

Mentoring as a way of integrating refugees into the labour market

– Evidence from a Swedish pilot scheme

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Abstract

A large number of refugee immigrants have recently entered western European countries, and a major political concern is how to integrate these refugees into the labour market. This study investigates the impact of a Swedish mentoring programme on the labour market status of newly arrived refugees. The key finding of the study is that mentoring as a universal ‘quick fix’ does not get any support. However, mentoring shows some promising results for males for who the results show a positive and significant impact when the outcome is defined as a yearly income exceeding 4,200 euro. For females, no short-term effect is found, but the absence of an impact might be due to lock-in effects into other labour market programmes.

Key words: Newly arrived refugees, mentorship, integration, labour market.

JEL: J64, J68

Introduction

Several studies have shown that, when compared to natives, immigrants and their children have lower incomes, have lower labour market status in relation to their education, and are disproportionately likely to be unemployed.¹ There have been various explanations for these findings, including discrimination, a lack of language proficiency, and a lack of social and professional networks. As a consequence of the later, recent studies have indicated that different kinds of mentoring projects could be an efficient way of integrating immigrants and refugees into the labour market.² Outside Sweden, such programmes have been implemented in, for example, the USA, Canada, Australia, France, Germany and Denmark. However, although mentorship programmes are suggested as an efficient route to labour market integration, there is surprisingly little empirical evidence for this being the case, since there is a lack of genuine impact evaluations. Further, despite a thorough search in the literature no counterfactual impact evaluation of mentorship programmes targeting refugees has been identified and only a few papers have been found that investigate mentoring impacts in general. Despite this, mentoring is held up as a policy tool appropriate for integrating refugees. The aim of our study is to investigate the impact of a mentoring programme targeting newly arrived refugees in Sweden. The questions for the study are: *i*) Does mentoring of newly arrived refugees move them closer to the labour market? and *ii*) Is there variation within the mentoring projects that influences the outcome?

The outline of this study is as follows. First we give a short description of the mentoring programme that is being evaluated. This description is followed by a survey of previous evaluations of mentoring in general, but focusing on labour market outcomes. The evaluation design is then described, and this is followed by a presentation of the data used. In the next section the results of the study are presented. First, the results of the impact assessment for the whole population are described, and then these results are divided by gender. The impact assessment reveals that, over the short follow-up period, the programme seems to have the desired impact only for men. In the second part of the results section we therefore consider how the different aspects of the projects, such as mentoring intensity and the characteristics of

¹ For an overview of immigrant occupation and/or income in Sweden see e.g. Rooth, 1999; Hammarstedt & Shukur, 2006, 2007; Gustafsson & Zheng, 2006; Lundborg, 2013. Examples of studies on employment and income among the children of immigrants are Rooth & Ekberg, 2003; Behrenz et al., 2007; Hammarstedt, 2009. For an overview of the employment and income situation for immigrants and their children across countries see e.g. Zimmermann & Bauer, 2002; Zimmerman, 2005.

² OECD, 2007a, b.

the mentor, influence the outcome. We limit the analysis to males, since it was only for males that an impact of participating in the programme could be identified. In the last section our conclusions are stated.

The Swedish mentoring programme for newly arrived refugees

In 2010 the National Board for Youth Affairs (NBYA)³ was commissioned by the Ministry of Employment to pursue an experimental programme of occupationally oriented mentorship. The budget allocated to the NBYA for this purpose was to be distributed among non-profit organisations for use in mentoring projects. The NBYA funded nine organisations that had applied for this funding. These projects started in the second half of 2010 and finished in 2012. One objective of the mentoring programme was to encourage designated categories of newly arrived and unemployed refugees to establish themselves in the labour market or to start a business. Another objective was to make it easier for non-profit organisations and associations in civil society to take part in social efforts that would give refugees a firm position in the labour market. Since the programme targeted refugees who were registered as unemployed, it was also an instrument of labour market policy. Therefore, the Employment Service had a central role in the programme.

