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## Policy Study 8

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# Impact evaluation of the program for training, mentoring and internship/employment of persons exposed at social risk in Macedonia

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## Policy Study 8

Economic Research & Policy Institute - Finance Think, Skopje

# **Impact evaluation of the program for training, mentoring and internship/employment of persons exposed at social risk in Macedonia**

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## Content

1. INTRODUCTION.....	3
2. CHARACTERISTICS OF THE VARIOUS GROUPS .....	4
2.1. CHARACTERISTICS OF THE INITIAL GROUP OF PARTICIPANTS IN THE PROJECT .....	4
2.2. TRAINING TREATMENT GROUP.....	10
2.3. DEFINING OUR CONTROL GROUP.....	11
2.4. MENTORSHIP TREATMENT GROUP.....	12
2.5. INTERNSHIP/EMPLOYMENT TREATMENT GROUP .....	16
3. THE UNDERLYING METHOD.....	19
4. RESULTS AND DISCUSSION.....	20
5. CONCLUSION AND RECOMMENDATION.....	27

## Content of figures

Figure 1 – Gender distribution of the sample.....	4
Figure 2 – Age distribution of the sample .....	5
Figure 3 – Education distribution.....	5
Figure 4 – Ethnicity distribution.....	6
Figure 5 – Income distribution .....	7
Figure 6 – Labor-market status of the participants.....	8
Figure 7 – The basic reason for not having a job.....	9
Figure 8 – Mentorship length .....	14
Figure 9 – Meeting with the mentor .....	14
Figure 10 – Internship length.....	17

## Content of tables

Table 1 – Chances and opportunities (% of total respondents) .....	9
Table 2 – Changes in chances and opportunities after training .....	11
Table 3 – Hotelling test: trained versus control.....	12
Table 4 – Hotelling test: mentored versus control.....	12
Table 5 – Labor-market transitions of the mentored .....	13
Table 6 – Value of the mentorship process for the mentored.....	15
Table 7 – Changes in chances and opportunities after mentorship .....	15
Table 8 – Hotelling test: interns/employed versus control.....	16
Table 9 – Labor-market transitions of the interns/employed .....	17
Table 10 – Value of the internship for the interns .....	18
Table 11 – Changes in chances and opportunities after internship/employment.....	18
Table 12 – Results for the mentorship .....	22
Table 13 – Results for the internship/employment .....	25

## 1. Introduction

The objective of this analysis is to evaluate – in a rigorous quantitative manner – the program for training, mentoring of and providing internship/employment for persons exposed at social risk, conducted by Finance Think – Economic Research and Policy Institute – Skopje, within the EU-IPA funded project “Promoting Active Inclusion of Disadvantaged Persons Excluded from the Labor Market”.

For so doing, 127 participants were selected on an open call. Then, all of them were supposed to obtain a three-day training, while some of them (ideally chosen randomly by the conductor of the training) continues with mentorship and/or internship/employment program. While a large deal of the random selection has been preserved, still individual drop-outs in the training program (largely driven by unobserved individual circumstances), self-selection in the mentorship program (again, prevalently driven by individual decisions and reluctance to participate in the mentorship process), as well as matching constraints in obtaining internship/employment (in this case mainly driven by observable characteristics, like education, but also unobservables like individual preferences for particular internship spots), prevented full randomization of the experiment. However, we are still able to compare the differences in outcomes between the treated and the control group assuming reasonable randomness and testing for the similarity of the samples on observables. Moreover, since we are relying on the difference-in-difference technique, strict randomization is even not necessary.

This report is structured as follows. Section 2 reviews the characteristics of the initial group, of the treated with training, with mentorship, and those with internship/employment, with paying special attention to the comparability of the various treated groups with the control group. Section 3 describes the methodology used. Section 4 presents the results of the impact evaluation. Section 5 concludes and provides a policy recommendation.

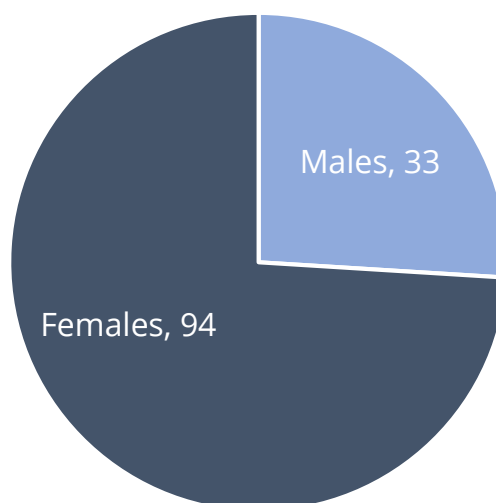
## 2. Characteristics of the various groups

### 2.1. Characteristics of the initial group of participants in the project

For the project, a group of 127 participants has been formed, all enrolled on an open call. This implies, that the group should be homogenous in terms of some unobservable characteristics, like motivation to apply and the desire to increase own employability and employment.

The initial sample is female-dominated, as almost  $\frac{3}{4}$  are females (Figure 1). The age distribution is skewed to the right, i.e. our sample is dominated by the younger cohorts of below 35 (Figure 2). The dominant share of our sample has completed tertiary education; the sample even features persons with master's diplomas (Figure 3). This is not surprising, given that young unemployed persons were eligible for the program. In terms of ethnicity, about  $\frac{3}{4}$  of the sample is Macedonians, being the dominant ethnic group (Figure 4).

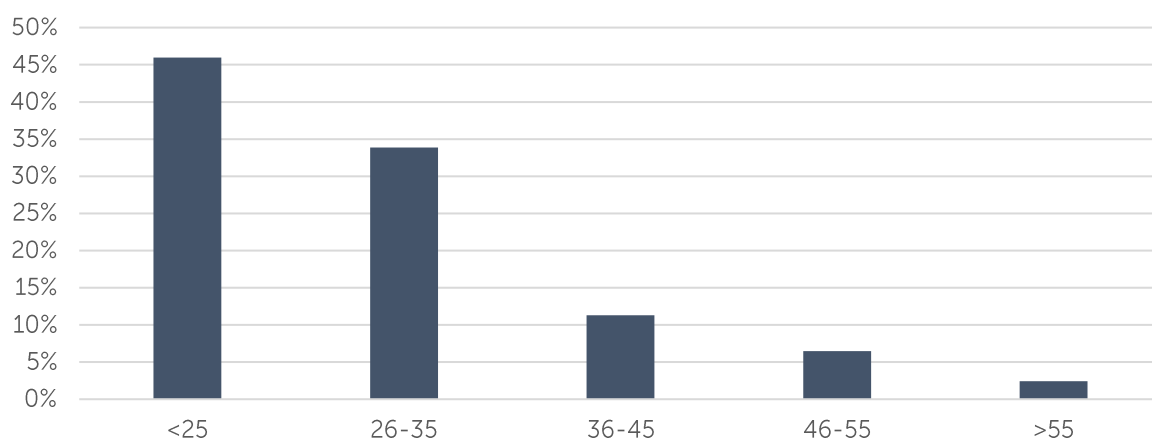
*Figure 1 – Gender distribution of the sample*



