |
| . Last employment: self-employed | 3.30 | 2.98 | ** | 3.01 | |
| . Last wage: none | 18.64 | 22.59 | | 16.10 | |
| . Last wage: < 500 | 22.60 | 20.40 | | 25.33 | |
| . Last wage: 500-1500 | 31.73 | 32.26 | | 31.36 | |
| . Last wage: > 1500 | 27.02 | 24.76 | | 27.21 | |
| **Preferences: working hours** | | | | | |
| . Part-time work | 2.64 | 5.48 | *** | 2.64 | |
| . Full-time work | 80.41 | 69.39 | | 81.45 | |
| . Part-time or Full-time work | 16.95 | 24.69 | *** | 15.73 | |
| . No registered preference | 0.00 | 0.44 | * | 0.19 | |
| **Preferences: working regime** | | | | | |
| . Daytime work | 97.46 | 97.80 | | 97.46 | |
| . Nighttime work | 13.47 | 9.64 | | 15.35 | |
| . Shifts | 56.03 | 46.58 | | 58.66 | |
| . Weekends | 23.35 | 22.99 | | 22.50 | |
| . Other non-standard | 25.14 | 27.63 | * | 26.27 | |
| **Amount of preference fields used** | 2.45 | 2.36 | | 2.49 | |

**Table 4**: Distributions of matchingvariables for treated, control and matched control groups – Other types of workplace training (i.e. non-IVT)

| | Treated | unmatched control | diff (sig.) | matched control | diff (sig.) |
|---|---|---|---|---|---|
| female (%) | 54.09 | 48.26 | | 58.08 | |
| age (Mean) | 29.59 | 31.26 | *** | 29.78 | |
| year | 2012.69 | 2010.92 | | 2012.54 | |
| **migration background** | | | | | |
| . no migration background | 10.18 | 9.49 | | 11.50 | |
| . European 1st gen | 2.77 | 3.28 | | 2.54 | |
| . European 2nd gen | 18.81 | 13.88 | | 19.03 | |
| . Non-European 1st gen | 38.38 | 38.88 | | 37.72 | |
| . Non-European 2nd gen | 29.87 | 34.47 | ** | 29.20 | |
| **Children** | | | | | |
| . None | 52.43 | 44.33 | | 51.99 | |
| . 1 | 15.15 | 18.14 | * | 17.15 | |
| . 2 | 19.58 | 18.35 | | 17.26 | |
| . 3 or more | 12.83 | 19.19 | *** | 13.61 | |
| any younger than 3 | 14.16 | 23.00 | *** | 14.82 | |
| **Partner** | | | | | |
| . No partner | 66.81 | 58.34 | | 69.25 | |
| . Non-employed | 9.73 | 15.48 | *** | 9.96 | |
| . Employed low wage | 9.29 | 13.89 | *** | 8.52 | |
| . Employed high wage | 14.16 | 12.29 | | 12.28 | |
| **Educational level** | | | | | |
| . Low | 50.11 | 53.28 | * | 50.77 | |
| . Mid | 39.71 | 34.30 | | 39.38 | |
| . High | 9.62 | 10.87 | | 9.40 | |
| . Unknown | 0.55 | 1.56 | ** | 0.44 | |
| **Educational field** | | | | | |
| . Generic programmes and qualifications | 17.81 | 25.75 | *** | 17.70 | |
| . Education | 0.66 | 1.13 | | 0.77 | |
| . Arts and humanities | 4.87 | 5.30 | | 4.76 | |
| . Social sciences, journalism and informa | 1.00 | 1.34 | | 0.77 | |
| . Business, administration and law | 16.26 | 17.63 | | 16.70 | |
| . Natural sciences, mathematics and stati | 1.55 | 0.79 | | 1.44 | |
| . ICT | 0.55 | 0.63 | | 1.22 | |
| . Engineering, manufacturing and construc | 26.22 | 25.53 | | 25.66 | |
| . Agriculture, forestry, fisheries and ve | 0.22 | 0.40 | | 0.33 | |
| . Health and welfare | 12.72 | 7.63 | | 11.95 | |
| . Services | 14.49 | 9.75 | | 15.93 | |
| . Unknown | 3.65 | 4.12 | | 2.77 | |
| **Language: Dutch** | | | | | |