The target group of the programme was refugees, others deemed in need of protection and persons granted a residence permit because of exceptionally distressing circumstances.⁴ Also included were people who had been granted a residence permit by virtue of their connection to someone belonging to one of these categories. For brevity's sake, members of any one of these groups are called refugees in this study. The mentoring programme was meant for those who had lived in Sweden for a period not exceeding five years after having been granted a residence permit. The projects were carried out by the nine organisations mentioned above, and each project targeted different groups – for example, one project targeted those with little education, another those with higher education, one project was addressed to women, and others were for the benefit of refugees from certain regions or countries, etc.

According to the government's commissioning document, a participant in a relevant target group should be matched to a mentor on the basis of the refugee's previous occupation, education or experience. The NBYA's instructions stated that the mentoring should be based

³ To reflect its broader role, this was renamed the Swedish Agency for Youth and Civil Society in 2014. What was stated in the commissioning document about the NBYA was changed to refer to the new authority.

⁴ Subsidiary protection in accordance with joint EU regulations as well as protection in accordance with national legislation.

on clearly formulated objectives as regards the roles of the mentor and the participant. The relationship should be aimed at maintaining the refugee's vocational identity and at establishing contacts with occupationally active persons in the same professional category. The Government instructed the NBYA to evaluate the mentoring programme. As was plain from this instruction, the question at stake for the evaluation was the extent to which participation in the mentoring projects had an *impact* on the probability of participants, when compared to non-participants, becoming employed or starting out in business. According to the commissioning document for the mentoring programme, projects that were aimed at women should be particularly supported and encouraged. Therefore, we also investigate differences between female and male participants regarding the probability of their being employed after having completed their participation in a project.

Previous research on and evaluations of mentoring programmes⁵

As mentioned in the introduction, we have not found any studies that look at the employment impact for the target group in this study – refugee immigrants. However, there are a number of surveys of mentoring programmes that target other groups. Among these, Underhill (2006) has the greatest focus on labour market outcomes.⁶ Underhill (2006) presents the results of 106 studies of mentorship programmes, but only 14 of these studies use a control group design.⁷ At first glance the results point towards there being positive impacts of mentoring on participants' careers and incomes which, to some extent, also could suggest that mentoring is used by refugees as a means for labour market integration. However, Underhill (2006) looks at the objectives and points out that variation in the objectives of the different mentoring programmes are likely to influence the results. The outcomes of mentoring can be subjective or objective. Subjective or qualitative outcomes are, for example, the impact on job satisfaction, on experienced stress, or on self-esteem, while examples of objective or quantitative outcomes are the impact on income or on the probability of securing a job or a promotion. A separate analysis of the objective and subjective outputs reveals different findings (see e.g. Chao et al., 1992; Ragins and Cotton, 1999; Ragins et al., 2000). As regards the subjective or qualitative outcomes, the evaluations show no positive impacts. This also corresponds to the results presented in the survey conducted by Allen et al. (2004). Two other

⁵ This section builds on Hammarstedt & Månsson, 2011.

⁶ See e.g. Merriam, 1983; Jacobi, 1991; DuBois et al., 2002; Allen et al., 2004; Underhill, 2006; Eby et al., 2008.

⁷ Fagenson, 1989, 1994; Chao et al., 1992; Yoder, 1992; Corzine et al., 1994; Mobley et al., 1994; Baugh et al. 1996; Chao, 1997; Schwerin & Bourne, 1998; Ragins & Cotton, 1999; Seibert, 1999; Nielson et al., 2001; Wallace, 2001; Day & Allen, 2004.

distinctions made in Underhill (2006) are the differences for men and women and the differences between studies using quantitative and qualitative methods (see e.g. Baugh et al., 1996; Ragins et al., 2000).⁸ The results reveal that, on average, males have more to gain from participating in mentoring programmes than females, and that qualitative studies of mentoring seem to point to more positive results than quantitative ones.

To summarise, the results of previous research indicate that, in general, mentoring programmes have positive impacts on the possibility of establishing a career, on job satisfaction and on the possibility of combining work and family life. The positive impact is slightly higher for males than for females. Further, the results show that informal mentoring programmes are more effective than formal ones. In most of the studies, the measured outcome of interest is subjective rather than objective. If objective outcomes had been used to a greater extent in the studies mentioned above, it is quite possible that the picture of the effects of mentoring would be different from the picture that they give. In terms of whether they can be generalised, the results of the reviewed studies have their limitations since many of them target high-level professions such as managers and lawyers. Finally, evaluations of mentoring programmes for certain groups are missing. One such group is refugees.

