

ARTICLE

Open Access



Integrating young male refugees: initial evidence from an inclusive soccer project

Martin Lange¹, Friedhelm Pfeiffer^{1,2*} and Gerard J. van den Berg^{3,4}

Abstract

This study analyses data collected among a group of young male refugees who participated in a randomised experiment. Refugees were randomly assigned to a soccer project aimed at facilitating social and labour market integration or to a control group. We evaluate the randomisation process, discuss the design and implementation of the survey and summarize the main findings of the survey by focusing on labour market activity, pre-migration characteristics, and the monetary costs of the escape. In addition, we provide a preliminary outlook on the effectiveness of the programme.

Keywords: Refugees, Randomised experiment, Labour market integration

JEL-Classification: C93, F22, J15, J24

1 Introduction

In 2015, Germany experienced the largest net inflow of migrants since the early 1950s (BAMF 2016). It is expected that the group of approximately 890,000 newly arrived asylum seekers will stay for a considerable length of time in Germany. Measures to facilitate integration into society and the labour market have been discussed by a variety of bodies.¹ In this context it seems to be of particular interest to examine volunteer-run initiatives which intend to provide support for refugees. In Germany many such initiatives have emerged.² Although volunteer-based support is widespread, scientific studies on its scope and consequences are not yet widespread.³

In this study we concentrate on a specific small-scale project, an inclusive and multi-dimensional soccer project for male asylum seekers, intended to enhance social inclusion and labour market participation. The project is administered by a non-commercial, non-administrative association and run by non-professional soccer coaches.⁴ The programme of this project consists of a comprehensive package of soccer training, mentoring and language classes,⁵ recreational activities and job placements. Invitations to participate in the project were randomised over a pool of refugees living in the Rhine-Neckar area in Germany. Our study presents the results of a survey among refugees in the soccer project (treatment group) and two groups of refugees living in a comparable situation (control groups). Socioeconomic similarities and disparities among these groups of refugees are examined. Furthermore, we provide information on the cost of fleeing their home countries, their human capital and indicators of social labour market integration. Finally, exploiting the randomisation design, we provide some

¹ See e.g. Konle-Seidl and Bolits (2016); for general overviews of economic research on asylum seekers and immigrants see e.g. Dustmann and Frattini (2014) and Fuest (2016).

² According to Ahrens (2016) almost 12% of all Germans are active in providing assistance to refugees; see also Karakayali and Kleist (2015).

³ A related strand of the literature focuses on the volunteers rather than the volunteers' target groups. For example, Yamamoto and Sakamoto (2012) discuss potential determinants of the motivation to engage in voluntary work. Meier and Stutzer (2008) conclude that volunteers are more satisfied with their lives than non-volunteers based on data after the collapse of the German Democratic Republic. Prouteau and Wolff (2006), among others find that voluntary work generates small to sizable wage premia.

⁴ The association is called Anpfiff ins Leben e.V. We would like to thank Roman Frackenpohl and Daniel Lingenfeld from this association for collaborating with us and their extremely valuable support throughout the conduct of the survey.

⁵ Existing research seems to partially confirm the effectiveness of language programs for integration; see Dustmann and Fabbri (2003), among others. Cabane and Lechner (2015) summarize the empirical evidence on the causal impact of physical activity on labour market outcomes.

*Correspondence: friedhelm.pfeiffer@zew.de

¹ Centre for European Economic Research (ZEW), P.O. Box 10 34 43, 68 034 Mannheim, Germany

Full list of author information is available at the end of the article

preliminary evidence on the short run effects of this volunteer-based project.

Our main findings can be summarized as follows. On average, the 81 male respondents of the survey were 22.8 years old, had spent nearly 9 years in education and had already accumulated 5 years of work experience in their home countries or on their way to Germany. Our sample is not representative for the entire population of refugees living in Germany. It corresponds to the significant group of recently arrived young male refugees. 24% of the refugees who applied for asylum in 2016 were in the age group of 18–25 and most of them were males (BAMF 2017).

Respondents report on average good health and are fairly optimistic about finding work in Germany. They had been living in Germany for 9 months at the time of the interview. 36% were searching for a job, and 14% report that they were working at the time of the survey. Thus, it seems that the surveyed refugees are equipped with good health, reasonable work experience and motivation, but a low level of education compared to Germans of the same age group. 28 survey participants take part in the soccer project. Most of them indicated that they would like to participate more frequently. Comparisons of means of key outcomes suggest that treatment participants visit German natives in their homes more often than the control group, which hints at some initial positive short-run integration effects.

The study proceeds as follows. In the next section the treatment and institutional setting are introduced. Sect. 3 discusses the randomised experiment and explains how the survey was conducted. Sect. 4 summarizes our initial survey evidence on human capital, on the cost of fleeing their homeland, and on labour market integration. Additionally, we will discuss the potential short-run treatment effects of the soccer project. Sect. 5 concludes.