| . No registered | 2.65 | 2.78 | | 1.44 | * |
| . Little knowledge | 5.65 | 14.52 | *** | 5.97 | |
| . Good knowledge | 30.64 | 31.95 | | 31.31 | |
| . Very good knowledge | 61.06 | 50.75 | | 61.28 | |
| **Language: French** | | | | | |
| . No registered | 43.03 | 37.02 | | 43.14 | |
| . Little knowledge | 27.21 | 26.51 | | 26.77 | |
| . Good knowledge | 19.25 | 21.32 | * | 21.02 | |
| . Very good knowledge | 10.51 | 15.16 | *** | 9.07 | |
| **Language: English** | | | | | |
| . No registered | 37.72 | 39.31 | | 39.38 | |
| . Little knowledge | 23.34 | 23.88 | | 23.78 | |
| . Good knowledge | 25.44 | 25.97 | | 23.67 | |
| . Very good knowledge | 13.50 | 10.84 | | 13.16 | |
| **Language: German** | | | | | |
| . No registered | 82.08 | 82.09 | | 80.31 | |
| . Little knowledge | 13.61 | 13.64 | | 14.27 | |

| | | | | | |
|---|---|---|---|---|---|
| . Good knowledge | 3.87 | 3.52 | | 4.42 | |
| . Very good knowledge | 0.44 | 0.75 | | 1.00 | |
| **Driver's license** | | | | | |
| . No registered | 39.38 | 31.17 | | 39.05 | |
| . Moped/motorcycle | 9.18 | 8.95 | | 9.40 | |
| . Car or larger vehicle | 51.44 | 59.88 | *** | 51.55 | |
| **Fysical limitation** | 16.92 | 7.16 | | 17.70 | |
| **Unemployment spell** | | | | | |
| . Spell number during obs | 2.42 | 2.39 | | 2.42 | |
| . Any benefits | 70.46 | 62.48 | | 72.68 | |
| . Amount of benefits | 462.97 | 396.31 | | 485.88 | |
| **ALMP participation during spell** | | | | | |
| . Start basic CT | 18.92 | 4.62 | | 20.57 | |
| . Start occupation-specific CT | 64.60 | 5.47 | | 66.37 | |
| . Start JSA | 96.35 | 41.57 | | 95.80 | |
| **Job referrals during spell** | | | | | |
| . Manual (by coach) | 0.13 | 0.15 | | 0.14 | |
| . Automatic (algorithm) | 1.60 | 1.87 | *** | 1.46 | |
| . Mandatory interview | 0.18 | 0.23 | * | 0.19 | |
| . Santions | 0.02 | 0.04 | ** | 0.01 | |
| **Previous ALMP participation** | | | | | |
| . JSA (amount of quarters) | 15.67 | 11.47 | | 17.17 | |
| . CT (amount of quarters) | 4.67 | 2.30 | | 5.14 | |
| . WT (amount of quarters) | 1.36 | 0.50 | | 1.58 | |
| . Manual job referrals (number) | 1.31 | 1.17 | | 1.60 | |
| . Automatic job referrals (number) | 44.50 | 40.56 | | 44.82 | |
| . Mandatory interviews (number) | 3.78 | 3.91 | | 3.79 | |
| . Santions (number) | 0.26 | 0.30 | * | 0.25 | |
| **Previous LF Participation** | | | | | |
| . Cumulative quarters work | 34.21 | 29.81 | | 33.80 | |
| . Worked under art.60/61 | 1.32 | 1.14 | | 1.44 | |
| . Worked for service vouchers | 7.85 | 5.47 | | 8.29 | |
| . Last working hours: none | 19.25 | 14.78 | | 14.48 | |
| . Last working hours: < 50% | 4.54 | 5.22 | | 5.53 | |
| . Last working hours: 5-75% | 15.49 | 11.75 | | 16.92 | |
| . Last working hours: 80-100% | 58.19 | 65.27 | *** | 58.30 | |
| . Last employment: self-employed | 2.54 | 2.98 | | 1.77 | |
| . Last wage: none | 26.55 | 22.53 | | 23.23 | |
| . Last wage: < 500 | 18.69 | 20.42 | | 20.13 | |
| . Last wage: 500-1500 | 31.64 | 32.26 | | 33.85 | |
| . Last wage: > 1500 | 23.12 | 24.78 | | 22.79 | |