Data and evaluation design

In contrast to many other observational studies, the evaluation plan for the Swedish mentoring programme was worked out well before the programme started, making data gathering before, during and after the programme possible.⁹ The evaluation was in three parts: questionnaires to be filled in by programme participants before and at the end of their participation, a process evaluation with a focus on the activities of the programme projects and finally a register-based impact evaluation. The mentoring *programme* was composed of numerous *projects* in different places and regions.

One objective of the evaluation was to elicit information about the selection process used to choose participants in the projects. It became clear that an observable administrative selection process was used to determine the eligibility of possible candidates. The main selection criterion for project participation was whether the possible candidate was in the region and

⁸ For a discussion of the difference between formal and informal mentoring programmes, see e.g. Chao et al., 1992.

⁹ Because of political constraints, it was not possible to use a randomised impact evaluation design.

was a member of the specific group targeted by the project. For example, if the project targeted poorly educated females in a specific region this was also the main criterion for the selection of participants. In most cases the project administrators found it difficult to identify potential participants, sometimes because they did not have access to employment office data. As a result, there were a few other administrative restrictions that played a role in the selection process and, in fact, in some cases places were filled with people from outside the target group. These participants are not included in the evaluation. This selection process will therefore serve as a basis for our matching – identifying non-participating individuals in the overall target group whose characteristics were as similar as possible to the characteristics of participants before they joined the programme.

Two sources of data are used in the quantitative evaluation. First, as mentioned above, primary data was collected from participants by means of questionnaires that were completed before and after their participation in the programme. Since the programme participants had to give a personal identity number it was possible to combine the information obtained from the questionnaires with information obtainable from public registers and from the Employment Service's database. For the impact assessment only register data was used, since information about non-participants was necessary in order to estimate the effects of programme participation. We had access to data from the year before the programme started in 2009 and follow-up data until 1 January 2013, one year after the participants completed the programme.

Outcomes

The objective of Swedish labour market policy, in general, is that an unemployed person should leave unemployment for a full-time and unsubsidised job in the open labour market or transfer to regular education outside of the employment office.¹⁰ This definition of a successful outcome is used. However, individuals in the target group for the mentoring programme are far from having a firm foothold in the labour market. Therefore, it may be unrealistic to use the labour market policy objective for the unemployed refugees for whom the mentoring programme was intended. In the analysis, three additional outcomes, all indicating that a programme participant has moved closer to the core labour market, are included. The first of these expands the definition above to include atypical employment arrangements such as temporary and part-time employment and subsidised employment. The

¹⁰ The meaning of 'getting a job' in the Swedish labour market context is extensively discussed in Månsson & Lundin, 2015.

third and fourth of the outcomes used are defined by thresholds for income from work. Many individuals who have taken up temporary or part-time employment change their labour market status several times in a given time period. Using income thresholds to define an outcome as successful makes the outcome independent of whether there are numerous spells of work with different durations. The first income threshold is a yearly income from work or self-employment exceeding SEK 100,000 (approximately 10,000 Euro). The second income threshold is a yearly income from work or self-employment exceeding a basic amount that in 2009 amounted to SEK 42,800 (approximately 4,280 Euro).¹¹ To have reached, or crossed, one of these thresholds cannot be said to be a definite indication of a transition to work, but it is an indication of having obtained a more secure position in the labour market and at least of having moved closer to the core labour market.

Matching method

The choice of the matching method that matches programme participants to non-participants is based on the scale of the heterogeneity of the projects in the programme. As described in the previous sections, some projects are limited to females and others to those with a good or poor education, and some projects have an over-representation of refugees from certain regions or countries. For this reason, an average-based matching such as propensity score matching is less likely to provide good results. To handle this heterogeneity the Coarsened Exact Matching (CEM) approach is used.¹² In CEM, the covariates considered to be of importance for whether individuals are likely to be assigned to the programme are temporarily coarsened – the observations of the covariates are grouped in strata that preserve the information. Using the coarsened data, each participant is matched to one or more non-participants.