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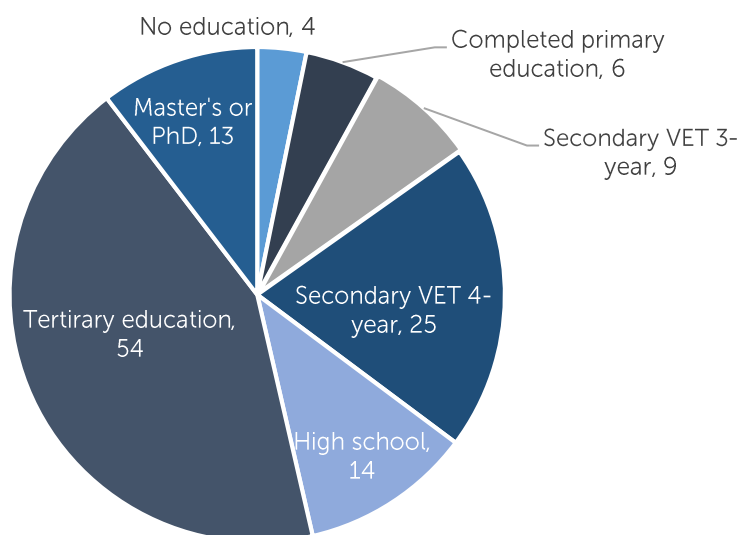
Source: Own baseline survey

Figure 2 – Age distribution of the sample



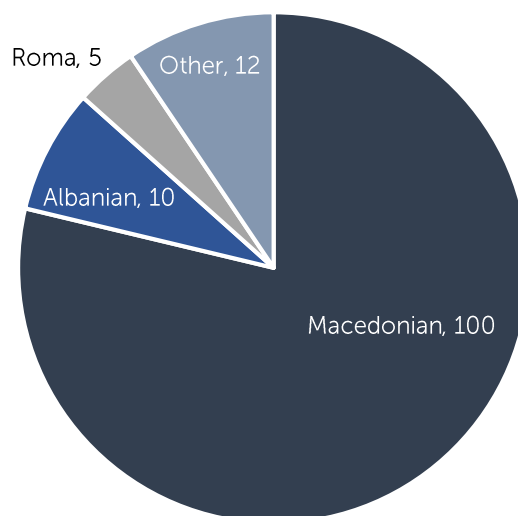
Source: Own baseline survey

Figure 3 – Education distribution



Source: Own baseline survey

Figure 4 – Ethnicity distribution

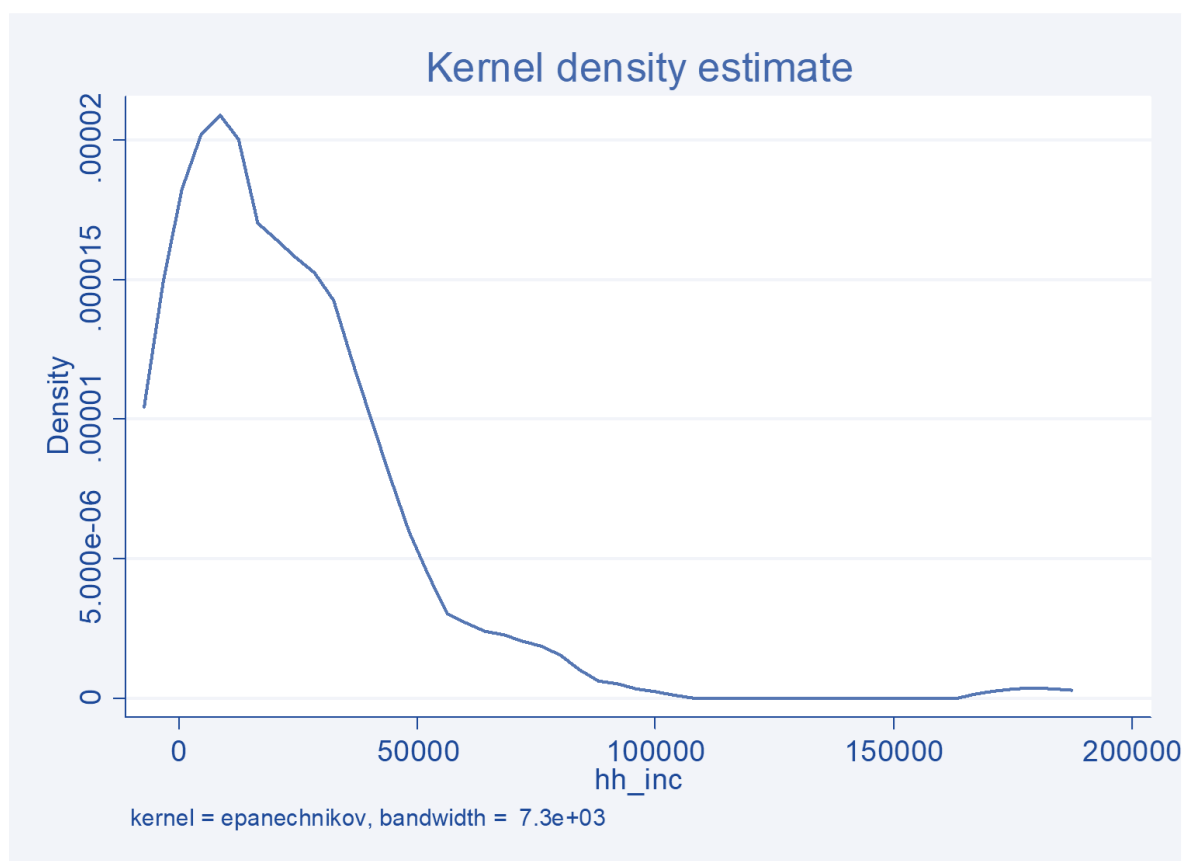


Source: Own baseline survey

Expectedly, major part of the households to which the group participants belong are poor households. The average household income (labor and non-labor income) has been reported at 22.277 denars per household. As a comparison, the Survey on Income and Living Conditions (SILC), at the national level, reports at-risk-of poverty threshold for a four-member household in Macedonia of 164.560 denars for 2015. Despite the two numbers are not directly comparable (as our measure is not normalized to four-member household), still it is obvious that members' households in our sample are quite left-positioned on the income distribution.

Further judging by the income distribution (Figure 5), it is evident that the targeting of the announcement has been proper, i.e. that the selected persons are indeed exposed to social risk, as they originate from households which live in absolute, not rarely extreme poverty. 21.3% of the persons reported their household has been a receiver of some form of social safety net.