2 The inclusive soccer project HEIMSTÄRKE

The inclusive soccer project HEIMSTÄRKE was designed in order to facilitate the integration process for asylum seekers residing in the Rhine-Neckar region. The German word HEIMSTÄRKE literally means home power. The project has been established in the communities of Walldorf, Sandhausen and Sinsheim. There is one course with a capacity of 16 participants in each community.

Anpfiff ins Leben e.V., a volunteer-based association which aims at supporting the inclusion of disadvantaged groups by enabling them to participate in sports, administers the course. A professional soccer club at each location provides the training ground and other facilities in support of the project HEIMSTÄRKE. Furthermore, the project is integrated into the professional network of Anpfiff ins Leben e.V. which enables the organisers to

provide the course groups with sports equipment and contacts to firms in the region.

One important goal of the course is to increase the participants' employment opportunities. The course's additional aims included encouraging contact with local residents, improving the participants' health, as well as increasing their German language proficiency and life satisfaction. HEIMSTÄRKE intends to achieve these goals by offering a multi-dimensional programme. The weekly 2-h training sessions are based on the football3-concept⁶ and put a strong emphasis on inclusive and social actions. The aim is to provide young people with a social skill set by addressing social topics such as fairness and mutual respect, health and peacebuilding, communication and leadership as well as gender equality and teamwork. In HEIMSTÄRKE the course consists of three parts: (i) language classes, mentoring or support in job search, (ii) soccer training and (iii) feedback. The mixture of activities is designed to improve labour market chances and outcomes for the participants.

In the first part, either a German language class, or mentoring or job search assistance is provided. The language classes focus on everyday language and sports, in particular soccer. The participants should learn to communicate on the pitch in German and in everyday conversations. The mentoring aims to provide guidance in everyday problems. Here, difficulties regarding housing conditions, administrative processes or communication issues are discussed and solutions are proposed.

Job search assistance is also provided. Participants acquire knowledge about the German labour market, receive assistance in writing a CV and are informed about job search channels. Notably, the project specifically aims at matching participants to firms from their network offering internships and full employment opportunities.

The second part consists of soccer training and playing. In addition to the standard rules of soccer games, cooperative behaviour and applying the newly learned vocabulary, e.g. for saying a German sentence after scoring a goal, is rewarded with additional points to the score. The third part is designated for giving feedback on that day's session in order to give participants the opportunity to tailor the sessions to their needs. In addition, the group meets occasionally for other sports events or social activities such as barbeque or watching soccer games.

3 Design of the research project

3.1 Randomised experiment

In order to assess whether the treatment has an effect on the outcomes of interest, a randomised experiment

⁶ For more information on the concept see <http://www.streetfootballworld.org/football3/?q=de#home>.

has been designed. The main methodological problem of assessing treatment effects stems from the impossibility of observing the same individual in two states at the same time (see Imbens and Wooldridge 2009; Lechner and Pfeiffer 2001, among others). That is, an individual being exposed to a treatment cannot be observed not having had the treatment and an individual not having had a treatment cannot be observed having had the treatment.

Experimental settings where one group is treated and another group is not treated may be helpful in overcoming this basic methodological problem. Thereby, attention has to be paid to the underlying mechanism which assigns individuals to the treatment. If participants are allowed to self-select into the treatment or selection is partly influenced by unobserved characteristics, outcome comparisons between the groups may be substantially biased. A randomised experiment may overcome this difficulty through the random assignment of treatment participation (Imbens and Wooldridge 2009; Rubin 1974; etc.).

Our identification strategy relies on random group assignment of individuals who were recommended to be part of the programme. The two step randomisation procedure was developed as follows: Since the organizers of HEIMSTÄRKE had no direct contact to refugees, they were dependent on persons who did. Hence, they asked volunteers who worked in the refugee camps for recommendations. Then, a list of asylum seekers who expressed a general interest in playing soccer was assembled for each programme location. Based on this list, refugees entered the pool of potential participants.

For Walldorf and Sandhausen, the decision on who received an invitation to be part of the programme and who did not was entirely based on random draws from the pool of recommended refugees. However, this procedure was not applicable for Sinsheim due to the small number of recommendations and restricted access to the sports ground. Because of the pre-existing training schedules of other teams, the football pitch could only be used by HEIMSTÄRKE before noon. As a result, all recommended refugees who had free time before noon were invited to participate in the course.

It is important to note that the refugees did not know that they were recommended or not recommended. Moreover, according to the best of our knowledge, no

refugee knew that the programme existed before the invitations to participate were given. It could be the case that recommendations for refugees were based on other characteristics than previously stated. For instance, volunteers could have recommended especially well-integrated refugees. Then, the external validity of the experiment will be rather weak. We tested whether refugees in the randomisation pool are structurally different from other refugees in the region (our non-recommended control group, see below) and found no qualitatively important differences in their observable characteristics.