The premise of the CEM approach is to make an exact match within a stratum on the covariates that are considered important for participation and outcome. Each participant is matched to at least one non-participant, which makes the approach comparable to stratified sampling. Further, the CEM matching approach is non-parametric, making it possible to include other factors in a second stage.

¹¹ The average yearly income in Sweden in 2014 was around SEK 376,800 (approximately 37,680 Euro).

¹² For applications of this method see e.g. Blackwell et al., 2009; Iacus et al., 2012; Widerstedt & Månsson, 2015.

The following characteristics are used for matching. The participant and the matched non-participant(s) must:

- a) have come from the same region before emigrating to Sweden;
- b) live in the same local labour market;
- c) be of the same gender;
- d) have the same educational level;
- e) have arrived in Sweden in the same year; and
- f) have been registered at the employment office in the same month and year.

All of the matching variables relate to the individual *before* the start of the programme, and can influence both whether the individual is assigned to the programme and the outcome of his or her participation in the programme. Characteristics that are, or could be, altered depending on the follow-up period is included in the second step regressions. Before the programme started, 83,855 non-participating individuals were formally eligible and are included in the matching process. After matching there is a matched non-participant for 145 out of the 257 participants (56%), and 2,437 non-participants are allocated to the comparison group.¹³ Since quite strict matching conditions are used, it is unavoidable that for some participants no non-participant can be found. The matching quality is good in the sense that, after matching, the differences in the values of the covariates before the programme started for the group of participants and the control group of non-participants are negligible.¹⁴

After the start of the programme (which is when we measured the variables for matching), a number of variables may change and therefore influence the outcome. In the impact estimates presented we control for such factors using regression techniques. The first factor is age: we expect that the probability of getting a job will increase up to a certain age and thereafter decrease. The second variable indicates whether the person is married/cohabiting or not. Two variables indicate whether or not there are children in the household. The first variable measures the number of children younger than 16 years old and the second variable indicates whether the person is single with children younger than 16 years. Having children living at home can have two effects. On the one hand, it may reduce the motivation to take up a full-time job because of childrearing responsibilities. On the other hand, having children may intensify efforts to leave unemployment in order to improve the family's income. When a person participates in a mentoring project she or he may obtain Swedish citizenship. A

¹³ See Appendix, Table A1.

¹⁴ See Appendix, Table A2.

variable that shows if this is the case is included. The assumption is that obtaining Swedish citizenship will have a positive impact on the probability of leaving unemployment. Finally, a newly arrived immigrant in Sweden is entitled to take a basic course in the Swedish language. In the data there is information about whether or not the person has completed that course. This variable is also included in the model.

Results

The results section is divided into two parts. First, the results for the register database impact assessment are presented. The results are presented for both the total population and the population divided by gender. The reason for dividing the data is based on the results of the previous research, which showed differences in the effect of programme participation between males and females. In the second part within programme variation is analysed – that is, what in the programme affects the outcome.

Impact assessment

In Table 1 the impact estimates for the total population are presented. The descriptive statistics are presented in the Appendix, Table A3.

Table 1. Impact estimates, all participants belonging to the target group. Standard errors in parentheses. (Weighted logit)

	Unsubsidised full-time job or education	Unsubsidised job or part-time, temporary or subsidised employment	Income above SEK 100,000	Income above SEK 42,800
	Marg.Eff	Marg.Eff	Marg.Eff	Marg.Eff
Programme impact	-0.010 (0.021)	0.032 (0.041)	0.007 (0.046)	0.050 (0.047)
Age	-0.001 (0.001)	-0.003 (0.002)	-0.002 (0.002)	-0.005 (0.002)
Female	0.016 (0.018)	-0.022 (0.033)	-0.075 (0.038)	-0.013 (0.039)
Married/Cohabiting	-0.014 (0.022)	-0.040 (0.042)	-0.030 (0.044)	-0.026 (0.048)
Number of children aged under 16	-0.008 (0.007)	-0.005 (0.011)	-0.005 (0.015)	-0.010 (0.016)
Single with children aged under 16	-0.003 (0.026)	-0.034 (0.049)	0.018 (0.072)	-0.047 (0.070)
Obtained Swedish citizenship	0.019 (0.023)	-0.038 (0.035)	<i>0.084</i> (0.052)	0.110 (0.051)
Completed course in Swedish	0.085 (0.020)	0.125 (0.032)	0.180 (0.036)	0.184 (0.037)
Pseudo R ²	0.060	0.030	0.040	0.040