Figure 5 – Income distribution

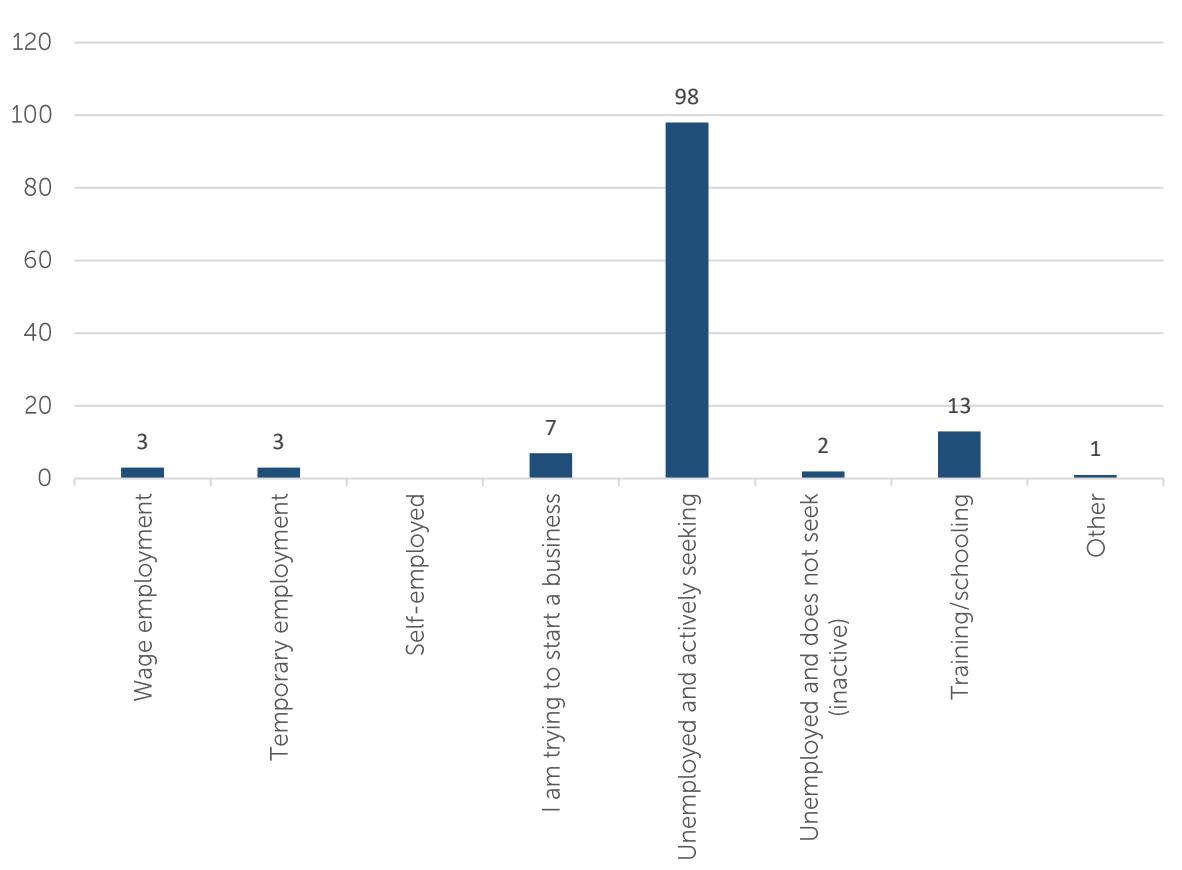


Source: Own baseline survey

In what follows, we present few labor-market characteristics for our sample. Figure 6 suggests that 78% of the selected participants are unemployed and actively seeking for a job, which then soars at 89% if we include those unemployed but not seeking for a job and those who were at the time in some form of training or schooling. However, two thirds reported they had some form of a job or labor-market activity in the past. Judged by the previous working experience, the sample is quite diverse, as experience extends between zero and 360 months (30 years), with the average experience length being 30 months.



Figure 6 – Labor-market status of the participants

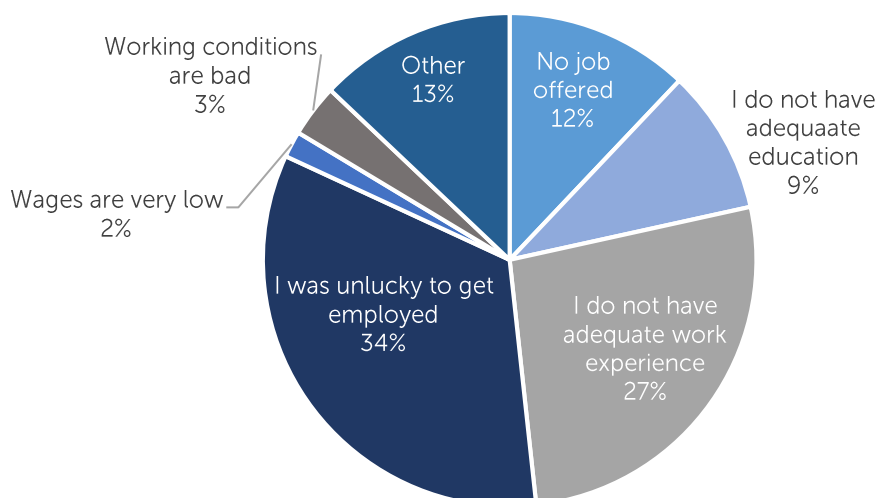


Source: Own baseline survey

Interestingly, dominant share of the unemployed persons in our sample feel unlucky not to have been employed so far (34%), followed by lack of adequate working experience (27%) (Figure 7). The former reason may corroborate with the widespread perception in Macedonia that the job should be waited, rather than actively sought, including waiting employment in the public administration. The latter reason is more prevalent among older persons, who lost hope over years, their skills likely deteriorated and they became hardly employable.

The three dominant ways in which respondents reported they have been looking for a job include: through the Employment Service Agency (61.7%), through applying on job ads (61.1%) and through reading ads in printed and electronic media (46.7%).

Figure 7 – The basic reason for not having a job



Source: Own baseline survey

Finally, judged based on several criteria measuring chances and opportunities, the respondents reported the following frequencies (Table 1). As we are measuring only the short-run effects of the project results and implications (as the long-run ones could be measured in 1-2 years, at the earliest, after project finishes), we will be using the questions below to judge project's impact. The short-run effects will be measured through four distinct features: chances, need, desire and opportunities to find a job, whereby the latter are conditional on government employment policies and own activities/ambition.