Table 1 reports the number of recommended participants per volunteer, where each row marks a volunteer, e.g. the first volunteer in Walldorf recommended eight participants, the second 20 and so on. In order to avoid the case that volunteers who were very selective in giving recommendations are underrepresented in the invited sample, the randomisation process was clustered at the volunteer level. That is, participants were randomly chosen from the pool of recommendations under the condition that the number of invited participants from each volunteer has to be greater or equal than one. The take up rate was remarkably high for Walldorf and Sandhausen. Everybody who got an invitation came to the first session. However, over time some participants dropped out of the course. Five participants quit the courses in Sandhausen, while six quit the one in Walldorf. Attrition was mainly due to return migration or relocations to other cities outside the Rhine-Neckar area.

For Sinsheim, which was not part of the randomisation, the picture looks different. Only 38% of the invited participants showed up at the first two sessions. After ten sessions, with a maximum number of nine participants for two sessions, the organizers of HEIMSTÄRKE decided to enlarge the group with refugees from another city, so that the course would regularly consist of 16 participants.

Since randomisation is crucial for unveiling any causal effects of the treatment, the quality of randomisation on the observables is analysed in part 4 below. The randomisation seems to have worked well. There are no statistically significant differences on a 5% confidence level regarding the predetermined variables prior to the assignment. These tests are provided together with results of the survey in Tables 4 and 5 below. Tests on differences in outcome variables are provided in Table 6.

Table 1 Recommendations per volunteer

Location	No. of recommendations					Total
Walldorf	8	20	3	20		51
Sandhausen	15	21				36
Sinsheim	10	1	6	21	5	43

Source ZEW inclusive soccer project survey

3.2 The ZEW inclusive soccer project survey

In order to learn more about the socio-economic characteristics of the refugees and selected outcomes of the project, ZEW conducted a survey among the refugees who belonged to the pool of recommendations. The pen and paper survey took place at six different locations, which are all in the Rhine-Neckar region (see Table 2). Refugees were interviewed either at their camp or at the playing field. The participants of the survey were either approached by the trainers, if they belonged to the treatment group or via mail and social workers, if they were part of the control group. All potential survey participants were informed that participation was entirely voluntary and that no information supplied by the individuals would be handed to any official administration. They were informed that the aim of the survey was purely academic.

The survey team intended to reach all refugees from the randomisation pool—not to survey all inhabitants of a camp. Some additional refugees were attracted out of curiosity to participate in the survey. We decided to include these refugees in the description of our survey results in order to increase the sample size. This group will henceforth be referred to as the ‘non-recommended control group’ because they do not belong to the randomisation pool. When investigating potential treatment effects, the analysis is limited to the randomised sample.

The survey was conducted within a month between 29th of June, starting in Wiesloch and Walldorf, and 21st of July, ending in Sinsheim. In this period a total of 81 male refugees filled in the questionnaire. Table 2 shows the number of interviewed persons as well as their group status for the six locations.

The camps in Wiesloch, Walldorf and camp 1 in Sinsheim are mainly inhabited by male refugees who came to Germany without their families. Wiesloch has a capacity of 160, Sinsheim of 372 refugees. All of these camps are rather similar in structure as they are set up in vacant halls or containers with group accommodation. Therefore, according to our information, the participants in the treatment as well as in our survey are facing similar or

the same local living conditions. Camp 2 in Sinsheim is also similar in terms of living facilities but primarily hosts families. Participants of the soccer course resided either in the aforementioned camps or at a camp in Leimen. Due to a lack of local support from social workers it was not possible to conduct the survey in this camp. Nevertheless, according to our information, it greatly resembles the camps from Wiesloch and Walldorf.

At the playing fields in Walldorf and Sandhausen 21 out of 32 potential interviewees filled in the questionnaire. For Sinsheim, participants as well as non-participants were interviewed at two refugee camps. Reaching persons in the control group turned out to be more difficult. Where possible, we used social workers at the camps to get in contact with the refugees and to motivate them to engage in the survey.

The survey was performed with a paper based questionnaire consisting of 49 items in total, covering a number of different topics. These topics included recreational activities, professional activities, the social environment, health, personality and values, language and their time living in Germany, general information about the interviewee and information about their life before fleeing their homeland. Compared to the IAB-BAMF-SOEP survey on refugees (see Brücker et al. 2016) which entails almost 450 questions, our questionnaire is fairly modest but comparable to the one performed by Buber-Ennsner et al. (2016) among refugees in Austria. Participants belonging to the treatment group filled in an additional questionnaire which tries to capture their experience with HEIMSTÄRKE. In general the items were designed to be ‘quick & easy’ to fill in. No open questions were included where participants would have been forced to write a sentence or more.