| **Preferences: working hours** | | | | | |
| . Part-time work | 11.62 | 5.42 | | 10.18 | |
| . Full-time work | 58.41 | 69.54 | *** | 58.63 | |
| . Part-time or Full-time work | 28.10 | 24.61 | | 29.98 | |
| . No registered preference | 1.88 | 0.43 | | 1.22 | |
| **Preferences: working regime** | | | | | |
| . Daytime work | 96.90 | 97.80 | * | 97.23 | |
| . Nighttime work | 10.07 | 9.67 | | 8.62 | |
| . Shifts | 45.80 | 46.68 | | 47.35 | |
| . Weekends | 29.42 | 22.95 | | 28.10 | |
| . Other non-standard | 20.24 | 27.66 | *** | 21.90 | |
| **Amount of preference fields used** | 2.28 | 2.36 | *** | 2.33 | |

**Table 5**: Distributions of matchingvariables for treated, control and matched control groups – Classroom training

| | Treated | unmatched control | diff (sig.) | matched control | diff (sig.) |
|---|---|---|---|---|---|
| female (%) | 46.90 | 48.34 | * | 46.53 | |
| age (Mean) | 29.91 | 31.31 | *** | 30.13 | |
| year | 2010.26 | 201.96 | *** | 2010.18 | |
| **migration background** | | | | | |
| . no migration background | 10.27 | 9.50 | | 11.25 | |
| . European 1st gen | 3.35 | 3.26 | | 3.24 | |
| . European 2nd gen | 14.72 | 13.86 | | 13.98 | |
| . Non-European 1st gen | 41.29 | 38.78 | | 40.53 | |
| . Non-European 2nd gen | 30.37 | 34.59 | *** | 31.01 | |
| **Children** | | | | | |
| . None | 50.17 | 44.13 | | 50.59 | |
| . 1 | 17.68 | 18.14 | | 17.44 | |
| . 2 | 17.05 | 18.40 | ** | 16.27 | |
| . 3 or more | 15.10 | 19.32 | *** | 15.71 | |
| any younger than 3 | 18.62 | 23.10 | *** | 17.33 | |
| **Partner** | | | | | |
| . No partner | 61.89 | 58.22 | | 61.36 | |
| . Non-employed | 13.68 | 15.50 | *** | 14.23 | |
| . Employed low wage | 12.43 | 13.94 | *** | 12.06 | |
| . Employed high wage | 12.00 | 12.34 | | 12.36 | |
| **Educational level** | | | | | |
| . Low | 50.33 | 53.34 | *** | 48.71 | |
| . Mid | 35.95 | 34.26 | | 36.65 | |
| . High | 11.55 | 10.85 | | 12.06 | |
| . Unknown | 2.18 | 1.55 | | 2.59 | |
| **Educational field** | | | | | |
| . Generic programmes and qualifications | 22.84 | 25.82 | *** | 22.83 | |
| . Education | 0.61 | 1.16 | *** | 0.70 | |
| . Arts and humanities | 5.77 | 5.28 | | 5.66 | |
| . Social sciences, journalism and informa | 1.51 | 1.34 | | 1.70 | |
| . Business, administration and law | 18.45 | 17.60 | | 19.26 | |
| . Natural sciences, mathematics and stati | 0.86 | 0.79 | | 0.76 | |
| . ICT | 1.04 | 0.61 | | 0.98 | |
| . Engineering, manufacturing and construc | 24.98 | 25.53 | | 24.18 | |
| . Agriculture, forestry, fisheries and ve | 0.47 | 0.39 | | 0.50 | |
| . Health and welfare | 7.63 | 7.66 | | 7.37 | |
| . Services | 10.58 | 9.74 | | 10.50 | |
| . Unknown | 5.27 | 4.08 | | 5.56 | |
| **Language: Dutch** | | | | | |
| . No registered | 3.23 | 2.76 | | 3.33 | |
| . Little knowledge | 13.49 | 14.50 | * | 12.75 | |
| . Good knowledge | 32.58 | 31.90 | | 32.77 | |
| . Very good knowledge | 50.70 | 50.83 | | 51.15 | |
| **Language: French** | | | | | |
| . No registered | 37.71 | 36.98 | | 36.96 | |