Table 1 – Chances and opportunities (% of total respondents)

	Your <u>chances</u> to find a job	Your <u>need</u> for a job	Your <u>desire</u> to find a job	Your <u>opportunities</u> to find a job	
				given Government policies in place	given your own activities and ambition
Very low	4.8	0.8	1.6	11.2	3.2
Low	19.8	12	0.8	22.4	8
Medium	47.6	19.2	11.2	41.6	46.4
High	23.0	68	35.2	18.4	25.6
Very high	4.8	N/A	51.2	6.4	16.8

Source: Own baseline survey

Table 1 reports that the chances to find a job, of the sample participants, are on average self-reported as medium and are normally distributed. The need for a job, on the other

hand, is heavily left-skewed, as 68% of the participants reported high need. Similar distribution is followed by the desire: 86% of the participants reported high or very high desire to work. Then, with regard to opportunities, the normal distribution is re-established, as majority of participants reported medium opportunities, both given employment policies in place and own activities/ambition.

## 2.2. Training treatment group

The program started by providing a three-day training to the persons who enrolled onto the program. As the objective was to train all enrolled persons, to gauge the effect of the training itself, we do not need (nor have) a control group. Even if we have a control group, it is highly unlikely that anything else may change the outcomes for the control group in three days for the duration of our training. However, we could measure the outcomes post-versus pre-training. For so doing, we first need to define the outcomes to be measured. As stipulated in the previous section, we are measuring short-term effects of the program, and hence the outcomes will be defined in terms of the perceptions and attitudes of participants. Namely, as we put in Table 1, we are measuring and observing the changes in the self-reported chances to find a job, the need for a job, the desire for working, and employment opportunities given employment policies in place and own activities and ambitions. These are our outcome variables all the way through this report.

Table 2 presents the changes in attitudes after the training only of those trained. All attitudes changed in a positive fashion, i.e. on average respondents rated attitudes (outcomes) higher on the scale at training's end. However, only two of the five attitudes were found statistically significant: the chances to find a job and the opportunities as conditioned on own activities and ambitions. Namely, both chances and opportunities on average increased by 0.3 (on a 1-5 scale), disregarding the potential differential effects. Both estimates are statistically significant even at the 1%. This outcome is plausible and expected: the training worked to encourage participants in both ways: by telling them not to lose hope (chances are always there), and by telling them that participating in similar activities must pay off. Similarly, needs and desire did not result in statistically different value, since they were already high, while employment policies expectedly did not change and hence did not affect this outcome.

Table 2 – Changes in chances and opportunities after training

	Your <u>chances</u> to find a job	Your <u>need</u> for a job	Your <u>desire</u> to find a job	Your <u>opportunities</u> to find a job	
				given Government policies in place	given your own activities and ambition
Difference (after vs. before training)	0.315	0.054	0.022	0.130	0.304
Standard error	(0.082)	(0.044)	(0.072)	(0.097)	(0.107)
Ho: Difference = 0 (p-value)	0.0002	0.2272	0.7648	0.1811	0.0054
<i>Source: Own after-training survey</i>					
<i>Note: The differences reported are measured on a 1-5 scale, except for the 'need', whereby the scale is 1-4.</i>					

In a conclusion, the training program produced plausible results. Namely, it increased the self-reported chances for finding a job, as well as opportunities as measured through own activities and ambition to find a job.

### 2.3. Defining our control group

The program started by providing a three-day training to those who self-enrolled into the program, by applying on an open call. The initial plan was that all enrolled have been trained, and then persons for mentoring and internship/employment are selected randomly. However, the initial plan changed, as only 89 persons out of 127 completed the training, while 38 dropped off, i.e. did not show up for the second and subsequent days of the training. While this was out of our control, it provided an opportunity for constructing a control group toward which not only the effect of the mentorship and the internship/employment will be measured, but the entire effect: training plus mentorship plus/or internship/employment. The conditions that this control group needs to satisfy were set to two: 1) the reason for the drop-out to be unrelated to the training itself; and 2) the control and the treatment group to be similar on observables.

The first condition was tested by directly asking the drop-outs (intended control group) for the reason of their drop-out. Large majority of them (39.1%) reported they had duties related to the household and everyday activities and had to leave; followed by 17.4% leaving for other training or schooling; and equal amount for sickness. One person reported the

level of the training did not fit his/her needs, while another 4 reported the training was not relevant for them. Therefore, we could robustly say that the first condition for a proper control group has been satisfied.

The second condition will be tested through statistical means. Namely, we will compare the intended control group (drop-outs) and all the treated with training on a couple of observable characteristics: age, gender, marriage, education, ethnicity, employment status and previous experience. We apply the Hotelling test, whose null hypothesis states that the vectors of means are equal for the two groups. The probability presented in Table 3 is well above the conventional threshold of 5%, suggesting that the null cannot be rejected. Therefore, the two samples are equal on observables.

Table 3 – Hotelling test: trained versus control

$F(11,110) = 1.5653$
$\text{Prob} > F(11,110) = 0.1191$

*Source: Own calculations based on after-training survey.*

In conclusion, we will be relying on the control group of those who dropped-off after the first day of the training, as they are equal on observables with those who continues the training and majority of them reported to have left the training for a reason unrelated to the training itself. They are suitable control group, as when compared to the treated, the entire effect of the program will be revealed: training plus mentorship plus/or internship/employment.

## 2.4. Mentorship treatment group

We begin the discussion about the mentored group (treated group with mentorship) by referring to the Hotelling test in Table 4. The test does not reject the null the vector of means is equal between the mentored and the control groups, providing initial confidence that randomization is reasonable, at least on observables.

Table 4 – Hotelling test: mentored versus control

$F(11,26) = 1.3626$
$\text{Prob} > F(11,26) = 0.2481$

*Source: Own calculations based on after-mentorship survey.*



We next present the transition matrix for those who completed the mentoring program- a total of 20. Table 5 suggests that 13 out of 20 mentored participants retained their status, prevalently as unemployed persons (grey fields). Two persons who were trying to start a business previously entered an internship (under 'other'), while one person who previously followed a training went unemployed. In addition, two persons who were previously unemployed, got employment.