The German questionnaire was translated by a professional institute into English, French, Dari, Farsi, Arabic, Urdu and Tigrinya. Despite having had the surveys translated into the native languages of the refugees, there were some participants who had problems in reading and understanding the survey. According to our field experience we think that the survey information gathered is fairly fine for

Table 2 Survey participation by survey location

Location	N	Treatment	Recommended control	Non-recommended control	Date of the survey
Camp, Wiesloch	8	0	7	1	29.06.16
Camp, Walldorf	7	0	3	4	29.06.16
Soccer court Walldorf	11	11	0	0	29.06.16
Soccer court Sandhausen	10	10	0	0	08.07.16
Camp 1, Sinsheim	32	6	6	20	15.07.16
Camp 2, Sinsheim	13	1	8	4	21.07.16
Total	81	28	24	29	

Source ZEW inclusive soccer project survey

those who were able to understand the questionnaire. Surely more experience is needed to provide more evidence on the quality of refugees' survey responses.⁷

4 Insights from the ZEW survey

This chapter provides initial insights on characteristics of surveyed refugees within the treatment and control group as well as refugees who were outside the experimental design. Findings are organised around three broad categories: socio-economic characteristics, family background and costs of fleeing their home country, elements of labour market integration in Germany and opinions about participation in HEIMSTÄRKE.

4.1 Socio-economic characteristics, family background and escape costs

Table 3 provides an overview on the distribution of home countries within the surveyed sample and across groups. Roughly one-third of the survey participants were born in Afghanistan. Another third of the participants originate from the Islamic Republic of The Gambia (17%), Syria (10%) and Iran (9%). In total 60% of the individuals among the observed population were born in Asia, while 18% were born in Africa. As already mentioned the sample should not be regarded as representative for the entire population of refugees living in Germany, although it should correspond to the quantitatively important group of young male refugees. For the evaluation of the treatment, however, representativeness is not needed.

The IAB-BAMF-SOEP survey is representative regarding the population which already filed an asylum application (Brücker et al. 2016). In our study participants are drawn from the entire distribution of refugees living in the region, regardless of their asylum application status. The distribution of nationalities across treatment and the recommended control group seems to be quite similar. Differences, however, to both of these groups are visible with respect to the non-recommended control group. Here, almost half of the sample are from Afghanistan.

Table 4 depicts pre-migration characteristics of the surveyed individuals as well as their current health and their time in Germany. The mean age in the sample is 22.8 years; the average duration of their stay in Germany is 9.2 months. The treatment group is on average 23.2 years old, whereas the recommended control group is slightly younger (21.7 years). The age of the non-recommended control group is 23.3.

The recommended control group has been in Germany on average 1.5 months longer than the treatment group. Important dimensions for understanding social and

labour market integration are related to the participants' socioeconomic background and work experience in their home country. Table 4 indicates that almost 72% of the surveyed individuals had a paid job before they came to Germany. There are some differences between the groups (treatment: 75%, rec. control: 54%, non-rec. control: 83%), which is sustained when looking at the length of work experience, which varies between 4.3 and 6.0 years. However, tests on the equality of means for these characteristics are all insignificant on a 5% confidence level. Although the sample size is rather small, according to our interpretation of these results there is no evidence that the randomisation failed.

Table 4 also presents the average number of years of education, an indicator of human capital widely used in education and labour market research (see Morrisson and Murtin 2009; Pfeiffer and Pohlmeier 2011, among others). The average number of years of schooling differs between the treatment and control groups. The treatment group has 9.6 years of education on average, while the recommended control group has 8.1 years on average. The non-recommended control group lies between the two other groups with 8.5 years of education on average.

A comparison of the country-specific averages of years of schooling in our sample with the educational attainment data of Barro and Lee (2013) indicates that the respondents of the survey have on average more years of schooling than their peers in their home countries. Afghanistan constitutes the only exception. Based on the Barro-Lee data we calculate country-specific means in the number of years of education for males at the age 15–29 years in 2010. The average number of years of education is 6.45 in Afghanistan, 5.84 years in Gambia, 8.82 years in Iraq and 7.77 years in Syria. In contrast, the mean time in education with respect to the country of origin for our sample are 6.27 years for Afghans, 8.93 years for Gambians, 10.43 years for Iraqis and 11.13 years for Syrians.

In addition to a reasonable level of education, a good health should be a prerequisite for a successful integration. Table 4 reports the assessment of refugees' own health, which seems to be relatively good on average. There seems to be no major group differences (treatment 3.9; rec. control 4.1; non-rec. control 4.1) on the scale ranging from 1 to 5 (bad–very good).

Migrating from troubled home countries may not only be arduous and exhaustive but also financially costly. The monetary costs of the escape may have a significant impact on the economic integration of refugees in Germany. If the migration process associated with these costs is seen as an investment, a certain return from it may be expected. Furthermore, if refugees have accumulated

⁷ The K6 mental health scale (Kessler et al. 2002), a locus of control and a self-control inventory (see Cobb-Clark 2015; Tangney et al. 2004) suffered from high missing-rates. Therefore we excluded these items from the analysis.