| . Little knowledge | 26.30 | 26.53 | | 25.83 | |
| . Good knowledge | 21.46 | 21.33 | | 22.45 | |
| . Very good knowledge | 14.54 | 15.15 | | 14.76 | |
| **Language: English** | | | | | |
| . No registered | 37.21 | 39.35 | *** | 36.62 | |
| . Little knowledge | 23.76 | 23.86 | | 22.83 | |
| . Good knowledge | 27.27 | 25.94 | | 28.00 | |
| . Very good knowledge | 11.76 | 10.85 | | 12.56 | |
| **Language: German** | | | | | |
| . No registered | 81.74 | 82.05 | | 81.26 | |
| . Little knowledge | 14.05 | 13.67 | | 14.80 | |

| | | | | | |
|---|---|---|---|---|---|
| . Good knowledge | 3.60 | 3.53 | | 3.41 | |
| . Very good knowledge | 0.61 | 0.75 | | 0.53 | |
| **Driver's license** | | | | | |
| . No registered | 34.89 | 31.04 | | 34.15 | |
| . Moped/motorcycle | 5.22 | 9.12 | *** | 4.95 | |
| . Car or larger vehicle | 59.89 | 59.83 | | 60.89 | |
| **Fysical limitation** | 7.45 | 7.19 | | 7.14 | |
| **Unemployment spell** | | | | | |
| . Spell number during obs | 2.08 | 2.41 | *** | 2.10 | |
| . Any benefits | 69.71 | 62.18 | | 69.83 | |
| . Amount of benefits | 474.88 | 393.06 | | 474.05 | |
| **ALMP participation during spell** | | | | | |
| . Start IVT | 0.79 | 1.93 | *** | 0.56 | |
| . Start other types of WT | 6.45 | 1.19 | | 6.06 | |
| . Start JSA | 80.96 | 40.16 | | 80.76 | |
| **Job referrals during spell** | | | | | |
| . Manual (by coach) | 0.11 | 0.15 | *** | 0.11 | |
| . Automatic (algorithm) | 1.48 | 1.88 | *** | 1.46 | |
| . Mandatory interview | 0.21 | 0.23 | * | 0.22 | |
| . Santions | 0.02 | 0.04 | *** | 0.02 | |
| **Previous ALMP participation** | | | | | |
| . JSA (amount of quarters) | 10.80 | 11.53 | *** | 10.99 | |
| . CT (amount of quarters) | 3.28 | 2.28 | | 3.33 | |
| . WT (amount of quarters) | 0.53 | 0.50 | | 0.50 | |
| . Manual job referrals (number) | 0.97 | 1.18 | *** | 1.06 | |
| . Automatic job referrals (number) | 29.13 | 41.10 | *** | 32.32 | |
| . Mandatory interviews (number) | 3.28 | 3.94 | *** | 3.51 | |
| . Santions (number) | 0.23 | 0.03 | *** | 0.23 | |
| **Previous LF Participation** | | | | | |
| . Cumulative quarters work | 25.85 | 30.02 | *** | 26.07 | |
| . Worked under art.60/61 | 1.59 | 1.11 | | 1.28 | |
| . Worked for service vouchers | 4.19 | 5.53 | *** | 4.04 | |
| . Last working hours: none | 20.77 | 14.55 | | 20.18 | |
| . Last working hours: < 50% | 4.32 | 5.25 | ** | 4.16 | |
| . Last working hours: 5-75% | 10.13 | 11.85 | *** | 9.63 | |
| . Last working hours: 80-100% | 62.62 | 65.34 | *** | 63.77 | |
| . Last employment: self-employed | 2.17 | 3.01 | *** | 2.26 | |
| . Last wage: none | 27.03 | 22.37 | | 26.38 | |
| . Last wage: < 500 | 20.08 | 20.41 | | 20.21 | |
| . Last wage: 500-1500 | 28.84 | 32.41 | *** | 29.57 | |
| . Last wage: > 1500 | 24.04 | 24.81 | | 23.84 | |
| **Preferences: working hours** | | | | | |
| . Part-time work | 6.17 | 5.43 | | 5.48 | |
| . Full-time work | 70.22 | 69.46 | | 71.11 | |
| . Part-time or Full-time work | 22.25 | 24.71 | *** | 21.61 | |