Bold = significant at 5% level, *Italic = significant at 10 % level.*

In the table, figures in bold indicate significance at the 5% level and figures in italics significance at the 10% level. It is important to keep in mind that the analysis is performed on matched data, which partly explains why most of the variables are insignificant.

The general finding is that, on average, there are no significant differences between participants in the mentoring projects and matched non-participants. However, there are some control variables that have a significant impact on the probability of a successful outcome, for both participants and non-participants in the programme. For example, being female reduces

the probability of transferring from unemployment to employment by 7.5 percentage points if the higher income threshold is used to measure the outcome. A negative effect in this respect holds for both female participants and female non-participants. One variable that stands out is completion of the mandatory course in Swedish. No matter which outcome definition is used, there is a large positive effect. Refugees who have passed the course in Swedish have a higher probability of being employed (definitions 1 and 2) or moving closer to the core labour market (definitions 3 and 4). The estimates are in the range of 8.5 to 18.4 percentage points higher than for participants and non-participants who have not completed the course in the Swedish language.

Impact assessment for females

Even if the mentoring programme did not produce any significant average effects on the population of programme participants, there could be differences between males and females. Therefore, separate analyses of males and females are conducted. Table 2 reports the results for females.

Table 2 Impact assessment for females. Standard errors in parentheses. (Weighted logit)

	Unsubsidised job or			
	Unsubsidised full-time job or education	part-time, temporary or subsidised employment	Income above SEK 100,000	Income above SEK 42,800
	Marg.Eff	Marg.Eff	Marg.Eff	Marg.Eff
Programme impact	-0.029 (0.030)	0.024 (0.059)	-0.060 (0.062)	-0.045 (0.065)
Age	0.000 (0.001)	0.001 (0.002)	0.000 (0.002)	-0.004 (0.003)
Married/Cohabiting	<i>0.037</i> (0.023)	0.039 (0.045)	-0.081 (0.057)	-0.150 (0.057)
Number of children aged under 16	-0.016 (0.010)	-0.021 (0.017)	-0.012 (0.025)	-0.003 (0.024)
Single with children aged under 16	0.023 (0.035)	0.003 (0.054)	-0.006 (0.067)	-0.111 (0.067)
Obtained Swedish citizenship	0.019 (0.041)	0.005 (0.061)	0.019 (0.081)	0.039 (0.082)
Completed course in Swedish	0.099 (0.034)	0.129 (0.046)	0.170 (0.051)	0.194 (0.051)
<i>Pseudo R²</i>	0.060	0.030	0.034	0.043

Bold = significant at 5% level, *Italic = significant at 10 % level.*

Table 2 shows no significant impact for females participating in the mentoring programme, and even some negative signs on the impact estimates. It should be borne in mind that the mentoring projects are targeting refugees and that the lack of impact could well be because of some kind of lock-in effect, especially for females. In the participant group there are females from countries where the male is the traditional breadwinner and where females have, to a great extent, previously worked in the informal sectors, such as in the home. Thus, having to report to and register at the employment office will in these cases mean that the person has moved from inactivity to activity and formally into the labour force from outside. It would therefore be expected that some females would be a considerable distance from the core labour market and therefore might need longer assistance within regular employment

programmes before they were able to take up a job.¹⁵ The results reveal that the effect of completing the mandatory course in Swedish on the probability of ending up with any of the outcomes is large, positive and significant. Completing the course in Swedish increases the probability of a successful outcome by at least 9.9 percentage points (and by 19.4 percentage points at the most).

Impact assessment for males

Table 3 presents a separate analysis for males.