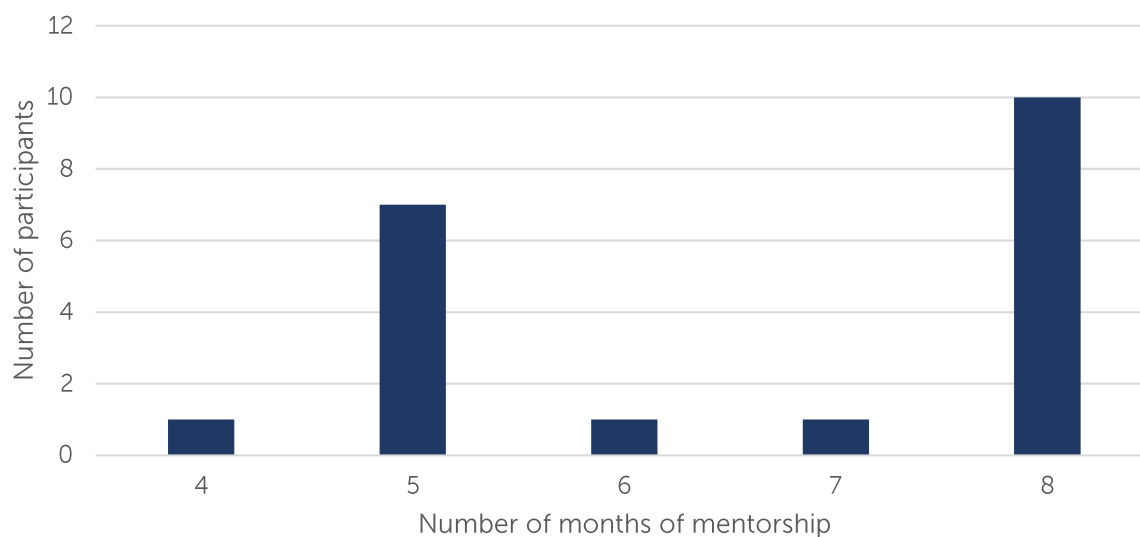
Table 5 – Labor-market transitions of the mentored

		Labor-market status AFTER				
		Employed	Trying to start own business	Unemployed, but seeking	Other	Total
Labor-market status BEFORE	Trying to start own business	0	1	0	2	3
	Unemployed, but seeking	2	1	12	1	16
	Training/Schooling	0	0	1	0	1
	Total	2	2	13	3	20

Source: Own after-mentorship survey

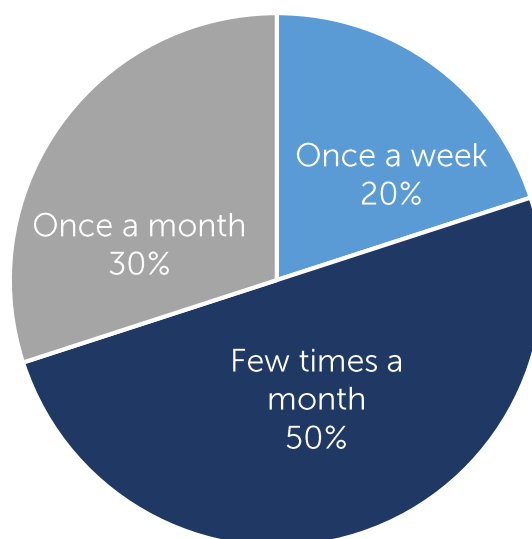
The mentorship length varied between four and eight months, the majority of participants being mentored for eight months (Figure 8). Half of the mentored have been meeting with their mentor few times a month; 30% monthly, while 20% weekly (Figure 9). In 75% of the cases, individual career development plan has been developed, in the majority of cases (76%) being jointly developed between the mentor and the mentee.

Figure 8 – Mentorship length



Source: Own after-mentorship survey

Figure 9 – Meeting with the mentor



Source: Own after-mentorship survey

Finally, mentored were asked to self-assess the benefits of the mentorship process for their employability and employment. Table 6 suggests that almost all mentored persons

expressed full satisfaction of the mentorship program, stipulating that it increased the span of contacts and information, as well the desire to work. As mentioned above, two mentored persons found a job during or after the mentoring period.

Table 6 – Value of the mentorship process for the mentored

	Value							
	It enabled new skills and knowledge	It enabled contacts I would not obtained	It enabled information which I would have hardly obtained	It motivated me to start seeking a job	It increased my desire for work	It gave me more precise/better idea of how to achieve my life goals	I found a job	Other
% who responded positively	75%	95%	95%	95%	95%	85%	10%	10%
Source: Own after-mentorship survey								

Finally, we provide some evidence of the changing attitudes of the persons in mentorship, in terms of the outcome variables. Table 7 presents the changes in the outcome variables, along the statistical significance of the change. Note that this is still not the impact evaluation, since the changes we observe in Table 7 may be due to our intervention, but also due to other factors. The impact evaluation – the prime objective of this report – follows in Section 3 and thereafter.

Table 7 – Changes in chances and opportunities after mentorship

	Your <u>chances</u> to find a job	Your <u>need</u> for a job	Your <u>desire</u> to find a job	Your <u>opportunities</u> to find a job	
				given Government policies in place	given your own activities and ambition
Difference (after vs. before training)	0.250	0.200	0.300*	-0.250	-0.200
Standard error	(0.190)	(0.138)	(0.159)	(0.280)	(0.268)
Ho: Difference = 0 (p-value)	0.2044	0.1625	0.0905	0.3828	0.4639
Source: Own after-training survey					
Note: The differences reported are measured on a 1-5 scale, except for the 'need', whereby the scale is 1-4.					

Results suggest that the mentored group noted only improvement in the desire to work after the program finished, compared to the program beginning (the only statistically significant difference, at the 10%). As explained, this still cannot be assigned as an effect of our program.

## 2.5. Internship/employment treatment group

We continue to provide some descriptives about the persons who underwent internship or got employed. It is important to mention that we have a total of 15 persons, out of which eight underwent internship out of which one continued in employment, while other eight persons got employment directly. Similarly as with the trained and mentored treatment groups, the Hotelling test (Table 8) does not reject the null the vector of means is equal between the intern and the control groups, providing initial confidence that randomization is reasonable, at least on observables.

Table 8 – Hotelling test: interns/employed versus control

$$F(11,26) = 1.8097$$

$$\text{Prob} > F(11,26) = 0.1112$$

*Source: Own calculations based on after-internship survey.*

Table 9 presents the labor-market transitions of those in internship/employment. The results are quite appealing. Only 2 out of 11 persons who in the baseline reported they were unemployed, were found in the same status, suggesting that the others switched to employment (regular or seasonal), while one person got engaged on a project. Similarly, one of the persons who was previously trying to start own business, got employment. The drawback of this flash evaluation of the labor-market transitions is that only 15 persons accepted our offer to get an internship (or employment), while we faced many refusals. Therefore, self-selection into treatment may be present, albeit we do not work with those who refused as a control group.