| . No registered preference | 1.36 | 0.40 | | 1.79 | |
| **Preferences: working regime** | | | | | |
| . Daytime work | 97.07 | 97.82 | *** | 96.60 | |
| . Nighttime work | 9.43 | 9.69 | | 9.63 | |
| . Shifts | 47.20 | 46.65 | | 47.85 | |
| . Weekends | 21.28 | 23.06 | ** | 20.26 | |
| . Other non-standard | 29.45 | 27.52 | | 29.90 | |
| **Amount of preference fields used** | 2.35 | 2.36 | | 2.35 | |

**Table 6**: Distributions of matchingvariables for treated, control and matched control groups – Basic Classroom training

| | Treated | unmatched control | diff (sig.) | matched control | diff (sig.) |
|---|---|---|---|---|---|
| female (%) | 50.32 | 48.24 | | 50.41 | |
| age (Mean) | 29.80 | 31.29 | *** | 29.95 | |
| year | 2010.11 | 2010.95 | *** | 2010.07 | |
| **migration background** | | | | | |
| . no migration background | 7.00 | 9.56 | *** | 7.94 | |
| . European 1st gen | 3.15 | 3.27 | | 3.06 | |
| . European 2nd gen | 13.21 | 13.93 | | 13.35 | |
| . Non-European 1st gen | 46.53 | 38.71 | | 46.18 | |
| . Non-European 2nd gen | 30.12 | 34.53 | *** | 29.47 | |
| **Children** | | | | | |
| . None | 48.12 | 44.30 | | 48.09 | |
| . 1 | 17.44 | 18.12 | | 18.62 | |
| . 2 | 16.85 | 18.41 | * | 17.21 | |
| . 3 or more | 17.59 | 19.17 | ** | 16.09 | * |
| any younger than 3 | 19.21 | 23.02 | *** | 18.24 | |
| **Partner** | | | | | |
| . No partner | 62.06 | 58.31 | | 61.56 | |
| . Non-employed | 14.79 | 15.45 | | 15.50 | |
| . Employed low wage | 12.09 | 13.91 | ** | 12.32 | |
| . Employed high wage | 11.06 | 12.33 | * | 10.62 | |
| **Educational level** | | | | | |
| . Low | 58.21 | 53.13 | | 57.56 | |
| . Mid | 31.74 | 34.39 | *** | 32.18 | |
| . High | 9.03 | 10.90 | ** | 9.15 | |
| . Unknown | 1.03 | 1.57 | ** | 1.12 | |
| **Educational field** | | | | | |
| . Generic programmes and qualifications | 27.32 | 25.67 | | 27.06 | |
| . Education | 0.41 | 1.15 | *** | 0.53 | |
| . Arts and humanities | 6.26 | 5.28 | | 5.85 | |
| . Social sciences, journalism and informa | 1.29 | 1.34 | | 1.44 | |
| . Business, administration and law | 17.85 | 17.61 | | 17.12 | |
| . Natural sciences, mathematics and stati | 0.88 | 0.79 | | 1.03 | |
| . ICT | 0.85 | 0.62 | | 0.68 | |
| . Engineering, manufacturing and construc | 22.76 | 25.59 | *** | 23.47 | |
| . Agriculture, forestry, fisheries and ve | 0.35 | 0.40 | | 0.35 | |
| . Health and welfare | 7.09 | 7.68 | | 7.74 | |
| . Services | 10.65 | 9.75 | | 10.26 | |
| . Unknown | 4.26 | 4.11 | | 4.47 | |
| **Language: Dutch** | | | | | |
| . No registered | 3.85 | 2.75 | | 4.03 | |
| . Little knowledge | 19.15 | 14.35 | | 18.18 | |
| . Good knowledge | 33.12 | 31.92 | | 32.85 | |
| . Very good knowledge | 43.88 | 50.98 | *** | 44.94 | |
| **Language: French** | | | | | |
| . No registered | 40.82 | 36.96 | | 41.15 | |
| . Little knowledge | 24.68 | 26.57 | ** | 26.00 | |
| . Good knowledge | 18.09 | 21.37 | *** | 17.24 | |
| . Very good knowledge | 16.41 | 15.09 | | 15.62 | |
| **Language: English** | | | | | |
| . No registered | 43.74 | 39.18 | | 41.88 | |