Table 3. Impact assessment for males. Standard errors in parentheses. (Weighted logit)

	Unsubsidised full- time job or education	Unsubsidised job or part-time, temporary or subsidised employment	Income above SEK 100,000	Income above SEK 42,800
	Marg.Eff	Marg.Eff	Marg.Eff	Marg.Eff
Programme impact	0.007 (0.029)	0.036 (0.057)	0.066 (0.067)	0.132 (0.068)
Age	-0.001 (0.001)	-0.007 (0.003)	-0.004 (0.003)	-0.008 (0.003)
Married/Cohabiting	-0.050 (0.034)	-0.084 (0.061)	0.022 (0.062)	0.077 (0.066)
Number of children aged under 16	-0.002 (0.008)	0.006 (0.014)	0.000 (0.020)	-0.013 (0.021)
Obtained Swedish citizenship	0.017 (0.022)	<i>-0.076</i> (0.039)	0.140 (0.066)	0.171 (0.066)
Completed course in Swedish	0.069 (0.021)	0.119 (0.044)	0.191 (0.049)	0.182 (0.051)
<i>Pseudo R²</i>	0.070	0.060	0.044	0.049

Bold = significant at 5% level, *Italic = significant at 10 % level.*

When the sample is limited to males, we find positive and significant impacts when the lower income definition is used. According to the analysis, the probability of male participants in

¹⁵ At the moment we do not have access to data to test whether this is the case, but additional qualitative research is being carried out on this matter.

the mentoring programme earning more than a basic amount from work is 13.2 percentage points higher than the probability of male non-participants doing so. This cannot, however, be interpreted as saying that male participants are firmly established in the labour market, but it is a strong indication that they have moved closer to it. As regards the effects of the control variables, the estimated effect of having obtained Swedish citizenship and of having completed the mandatory course in Swedish is large, positive and significant.

Which features in the mentoring programme have an effect on the outcome?

Since we administered a survey, we have access to information about the essential ingredients in the projects and the characteristics of the mentor. We choose to limit this analysis to males only, and only to the outcome indicating an income exceeding a basic amount – that is, to the situation for which we can identify a significant impact. We are therefore looking at factors within the programme that either strengthen or weaken the estimated positive impact. The results of this analysis are presented in Table 4.¹⁶

¹⁶ Descriptive statistics are presented in the Appendix, Table A4.

Table 4. The influence of the project activities and the mentor's and mentee's characteristics on obtaining an income in excess of a basic amount. Logit model

	Marginal effect	Standard error
<i>Mentee</i>		
Age	-0.022	0.009
More than 9 and fewer than 13 years' education (self-reported)	-0.020	0.160
More than 13 years' education (self-reported)	0.282	0.171
Married/cohabiting	-0.064	0.157
Number of children aged under 16	0.034	0.136
Have moved within Sweden	-0.068	0.148
Completed Swedish course	-0.049	0.135
Obtained Swedish citizenship	0.253	0.153
Total number of years worked (self-reported)	0.034	0.011
<i>The mentoring</i>		
Mentoring in Swedish	0.192	0.203
More than five mentoring sessions	-0.086	0.145
<i>The mentor</i>		
Manager or self-employed	0.085	0.136
More than five years' mentoring experience	-0.210	0.136
Female	0.152	0.147
Over 60 years of age	0.176	0.164
Born in Sweden	-0.235	0.204

Pseudo $R^2 = 0.20$, LL = -66.56. **Bold** indicates significance at 5% level and *italic* at 10% level.

The analysis is based on the 122 males who entered the mentoring programme on projects for which we have information about the mentoring activities. As a whole, few variables related to mentors or to activities in the project affect the outcome. There is an estimated negative effect of the mentee's age. That is, the older the mentee, the less likely it is that she or he has an income from work exceeding the basic amount. As expected, an increase in years of education results in a higher probability of crossing the income threshold. Including the self-reported working years in the home country in the analysis reveals that the greater the number of years worked, the higher the probability of coming closer to the core labour market in Sweden. Before launching the programme there was a discussion of mentoring intensity –

how much mentoring is enough? In our analysis, mentoring intensity is considered to be low if there were five or fewer meetings between mentor and mentee, and high if there were more than five meetings. The analysis shows that mentoring intensity does not have a significant effect. In the review of previous research we mentioned that there were evaluation results that indicated that the mentor's gender was important in the results on participation in the mentoring programme. This is, however, not the case in the Swedish mentoring programme under examination here. We did not find that the mentor's gender affected the outcome for mentees. Finally, one of the objectives of the mentoring programme was to inform the mentee about conditions in the Swedish labour market. It would be expected that a mentor born in Sweden had an advantage in being able to convey such information. Therefore it might be expected that having a Swedish mentor could play a crucial part in the outcome of the mentoring programme. This is, however, not supported by the results of our analysis.