Table 3 Country of birth across groups

	Total	Treatment	Recommended. control	Non-recom- mended. control
	N (%)	N (%)	N (%)	N (%)
Iraq	7 (9)	4 (14)	3 (13)	0 (0)
Syria	8 (10)	4 (14)	3 (13)	1 (3)
Afghanistan	26 (32)	6 (21)	6 (25)	14 (48)
Pakistan	1 (1)	0 (0)	0 (0)	1 (3)
The Gambia	14 (17)	7 (25)	4 (17)	3 (10)
Eritrea	2 (2)	0 (0)	2 (8)	0 (0)
Iran	3 (4)	0 (0)	0 (0)	3 (10)
Turkey	1 (1)	0 (0)	0 (0)	1 (3)
Togo	1 (1)	1 (1)	0 (0)	0 (0)
Missing	18 (22)	6 (21)	6 (25)	6 (21)
All	81 (100)	28 (100)	24 (100)	29 (100)

Source ZEW inclusive soccer project survey. Relative frequencies within groups are reported in parentheses

Table 4 Characteristics of respondents

	Total	Treatment	Recommended control	Non-recommended control	Treatment vs. recommended control ^b
Age, mean in years (Standard deviation in years) [Number of answers]	22.8 (3.8) [80]	23.2 (3.6) [28]	21.8 (3.2) [24]	23.3 (4.4) [28]	0.15
Work home [Number of answers]	72% [77]	75% [28]	54% [21]	83% [28]	0.34
Experience home, mean in years (Standard deviation in years) [Number of answers]	5.2 (3.4) [37]	4.3 (3.0) [14]	5.2 (2.2) [6]	6.0 (4.0) [17]	0.52
Education, mean in years (Standard deviation in years) [Number of answers]	8.8 (4.7) [71]	9.6 (4.2) [27]	8.1 (4.9) [20]	8.5 (5.0) [24]	0.26
Health ^a , mean score (Standard deviation) [Number of answers]	4.0 (1.1) [78]	3.9 (1.1) [28]	4.0 (1.2) [23]	4.1 (0.9) [27]	0.82
Time in Germany, mean in months (Standard deviation in months) [Number of answers]	9.2 (3.9) [72]	8.9 (3.6) [25]	10.5 (4.4) [22]	8.3 (3.5) [25]	0.18

Source ZEW inclusive soccer project survey; own calculations

^a Reported are the means of a self-assessment given on a scale 1 (bad) – 5 (very good)

^b Reported are the p-values of a t Test testing $H_0 =$ the means of the two groups are equal

debts, the incentive to be active on the labour market might be higher, all other things equal.

Table 5 presents the results from the self-reported costs of migrating to Germany. On their way to Germany, 77% of the surveyed individuals crossed the Mediterranean. The crossing is not only associated with high risks but also with an average costs of €2212. There are differences in the costs between the treatment and control groups. Treated individuals experienced lower costs compared to the control group, but the difference is not significant from a statistical point of view.

A similar picture emerges when looking at the overall costs of fleeing to Germany. On average respondents spent €4900 on their way to Germany. The IAB-BAMF-SOEP survey reports higher average costs for the journey (roughly €7000). This may be due to selective non-response and to differences in age and/or home country, since the monetary migration costs are a function of the route taken and of funds available. The accumulated debt from the escape is €3978. Hence, respondents financed 81.2% of their escape expenses by credit.

Table 5 Monetary costs of the escape

	Total	Treatment	Recommended control	Non-recommended control	Treatment vs. recommended control ^a
Crossed Mediterranean Sea [Number of answers]	77% [75]	74% [27]	71% [21]	85% [27]	0.84
Cost crossing, mean in € (Standard deviation in €) [Number of answers]	2212 (2375) [38]	1021 (598) [9]	2645 (3078) [13]	2531 (2240) [16]	0.14
Cost escape, mean in € (Standard deviation in €) [Number of answers]	4900 (2578) [39]	3734 (2389) [12]	4445 (3220) [8]	5827 (2146) [19]	0.58
Debt escape, mean in € (Standard deviation in €) [Number of answers]	3978 (2926) [29]	2988 (3101) [9]	2765 (1658) [4]	4838 (2921) [16]	0.90

Source ZEW inclusive soccer project survey; own calculations

^a Reported are the p values of a t-Test testing $H_0 =$ the means of the two groups are equal

Kennan and Walker (2011) estimate a structural model for individual migration decisions between states within the US. One of the structural parameters is the total instantaneous “switching” cost of the migration itself, which is supposed to capture monetary as well as additional monetized costs. Compared to their estimates, the values reported above are rather modest. This, as well as the fact that refugees experience large emotional costs from migration, suggests that the expenditures and debts reported by refugees only constitute a small fraction of the total utility loss incurred. It is, however, an open question to what extent the accumulation of interest payments on debts leads to substantial increases of the ultimate debt to be paid.