| . Little knowledge | 23.21 | 23.90 | | 24.18 | |
| . Good knowledge | 23.53 | 26.03 | *** | 23.88 | |
| . Very good knowledge | 9.53 | 10.89 | ** | 10.06 | |
| **Language: German** | | | | | |
| . No registered | 86.44 | 81.98 | | 86.35 | |
| . Little knowledge | 10.12 | 13.73 | *** | 10.47 | |

| | | | | | |
|---|---|---|---|---|---|
| . Good knowledge | 2.97 | 3.53 | * | 2.71 | |
| . Very good knowledge | 0.47 | 0.75 | * | 0.47 | |
| **Driver's license** | | | | | |
| . No registered | 39.32 | 31.01 | | 39.75 | |
| . Moped/motorcycle | 4.50 | 9.06 | *** | 4.12 | |
| . Car or larger vehicle | 56.18 | 59.92 | *** | 56.15 | |
| **Fysical limitation** | 6.53 | 7.23 | | 7.35 | |
| **Unemployment spell** | | | | | |
| . Spell number during obs | 2.03 | 2.40 | *** | 2.06 | |
| . Any benefits | 69.47 | 62.37 | | 71.09 | |
| . Amount of benefits | 464.86 | 395.11 | | 476.55 | |
| **ALMP participation during spell** | | | | | |
| . Start IVT | 0.50 | 1.92 | *** | 0.67 | |
| . Start other types of WT | 2.32 | 1.34 | | 3.09 | |
| . Start JSA | 75.82 | 41.05 | | 74.26 | |
| **Job referrals during spell** | | | | | |
| . Manual (by coach) | 0.11 | 0.15 | *** | 0.11 | |
| . Automatic (algorithm) | 1.61 | 1.87 | *** | 1.65 | |
| . Mandatory interview | 0.24 | 0.23 | | 0.25 | |
| . Santions | 0.02 | 0.04 | *** | 0.02 | |
| **Previous ALMP participation** | | | | | |
| . JSA (amount of quarters) | 10.34 | 11.53 | *** | 10.58 | |
| . CT (amount of quarters) | 2.83 | 2.31 | | 3.06 | |
| . WT (amount of quarters) | 0.40 | 0.51 | *** | 0.41 | |
| . Manual job referrals (number) | 0.83 | 1.18 | *** | 0.87 | |
| . Automatic job referrals (number) | 27.04 | 40.94 | *** | 27.90 | |
| . Mandatory interviews (number) | 3.36 | 3.93 | *** | 3.58 | |
| . Santions (number) | 0.24 | 0.30 | *** | 0.24 | |
| **Previous LF Participation** | | | | | |
| . Cumulative quarters work | 22.33 | 30.03 | *** | 22.93 | |
| . Worked under art.60/61 | 2.11 | 1.11 | | 2.06 | |
| . Worked for service vouchers | 4.32 | 5.50 | ** | 4.82 | |
| . Last working hours: none | 25.82 | 14.52 | | 26.47 | |
| . Last working hours: < 50% | 4.79 | 5.22 | | 5.15 | |
| . Last working hours: 5-75% | 9.59 | 11.83 | *** | 8.76 | |
| . Last working hours: 80-100% | 57.56 | 65.42 | *** | 57.50 | |
| . Last employment: self-employed | 2.24 | 3.00 | ** | 2.12 | |
| . Last wage: none | 32.68 | 22.30 | | 33.65 | |
| . Last wage: < 500 | 20.15 | 20.43 | | 20.91 | |
| . Last wage: 500-1500 | 28.06 | 32.35 | *** | 27.03 | |
| . Last wage: > 1500 | 19.12 | 24.91 | *** | 18.41 | |
| **Preferences: working hours** | | | | | |
| . Part-time work | 6.85 | 5.41 | | 6.53 | |
| . Full-time work | 68.62 | 69.50 | | 68.59 | |
| . Part-time or Full-time work | 23.62 | 24.66 | | 23.21 | |
| . No registered preference | 0.91 | 0.43 | | 1.68 | |
| **Preferences: working regime** | | | | | |
| . Daytime work | 97.59 | 97.79 | | 96.62 | |
| . Nighttime work | 8.24 | 9.71 | | 8.15 | |
| . Shifts | 46.06 | 46.68 | | 46.12 | |