Conclusions

This study seeks to ascertain whether the participation in mentoring by unemployed refugees will accelerate the job-seeking process and increase their probability of getting a job or coming closer to the core labour market. Since most unemployed refugees are at some distance from the labour market, success in the latter sense is an important step towards gaining a foothold in the labour market. The main conclusion reached from this study is that mentoring is not a 'quick fix' for integration. We could show that mentoring has a positive and significant short-term impact for males, when we define a positive outcome as having an income from work or self-employment that at least exceeds a basic amount. We argue that this first indication suggests that mentoring activities are a promising way of integrating refugees into the labour market, but they are still far away from being integrated. The results also suggest that, for the target group to be fully integrated, we need to allow more time. This is especially the case for the female population, where we suspect larger lock-in effects. We therefore suggest a future follow-up, with special emphasis on female participants. Further, how the mentoring activities are organised and the characteristics of the mentor seem to have little importance for the outcome, at least in the dimensions investigated in our study. For example, we did not find that the gender of the mentor has any effect: female and male mentors influence the results for male programme participants in the same way. A question that arose in planning the programme was the number of times the mentee should meet with the mentor. Before the programme started, this topic was an important issue. Our analysis

reveals, however, that the intensity of mentoring does not have any impact. Another factor that might influence the outcome of the programme is the national origin of the mentor. The results of our analysis do not indicate any difference in goal attainment arising from the mentor having been born in Sweden.

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Appendix

Table A1. Numbers of matched participants and non-participants

	Matched	Not Matched	Total
Participants	145	112	257
Non-participants	2,437	81,418	83,855
Total	2,582	81,530	

Table A2. Matching quality

	Difference
Origin of birth (grouped)	0.00
Local labour market	0.00
Gender	0.00
Education (6 levels)	0.00
Year arrived in Sweden	0.00
Date registered as unemployed (intervals)*	-0.06

* -0.06 for the date registered as unemployed means that the non-participants were, on average, registered less than one week before the participants.

Table A3. Descriptive statistics for matched participants and non-participants in the mentoring programme entering the regression analysis.

	<u>Treated</u>		<u>Untreated</u>	
	Mean	Std. Dev	Mean	Std. Dev
Age	33.52	8.76	37.18	9.60
Married/Cohabiting (Share)	0.75	0.43	0.76	0.43
Number of children aged under 16	0.81	1.25	1.24	1.74
Single with children aged under 16 (Share)	0.06	0.24	0.08	0.28
Obtained Swedish citizenship (Share)	0.17	0.38	0.16	0.37
Completed course in Swedish (Share)	0.51	0.50	0.54	0.50
N	145		2,437	

Table A4. Males participating in the mentoring programme. N = 122

Variables	Mean	Std.Dev	Min	Max
<i>Labour market income ></i>				
<i>SEK 48,800</i>	0.70	0.46		
Age	36.46	10.43	19	63
More than 9 and fewer than 13 years' education (self-reported)	0.30	0.46		
More than 13 years' education (self-reported)	0.42	0.50		
Married/cohabiting	0.71	0.45		
Children aged under 16	0.46	0.50		
Have moved within Sweden	0.27	0.45		
Completed Swedish course	0.53	0.50		
Obtained Swedish citizenship	0.14	0.35		
Total number of years worked (self-reported)	10.18	8.26	1	46
Mentoring in Swedish	0.58	0.50		
More than five mentoring sessions	0.52	0.50		
Mentor is a manager or self-employed	0.60	0.49		
Mentor has more than five years' experience	0.71	0.45		
Female mentor	0.24	0.43		
Mentor aged over 60	0.39	0.49		
Mentor born in Sweden	0.61	0.49		