4.2 Integration in Germany: initial evidence on short-run differences

In this subsection, we look at the potential short-run effects of the soccer project. At the time of the survey, the treatment had been in place for roughly 3 months for all course groups. Hence, the survey may serve also as an opportunity for a very preliminary and initial short-term evaluation of the project. Table 6 summarizes the key social and economic indicators which should capture progress in the areas of interest for the treatment. Since group assignment was random, we are able to identify potential treatment effects through comparisons of means of the treatment and recommended control group. The last column of Table 6 presents the p values

Table 6 Integration in Germany

	Total	Treatment	Recommended control	Non-recommended control	Treatment vs. recommended control ^a
Working in Germany [Number of answers]	14% [78]	7% [27]	9% [23]	25% [28]	0.70
Searching for paid work [Number of answers]	36% [78]	22% [27]	35% [23]	50% [28]	0.33
Expectation of finding a job ^b (Standard deviation) [Number of answers]	3.5 (0.7) [77]	3.4 (0.5) [27]	3.6 (0.7) [22]	3.4 (0.8) [28]	0.19
Attended language course [Number of answers]	77% [79]	71% [28]	79% [23]	79% [28]	0.36
German language skills (speaking) ^c (Standard deviation) [Number of answers]	3.1 (0.9) [77]	3.1 (0.8) [27]	2.9 (1.0) [24]	3.3 (0.8) [26]	0.53
Visits German natives [Number of answers]	35% [77]	54% [28]	27% [22]	22% [27]	0.06

Source ZEW inclusive soccer project survey; own calculations

^a Reported are the p values of a t-test testing $H_0 =$ the means of the two groups are equal

^b Reported are the means of given answers on a scale 1 (very unlikely)—5 (very likely)

^c Reported are the means of self-assessment on a scale 1 (not at all)—5 (very good)

of tests of equality of means while the first four columns show the shares of surveyed refugees who are working and searching for a job in Germany, have attended a German language course in the last 4 weeks as well as visited Germans in their homes within the last 12 months.

Labour market activity was still limited at the time of the survey. 14% reported having a paid job in Germany at the time of the survey (similar Brücker et al. 2016). The non-recommended control group seems to have been more successful in finding employment. Similarly, this group is much more active in looking for work: half of the survey participants who answered this question in this group are currently searching for employment. The recommended control and treatment group report much lower values. This might be due to differential education aspirations. Since the treatment group is on average younger and more educated, more of them might aim to enter further education or training rather than directly finding employment. Tests of equality of means between the treatment and recommended control group suggest that there are no short-run treatment effects on labour market activity.

Another reason for the low percentage of individuals pursuing paid work might be explained by a lack of institutional help in searching for a job. 80% report having received no institutional support in their search for paid work (number not documented in the table). The surveyed participants indicated that they are mainly using non-institutional channels in order to find a job. Employment offices and job centres account for 31% of the used channels, whereas individual networks are used much more extensively (49%).

Successful integration does not only require certain competencies and qualifications but also motivation and optimism. Regarding the expectations of their labour market prospects, the majority are optimistic: 91% think that it is very likely or likely that they will find paid work within the next 2 years. Only 4% do not share the confidence of the other survey participants.

An additional important aspect of assimilation into German society and labour market are language skills. A considerably high percentage (77% on average) reported having attended a language course in the last 4 weeks. As Table 6 indicates, there are no pronounced differences in language course attainment between the treatment and recommended control group. When looking at a self-assessment of German language skills the treatment group reports an average speaking skill level of 3.1 on a scale from 1 to 5 (not at all—very good) (rec. control 2.92, non-rec. control 3.27). These values suggest moderate conversational skills in German.⁸ The same picture

emerges when looking at self-assessed German writing and reading skills, which range from 2.9 to 3.4. Again, we find no significant short-run treatment effect on language acquisition when comparing the means of treatment and recommended control group.

The variable ‘Visits German Natives’ indicates a specific dimension of social inclusion into German society. This concept is frequently used in order to measure immigrants’ level of contact with the native population (among others by Kanas et al. 2012; Lancee 2012; or Danzer and Yaman 2013). Table 6 reports that individuals in the treatment group have closer ties to the German population than the recommended control group. The effect is statistically different from zero at a 6% confidence level, which might be an initial positive short term outcome of the treatment.

In addition, we tested whether outcome variables across the recommended and non-recommended control groups differ. Bivariate tests did not hint at statistical differences between these two groups. According to our interpretation these findings provide preliminary evidence that respondents from the non-recommended group who self-selected into the interview—a standard problem with survey data—might not have been different from recommended participants. Alternatively, recommendations may have not been very selective. In either case, results might be at least to some extent transferrable to other groups of refugees.