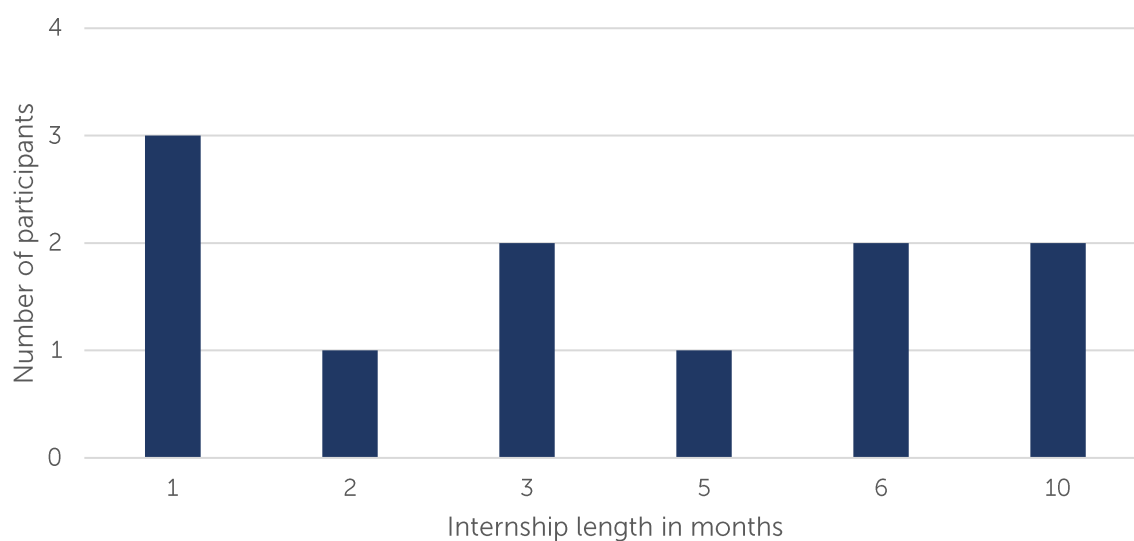
Table 9 – Labor-market transitions of the interns/employed

		Labor-market status AFTER				
		Employed	Temporary /Seasonal employment	Unemployed , but seeking	Other	Total
Labor-market status BEFORE	Employed	0	0	0	1	1
	Trying to start own business	1	0	0	1	2
	Unemployed, but seeking	7	1	2	1	11
	Training/Schooling	0	0	1	0	1
	Total	8	1	3	3	15

Source: Own after-internship survey

Internship ranged between one and 10 months (Figure 1).

Figure 10 – Internship length



Source: Own after-internship survey



All interns expressed the highest satisfaction with the internship on all accounts, while one intern continued the internship as an employee (Table 10).

Table 10 – Value of the internship for the interns

	Value						
	It enabled new skills and knowledge	It enabled contacts I would not obtained	It enabled information which I would have hardly obtained	It increased my desire for work	It gave me more precise/better idea of I found a job		Other
% who responded positively	88%	100%	100%	88%	75%	13%	25%
Source: Own after-internship survey							

Finally, we provide some evidence of the changing attitudes of the persons in internship or employment, in terms of the outcome variables. Table 11 presents the changes in the outcome variables, along the statistical significance of the change. Note that this is still not the impact evaluation, since the changes we observe in Table 11 may be due to our intervention, but also due to other factors. The impact evaluation – the prime objective of this report – follows after this section.

Table 11 – Changes in chances and opportunities after internship/employment

	Your <u>chances</u> to find a job	Your <u>need</u> for a job	Your <u>desire</u> to find a job	Your <u>opportunities</u> to find a job	
				given Government policies in place	given your own activities and ambition
Difference (after vs. before training)	0.352	0.353**	0.353**	0.353	0.176
Standard error	(0.242)	(0.147)	(0.147)	(0.284)	(0.231)
Ho: Difference = 0 (p-value)	0.1635	0.0289	0.0289	0.2313	0.4554

Source: Own after-training survey

Note: The differences reported are measured on a 1-5 scale, except for the 'need', whereby the scale is 1-4.

Results suggest that the group under internship/employment noted only improvement in the need and the desire to work after the program finished, compared to the program

beginning (the only two statistically significant coefficients, at the 5% level). As explained, this still cannot be assigned as an effect of our program.

### 3. The underlying method

The underlying method of this analysis is the difference-in-difference (DID) method. The technique originates in econometrics, but the logic underlying the technique has been used as early as the 1850's by John Snow and is called the 'controlled before-and-after study' in some social sciences. DID is typically used to estimate the effect of a specific intervention or treatment by comparing the changes in outcomes over time between a population that is enrolled in a program (the intervention group) and a population that is not (the control group). This is exactly what we did in this study: we measured some outcomes (attitudes and preferences toward working) before participants embarked on a program composed of training, mentoring and/or internship/employment.

DID is a useful technique when randomization on the individual level is not possible. It requires data from pre-/post-treatment, such as cohort or panel data (individual level data over time) or repeated cross-sectional data (individual or group level). The approach removes biases in post-treatment comparisons between the treatment and control group that could be the result from permanent differences between those groups, as well as biases from comparisons over time in the treatment group that could be the result of trends due to other causes of the outcome.

DID is usually implemented as an interaction term between period and treatment group dummy variables in a regression model. Hence, we set the model as follows:

$$y_i = \beta_0 + \beta_1 * Period_i + \beta_2 * Treatment_i + \beta_3 * Period_i * Treatment_i + \sum \gamma_m * Covariates_{mi} + \varepsilon_i \quad (1)$$

Whereby  $y_i$  is our outcome variable, being defined through five distinct variables: the chance to find a job, the need for a job, the desire to work, and the opportunities for employment, given employment policies in place, and own activities and ambition, all of person  $i$ .  $Period_i$  refers to the time dimension, which in our case boils down to two periods: the one before the treatment (baseline survey) and the one after the treatment (after survey), hence taking a value of zero for the former and 1 for the latter.  $Treatment_i$  takes a value of 1 for all persons who were exposed to treatment, and zero for the control group. Then,  $Period_i * Treatment_i$  considers the product of the period and the treatment, i.e.

would take a value of 1 for all persons who were treated in the second period, and zero for the treated in the baseline period and for all controls.  $Covariates_{mi}$  stands for a set of explanatory variables, including: gender, age, education, marriage, ethnicity, geographical settlement, labor-market status and job experience.  $\varepsilon_i$  is the error term which is assumed to be well behaved.

$\beta_0$  measures the baseline average;  $\beta_1$  gives the difference in outcomes between periods in the control group (given we control for the treatment group separately);  $\beta_2$  gives the difference in outcomes between the two groups before the treatment (given we control for the after period separately); and  $\beta_3$  gives the difference in outcomes between the treated and controls in the second period (i.e. after the treatment). Our true interest lies in  $\beta_3$ .

To estimate (1), we use an ordered probit approach, since our dependent variables are all measured on a scale from 1 to 5 (except the 'need' variable which is measured on a 1-4 scale).

## 4. Results and discussion

Our key results are presented in Table 12 and Table 13. Both tables have been organized in the following manner. There are 10 columns: the first 5 columns give the impact evaluation results without the covariates; the second 5 columns add the covariates and observe any changes in the program impact. The key result is presented in a greyed row.