| . Weekends | 20.41 | 23.07 | | 20.71 | |
| . Other non-standard | 30.15 | 27.53 | | 30.59 | |
| **Amount of preference fields used** | 2.35 | 2.36 | | 2.34 | |

**Table 6**: Distributions of matchingvariables for treated, control and matched control groups – Occupation-specific Classroom training

| | Treated | unmatched control | diff (sig.) | matched control | diff (sig.) |
|---|---|---|---|---|---|
| female (%) | 44.86 | 48.37 | *** | 43.00 | |
| age (Mean) | 30.12 | 31.28 | *** | 30.16 | |
| year | 2010.40 | 2010.94 | *** | 2010.44 | |
| **migration background** | | | | | |
| . no migration background | 13.61 | 9.41 | | 13.78 | |
| . European 1st gen | 3.38 | 3.27 | | 3.47 | |
| . European 2nd gen | 17.07 | 13.85 | | 18.59 | |
| . Non-European 1st gen | 35.72 | 38.95 | *** | 34.46 | |
| . Non-European 2nd gen | 30.22 | 34.52 | *** | 29.70 | |
| **Children** | | | | | |
| . None | 51.62 | 44.19 | | 53.28 | |
| . 1 | 18.42 | 18.11 | | 18.13 | |
| . 2 | 17.82 | 18.38 | | 16.53 | |
| . 3 or more | 12.15 | 19.32 | *** | 12.06 | |
| any younger than 3 | 18.28 | 23.04 | *** | 17.30 | |
| **Partner** | | | | | |
| . No partner | 61.19 | 58.31 | | 62.36 | |
| . Non-employed | 12.46 | 15.51 | *** | 12.49 | |
| . Employed low wage | 12.80 | 13.89 | * | 11.34 | * |
| . Employed high wage | 13.55 | 12.29 | | 13.81 | |
| **Educational level** | | | | | |
| . Low | 41.16 | 53.54 | *** | 39.90 | |
| . Mid | 41.68 | 34.14 | | 42.05 | |
| . High | 13.92 | 10.79 | | 14.24 | |
| . Unknown | 3.24 | 1.53 | | 3.81 | |
| **Educational field** | | | | | |
| . Generic programmes and qualifications | 18.22 | 25.89 | *** | 17.39 | |
| . Education | 0.77 | 1.14 | * | 0.80 | |
| . Arts and humanities | 5.16 | 5.30 | | 5.13 | |
| . Social sciences, journalism and informa | 1.89 | 1.33 | | 1.95 | |
| . Business, administration and law | 20.14 | 17.55 | | 20.40 | |
| . Natural sciences, mathematics and stati | 0.83 | 0.79 | | 0.57 | |
| . ICT | 1.26 | 0.61 | | 1.17 | |
| . Engineering, manufacturing and construc | 26.24 | 25.50 | | 25.90 | |
| . Agriculture, forestry, fisheries and ve | 0.54 | 0.40 | | 0.92 | |
| . Health and welfare | 8.54 | 7.65 | | 8.48 | |
| . Services | 10.25 | 9.76 | | 10.57 | |
| . Unknown | 6.16 | 4.08 | | 6.73 | |
| **Language: Dutch** | | | | | |
| . No registered | 2.21 | 2.80 | * | 2.23 | |
| . Little knowledge | 7.13 | 14.66 | *** | 6.87 | |
| . Good knowledge | 31.97 | 31.95 | | 31.11 | |
| . Very good knowledge | 58.69 | 50.59 | | 59.78 | |
| **Language: French** | | | | | |
| . No registered | 32.68 | 37.15 | *** | 32.23 | |
| . Little knowledge | 28.93 | 26.45 | | 28.10 | |
| . Good knowledge | 25.64 | 21.20 | | 26.21 | |
| . Very good knowledge | 12.75 | 15.19 | *** | 13.46 | |
| **Language: English** | | | | | |
| . No registered | 28.70 | 39.56 | *** | 27.36 | |
| . Little knowledge | 24.43 | 23.85 | | 22.69 | * |
| . Good knowledge | 32.23 | 25.81 | | 34.49 | |
| . Very good knowledge | 14.64 | 10.78 | | 15.47 | |
| **Language: German** | | | | | |