4.3 Self-assessment of HEIMSTÄRKE

This final subsection illustrates HEIMSTÄRKE participants’ opinion about the course. Table 7 presents the degree to which participants in HEIMSTÄRKE agree or disagree with the statements in the first column. Over half of the participants agreed that the project HEIMSTÄRKE is more than just football training to them. In contrast, 41% of the participants report no substantial learning effects beyond the football training. However, when participants are asked to evaluate their experiences with specific parts of the course, feedback is largely positive. For instance the language lessons are highly valued by participants: 82% report an improvement in their language skills.

Furthermore, as shown in Table 7, 64% of the participants said they would like to participate more frequently in HEIMSTÄRKE. In addition, 64% viewed participation as an opportunity to find paid work. Only a small fraction of 12% did not expect an increase in their chances to find a job as a result of participating in the programme. Overall, our initial findings hint at a positive short-term assessment of the course on the part of its participants.

⁸ However, self-assessments of language proficiencies may often be biased, see for instance Edele et al. (2015).

Table 7 Opinions about HEIMSTÄRKE

	Disagree completely (%)	Disagree somewhat (%)	Agree partially (%)	Agree somewhat (%)	Agree completely (%)
Besides football, I'm not learning very much	50	4	4	8	33
I would like to participate more frequently per week at HEIMSTÄRKE	14	5	18	5	59
I see participation as an opportunity to get a job	4	8	24	20	44

Source: ZEW inclusive soccer project survey; own calculations

5 Conclusion

The economic consequences of the recent influx of refugees have been the subject of intense discussion—despite a lack of evidence from micro data. However, in the past, labour market integration of refugees has been more difficult compared to other immigrant groups in Germany. Fuest (2016, p. 13), summarizing the evidence, concludes: “I do not think that the refugee wave of 2015 into Germany will bring economic advantages, but admitting those migrants was more a question of offering humanitarian aid.”

Our initial evidence on relatively low levels of education and low job search intensities among refugees seem to provide some preliminary support for this conclusion. However, our sample of asylum seekers also reports significant labour market experience in their home countries, which could be valuable in the medium term for integration in the German economy. Additionally, our findings indicate that refugees are in a good health and have high labour market motivation. Based on a randomisation process, 28 survey participants took part in a programme of a multi-dimensional soccer project. Most of them enjoyed participating and indicated that they would like to train more frequently. Furthermore, a test of equality of means suggests that soccer project participants visit German natives in their homes more often than control group members, which hints at some initial positive short-run integration effects.

According to our experience respondents enjoyed taking part in the survey. Since the number of respondents is rather small, our findings are preliminary in nature. Future research that intends to more deeply assess causal impacts must be based on larger samples and panel data.

Author details

¹ Centre for European Economic Research (ZEW), P.O. Box 10 34 43, 68 034 Mannheim, Germany. ² University of Mannheim, Mannheim, Germany. ³ University of Bristol, Bristol, UK. ⁴ IFAU Uppsala, Uppsala, Sweden.

Acknowledgements

The data have been collected by the authors during a research project which is a part of “Real-World Laboratory: Asylum Seekers in the Rhine-Neckar-Region”, supported by the State Ministry of Science, Research and the Arts of

Baden-Württemberg and the Humboldt Foundation. We thank the Ministry and Humboldt Foundation for their generous support. We thank Anpffiff ins Leben e.V. for their excellent collaboration, Monika Gonser, Katrin Sommerfeld, an anonymous referee and the editor for very useful comments, and Michael Kolb for his invaluable research assistance. The views expressed in this study are those of the authors and do not necessarily reflect the views of the Ministry. All opinions are our own.