Table 12 presents the results for the mentorship component. Results suggest that mentorship exhibited impact on the treated only through their desire to find a job, but not onto the other outcomes. Treated, on average have 0.8 points higher desire (on a 1-5 scale) than the period before and the non-treated. The result is reconfirmed when covariates are added. Hence, this is a robust finding that the program worked to increase the desire to work of the treated. It suggests that the program is powerful tool for dragging people exposed at social risk out of a grey zone, whereby they potentially lost hopes, and setting them back on track with regard to their will to work. This may be an important achievement, given the prevalent labor-market inactivity in Macedonia, in particular the inactivity of socially-excluded persons, who fall into the vicious cycle of inactivity-poverty-exclusion, i.e. face strong detachment from the labor market, which strongly forks for their discouragement. Mentorship program may be a powerful tool to drag them back close to

the labor market, as it increases their desire to work, which may actually convert into actual employment.

The other results suggest that the treated group is different than the control group in terms of their opportunities to employ, given their own activities and the employment policies in place. Age reduces chances to employment, but increases working desire. Education increases the need for job, the desire to work, and the opportunities for work given own ambition. Namely, ambition to work and education may be endogenous, in the sense that more ambitious persons in general, opt for higher education and for sooner inclusion in the labor market. In terms of ethnicity, ethnic Albanians face lower need and lower opportunities due to ambition than ethnic Macedonians. Surprisingly, however, Roma are not different than Macedonians in terms of the program outcomes. Finally, people who worked in the past consider greater chances to find a job at the present moment, as well consider higher opportunities to work. This resonates our finding that once these people are dragged (back) onto the labor market, the objective for their employment becomes more viable, even in the short run.

Table 12 – Results for the mentorship

	Your <u>chances</u> to find a job	Your <u>need</u> for a job	Your <u>desire</u> to find a job	Your <u>opportunities</u> to find a job		Your <u>chances</u> to find a job	Your <u>need</u> for a job	Your <u>desire</u> to find a job	Your <u>opportunities</u> to find a job	
				given Government policies in place	given your own activities and ambition				given Government policies in place	given your own activities and ambition
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Period (1=after treatment)	0.084 (0.368)	0.117 (0.455)	-0.404 (0.381)	0.376 (0.377)	-0.313 (0.383)	0.102 (0.385)	0.303 (0.509)	-0.413 (0.391)	0.371 (0.385)	-0.298 (0.395)
Treatment (1=treated)	0.338 (0.353)	0.0702 (0.432)	0.309 (0.375)	1.209*** (0.372)	0.630* (0.371)	0.804* (0.415)	0.237 (0.580)	0.0926 (0.441)	1.408*** (0.428)	0.893** (0.433)
Period * Treatment	0.228 (0.500)	0.568 (0.658)	0.808** (0.436)	-0.646 (0.507)	0.0488 (0.513)	0.298 (0.519)	0.411 (0.718)	0.837** (0.453)	-0.666 (0.516)	-0.00457 (0.527)
Gender (1=female)						-0.226 (0.301)	0.296 (0.394)	0.522* (0.310)	0.033 (0.293)	0.324 (0.305)
Age (in years)						-0.0593*** (0.023)	0.0455 (0.034)	0.0454* (0.026)	-0.0143 (0.022)	-0.00238 (0.022)
Marriage (1=married)						-0.374 (0.393)	-0.254 (0.620)	-0.706 (0.447)	0.291 (0.384)	0.079 (0.387)
Education						0.103 (0.138)	0.461** (0.208)	0.268* (0.148)	-0.149 (0.132)	0.301** (0.141)
Ethnicity (1=Albanian)						0.25 (0.710)	-2.447** (0.963)	-0.707 (0.822)	-0.961 (0.783)	-1.338* (0.812)
Ethnicity (1=Roma)						0.4 (0.613)	1.174 (0.814)	0.369 (0.613)	-0.18 (0.588)	0.216 (0.613)
Settlement (1=urban)						-0.358 (0.467)	-0.79 (0.618)	0.125 (0.477)	-0.101 (0.454)	-0.431 (0.476)
Labor-market status (1=unemployed)						-0.281 (0.410)	0.445 (0.497)	0.149 (0.421)	-0.652 (0.400)	-0.507 (0.410)
Person worked in the past						0.675** (0.298)	0.185 (0.422)	-0.158 (0.319)	0.480* (0.291)	0.560* (0.300)



Person searched for a job						0.467 (0.478)	0.483 (0.578)	0.408 (0.498)	0.500 (0.462)	0.281 (0.469)
Constant cut1	-1.172*** (0.305)	-1.754*** (0.403)	-1.562*** (0.350)	-0.766** (0.300)	-1.857*** (0.391)	-2.863*** (0.942)	1.453 (1.328)	1.224 (0.983)	-1.690* (0.879)	-0.902 (0.898)
Constant cut2	-0.099 (0.271)	-1.562*** (0.378)	-0.815*** (0.298)	0.259 (0.284)	-0.764*** (0.293)	-1.34 (0.895)	1.722 (1.327)	2.072** (0.995)	-0.58 (0.875)	0.329 (0.881)
Constant cut3	1.252*** (0.296)	-0.558* (0.329)	0.286 (0.286)	1.520*** (0.315)	0.840*** (0.299)	0.264 (0.877)	3.085** (1.378)	3.357*** (1.037)	0.849 (0.866)	2.165** (0.916)
Constant cut4	2.515*** (0.456)			2.426*** (0.381)	1.760*** (0.339)	1.800* (0.956)			1.823** (0.883)	3.172*** (0.936)
Observations	74	73	73	72	72	74	73	73	72	72

Source: Own calculations. \*, \*\* and \*\*\* refer to statistical significance at the 10, 5 and 1% level respectively. Standard errors provided in parentheses.

Results are largely replicated for the internship/employment program. They are presented in Table 13. The internship/employment program, similarly, worked for the desire to work only, but with reinforced effect. Namely, treated with internship increased their desire for more than 1 point (on a 1-5 scale) compared to the baseline period and to the non-treated. This finding – while corroborating the mentorship finding – suggests that when socially-excluded people are brought to the labor market further close, their desire to work increases even more, hence increasing the chances that they soon employ (in case they have not done so at the very end of the internship).

Observing the covariates, we observe some interesting differences than in the mentorship case. For instance, marriage becomes significant for the need to work: married persons have lower need to work than others (singles and widowed), while education and ethnicity lost their significance. On the other hand, persons who were unemployed showed higher need and desire to work (compared to those who already entered employment at program's end), which is expected since the need and desire of those who at program's end became employed were satisfied. Finally, previous work experience lost significance, but the fact that these persons search(ed) for a job gained significance for the chances, need and desire to work.