| | | | | | |
|---|---|---|---|---|---|
| . No registered | 76.20 | 82.22 | *** | 74.19 | * |
| . Little knowledge | 18.68 | 13.52 | | 19.68 | |
| . Good knowledge | 4.38 | 3.51 | | 5.13 | |
| . Very good knowledge | 0.74 | 0.75 | | 1.00 | |
| **Driver's license** | | | | | |
| . No registered | 29.22 | 31.25 | ** | 28.67 | |
| . Moped/motorcycle | 5.79 | 9.03 | *** | 5.70 | |
| . Car or larger vehicle | 65.00 | 59.72 | | 65.63 | |
| **Fysical limitation** | 8.13 | 7.19 | | 7.73 | |
| **Unemployment spell** | | | | | |
| . Spell number during obs | 2.13 | 2.40 | *** | 2.13 | |
| . Any benefits | 71.01 | 62.31 | | 71.90 | |
| . Amount of benefits | 494.80 | 394.34 | | 500.84 | |
| **ALMP participation during spell** | | | | | |
| . Start IVT | 1.20 | 1.89 | ** | 1.31 | |
| . Start other types of WT | 9.88 | 1.19 | | 8.77 | |
| . Start JSA | 87.74 | 40.74 | | 88.14 | |
| **Job referrals during spell** | | | | | |
| . Manual (by coach) | 0.12 | 0.15 | *** | 0.12 | |
| . Automatic (algorithm) | 1.47 | 1.87 | *** | 1.50 | |
| . Mandatory interview | 0.21 | 0.23 | | 0.23 | |
| . Santions | 0.02 | 0.04 | *** | 0.02 | |
| **Previous ALMP participation** | | | | | |
| . JSA (amount of quarters) | 11.13 | 11.51 | * | 11.26 | |
| . CT (amount of quarters) | 3.66 | 2.28 | | 3.77 | |
| . WT (amount of quarters) | 0.62 | 0.50 | | 0.71 | |
| . Manual job referrals (number) | 1.12 | 1.17 | | 1.10 | |
| . Automatic job referrals (number) | 31.46 | 40.81 | *** | 32.66 | |
| . Mandatory interviews (number) | 3.23 | 3.92 | *** | 3.22 | |
| . Santions (number) | 0.21 | 0.30 | *** | 0.22 | |
| **Previous LF Participation** | | | | | |
| . Cumulative quarters work | 30.12 | 29.84 | | 30.24 | |
| . Worked under art.60/61 | 1.06 | 1.14 | | 1.26 | |
| . Worked for service vouchers | 4.21 | 5.52 | *** | 4.21 | |
| . Last working hours: none | 14.18 | 14.81 | | 14.18 | |
| . Last working hours: < 50% | 3.87 | 5.24 | *** | 4.47 | |
| . Last working hours: 5-75% | 10.66 | 11.80 | * | 10.77 | |
| . Last working hours: 80-100% | 69.18 | 65.14 | | 68.40 | |
| . Last employment: self-employed | 2.12 | 3.00 | ** | 2.18 | |
| . Last wage: none | 19.97 | 22.62 | *** | 20.14 | |
| . Last wage: < 500 | 20.28 | 20.41 | ** | 20.25 | |
| . Last wage: 500-1500 | 30.28 | 32.31 | | 30.88 | |
| . Last wage: > 1500 | 29.48 | 24.65 | | 28.73 | |
| **Preferences: working hours** | | | | | |
| . Part-time work | 4.41 | 5.49 | ** | 4.53 | |
| . Full-time work | 72.36 | 69.39 | | 72.33 | |
| . Part-time or Full-time work | 21.51 | 24.71 | *** | 21.34 | |
| . No registered preference | 1.72 | 0.41 | | 1.80 | |
| **Preferences: working regime** | | | | | |
| . Daytime work | 96.56 | 97.82 | *** | 96.39 | |
| . Nighttime work | 10.51 | 9.65 | | 10.51 | |
| . Shifts | 48.30 | 46.62 | | 50.01 | |
| . Weekends | 22.77 | 23.00 | | 22.69 | |
| . Other non-standard | 29.47 | 27.56 | | 28.10 | |
| **Amount of preference fields used** | 2.36 | 2.36 | | 2.37 | |

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