Publisher's Note

Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

Received: 31 May 2017 Accepted: 20 September 2017

Published online: 27 September 2017

References

- Ahrens, P.-A.: Skepsis oder Zuversicht? Erwartungen der Bevölkerung zur Aufnahme von Flüchtlingen zwischen November 2015 und August 2016 (Slides). Sozialwissenschaftliches Institut der Evangelischen Kirche in Deutschland (2016)
- Barro, R.J., Lee, J.W.: A new data set of educational attainment in the world. 1950–2010. *J. Dev. Econ.* **114**, 184–198 (2013)
- BAMF: Migrationsbericht 2015. Migrationsbericht des Bundesamtes für Migration und Flüchtlinge im Auftrag der Bundesregierung, Berlin (2016)
- BAMF: Das Bundesamt in Zahlen 2016—Modul Asyl. Bundesamt für Migration und Flüchtlinge, Berlin (2017)
- Brücker, H., Rother, N., Schupp, J.: IAB-BAMF-SOEP-Befragung von Geflüchteten: Überblick und erste Ergebnisse, p. 116. Politikberatung kompakt, DIW Berlin (2016)
- Buber-Ennser, I., Kohlenberger, J., Rengs, B., Al Zalak, Z., Goujon, A., Striessnig, E., Potancokova, M., Gisser, R., Testa, M.R., Lutz, W.: Human capital, values, and attitudes of persons seeking refuge in Austria in 2015. *PLoS ONE* **11**(9), e0163481 (2016)
- Cabane, C., Lechner, M.: Physical activity of adults: a survey of correlates, determinants, and effects. *J. Econ. Stat.* **235**(4–5), 376–402 (2015)
- Cobb-Clark, D.A.: Locus of control and the labour market. *IZA J. Labor Econ.* **4**(1), 1–19 (2015)
- Danzer, A.M., Yaman, F.: Do ethnic enclaves impede immigrants' integration? Evidence from a quasi-experimental social-interaction approach. *Rev. Int. Econ.* **21**(2), 311–325 (2013)
- Dustmann, C., Fabbri, F.: Language proficiency and labour market performance of immigrants in the UK. *Econ. J.* **113**(489), 695–717 (2003)
- Dustmann, C., Frattini, T.: The fiscal effects of immigration to the UK. *Econ. J.* **124**(580), 593–643 (2014)
- Edele, A., Seuring, J., Kristen, C., Stanat, P.: Why bother with testing? The validity of immigrants' self-assessed language proficiency. *Soc. Sci. Res.* **52**, 99–123 (2015)
- Fuest, C.: Migration: challenge or opportunity? *CESifo Forum* **17**(3), 8–13 (2016)

- Imbens, G.W., Wooldridge, J.M.: Recent developments in the econometrics of program evaluation. *J. Econ. Lit.* **47**(1), 5–86 (2009)
- Kanas, A., Chiswick, B.R., Lippe, T., Tubergen, F.: Social contacts and the economic performance of immigrants: a panel study of immigrants in Germany. *Int. Migr. Rev.* **46**(3), 680–709 (2012)
- Karakayali, S., Kleist, J.O.: Strukturen und Motive der ehrenamtlichen Flüchtlingsarbeit (EFA) in Deutschland. 1. Forschungsbericht. Ergebnisse einer explorativen Umfrage vom November/Dezember 2014, Berlin: Berliner Institute für empirische Integrations- und Migrationsforschung. Humboldt-Universität zu Berlin, Berlin (2015)
- Kennan, J., Walker, J.R.: The effect of expected income on individual migration decisions. *Econometrica* **79**(1), 211–251 (2011)
- Kessler, R.C., Andrews, G., Colpe, L.J., Hiripi, E., Mroczek, D.K., Normand, S.-L.T., Walters, E.E., Zaslavsky, A.M.: Short screening scales to monitor population prevalence and trends in non-specific psychological distress. *Psychol. Med.* **32**(6), 959–976 (2002)
- Konle-Seidl, R., Bolits, G.: Labour market integration of refugees: strategies and good practices. Study for the EMPL Committee, Brussels (2016)
- Lancee, B.: The economic returns of bonding and bridging social capital for immigrant men in Germany. *Ethnic Racial Stud.* **35**(4), 664–683 (2012)
- Lechner, M., Pfeiffer, F. (eds.): *Econometric evaluation of labour market policies*. Heidelberg, Springer (2001)
- Meier, S., Stutzer, A.: Is volunteering rewarding in itself? *Economica* **75**(297), 39–59 (2008)
- Morrison, C., Murfin, F.: The century of education. *J. Hum. Cap.* **3**(1), 1–42 (2009)
- Pfeiffer, F., Pohlmeier, W.: Causal returns to schooling and individual heterogeneity. *Rev. Econ. Bus. Stud.* **8**, 29–41 (2011)
- Prouteau, L., Wolff, F.C.: Does volunteer work pay off in the labour market? *J. Behav. Exp. Econ.* **35**(6), 992013 (2006)
- Rubin, D.: Estimating causal effects of treatments in randomized and nonrandomized studies. *J. Educ. Psychol.* **66**(5), 688–701 (1974)
- Tangney, J.P., Baumeister, R.F., Boone, A.L.: High self-control predicts good adjustment, less pathology, better grades, and interpersonal success. *J. Pers.* **72**(2), 271–324 (2004)
- Yamamoto, I., Sakamoto, K.: What motivates volunteer work in an emergency? Evidence from the 2011 East Japan Earthquake and Tsunami. *Econ. Bull.* **32**(3), 1933–1941 (2012)

Submit your manuscript to a SpringerOpen[®] journal and benefit from:

- ▶ Convenient online submission
- ▶ Rigorous peer review
- ▶ Open access: articles freely available online
- ▶ High visibility within the field
- ▶ Retaining the copyright to your article

Submit your next manuscript at ▶ springeropen.com