Table 13 – Results for the internship/employment

	<u>Your chances to find a job</u>	<u>Your need for a job</u>	<u>Your desire to find a job</u>	<u>Your opportunities to find a job</u>		<u>Your chances to find a job</u>	<u>Your need for a job</u>	<u>Your desire to find a job</u>	<u>Your opportunities to find a job</u>	
				given Government policies in place	given your own activities and ambition				given Government policies in place	given your own activities and ambition
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Period (1=after treatment)	0.102 (0.368)	0.111 (0.455)	-0.420 (0.382)	0.394 (0.379)	-0.33 (0.379)	0.115 (0.389)	0.241 (0.538)	-0.473 (0.402)	0.474 (0.387)	-0.264 (0.393)
Treatment (1=treated)	0.944** (0.379)	-0.146 (0.436)	0.345 (0.391)	0.781** (0.378)	0.710* (0.383)	0.642 (0.458)	-0.565 (0.637)	0.283 (0.507)	0.921** (0.448)	0.155 (0.452)
Period * Treatment	0.363 (0.522)	0.693 (0.671)	1.025* (0.569)	0.0106 (0.526)	0.539 (0.533)	0.435 (0.543)	0.927 (0.792)	1.271** (0.631)	-0.0404 (0.532)	0.523 (0.551)
Gender (1=female)						-0.303 (0.338)	-0.937* (0.520)	0.107 (0.343)	0.261 (0.319)	0.549 (0.335)
Age (in years)						-0.0712*** (0.027)	0.063 (0.043)	0.0852** (0.035)	-0.0349 (0.025)	-0.00174 (0.026)
Marriage (1=married)						-0.297 (0.342)	-0.396 (0.491)	-1.213*** (0.397)	0.392 (0.331)	-0.0607 (0.339)
Education						0.00128 (0.152)	0.0876 (0.232)	0.128 (0.175)	-0.137 (0.149)	0.364** (0.158)
Ethnicity (1=Albanian)						0.296 (0.633)	-1.118 (0.775)	-0.784 (0.692)	-0.291 (0.702)	-0.924 (0.724)
Ethnicity (1=Roma)						0.0549 (0.729)	-0.637 (1.109)	-0.301 (0.828)	0.0825 (0.710)	0.00968 (0.728)
Settlement (1=urban)						0.289 (0.451)	-0.193 (0.693)	0.400 (0.469)	0.0743 (0.446)	0.0411 (0.459)
Labor-market status (1=unemployed)						0.458 (0.389)	0.977** (0.468)	0.814** (0.407)	0.376 (0.362)	0.0634 (0.373)
Person worked in the past						0.204 (0.359)	-0.0631 (0.481)	-0.495 (0.420)	0.122 (0.336)	0.387 (0.349)

Person searched for a job						1.560*	2.089**	1.351*	0.854	0.672
						(0.808)	(0.971)	(0.764)	(0.723)	(0.734)
Constant cut1	-0.988***	-1.809***	-1.691***	-0.781***	-1.577***	-1.826	1.254	2.232	-0.921	0.649
	(0.305)	(0.410)	(0.372)	(0.302)	(0.355)	(1.237)	(1.823)	(1.464)	(1.185)	(1.188)
Constant cut2	-0.187	-1.351***	-1.538***	0.274	-0.784***	-0.553	1.85	2.376	0.221	1.65
	(0.273)	(0.361)	(0.353)	(0.285)	(0.293)	(1.188)	(1.823)	(1.459)	(1.192)	(1.208)
Constant cut3	1.226***	-0.584*	-0.883***	1.486***	0.626**	1.129	2.907	3.233**	1.514	3.415***
	(0.306)	(0.328)	(0.304)	(0.318)	(0.298)	(1.201)	(1.850)	(1.471)	(1.192)	(1.270)
Constant cut4	2.543***		0.334	2.909***	2.047***	2.548**		4.928***	2.992**	5.011***
	(0.396)		(0.289)	(0.496)	(0.359)	(1.222)		(1.524)	(1.240)	(1.298)
Observations	68	67	67	66	66	68	67	67	66	66

Source: Own calculations. \*,\*\* and \*\*\* refer to statistical significance at the 10, 5 and 1% level respectively. Standard errors provided in parentheses.

## 5. Conclusion and recommendation

The objective of this report was to quantitatively evaluate the impact of the program for training, mentorship and/or internship/employment of a group of persons exposed at social risk in Macedonia. 127 participants were select to undergo a training for motivation and skills for finding a job, out of which 92 completed the training. 37 participants gave up after the first day, the primary reason for dropping off being unrelated to the training itself. Hence, they became the control group. Then, out of the 92 trained individuals, fairly randomly, 20 persons were selected to undergo a mentorship program, while 15 were selected to get an internship or employment. While the level of randomization was satisfactory, some factors in the case of internship, like matching problems, resulted in drop-outs, hence violating the randomization. To overcome this problem, we conduct the impact evaluation through the difference-in-difference method, which does not require random assignment. The method is actually considering the difference in the difference in outcomes after the treatment versus before the treatment, hence not being concerned with the levels.

Overall, the results from the impact evaluation suggest that both mentorship and internship/employment worked to increase the desire for work. Considering that we were dealing with persons exposed to social risk, the result if the program is an important achievement. It actually suggests that once these people are brought (back) closer to the labor market, their desire to work is provoked, and this is more likely to result in actual employment, sooner or later, and as it actually did in eight cases.

The result of the program seems to be stronger for the internship component, as it likely brings these persons closer to the labor market than the mentorship program. However, as the difference is not very large, the suggestion is that the two programs continue in the way they have been designed, especially considering that persons more frequently declined internship offerings than mentorship offerings. Still, considering the latter, future programs should be designed in the way that declines of the internship participation should be minimized, as results may be large. To achieve this, people may be either incentivized to accept internships (through some small-scale subsidy, either as a direct grant, or as in-kind grant for commuting, or for per diems), or penalized (through exclusion of these persons from social programs in case they reject an internship). Still, penalization may be more difficult to pursue.

On the other hand, mentorship may continue in the way designed, since the result is significant. However, to amplify the results, mentors may be incentivized to accept and



more succinctly track mentees, as well as to incentivize and actively seek internship or employment toward the end of the mentoring period. Such a combination is further powerful in terms of harvesting the synergies of mentorship and internship.

Finally, one must not forget the initial training program, whose effects are embedded into the ones for the mentorship and internship presented in this report, as our control group was composed of persons who gave up of the training despite initially selected. The training worked through increasing chance and opportunities given own activities to find a job. This actually suggests that even a fairly short training motivates persons than their chances and opportunities on the labor market may be not that bad. The motivation may stem out of the training topics themselves, but also out of group interaction and networking spurred during the training. After the initial motivation, then internship and mentorship work to increase the desire for working, which altogether, then, has increased the likelihood for decent employment of the persons exposed at social risk.



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