Language proficiency of migrants: the relation with job satisfaction and matching

by

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Abstract

We empirically analyze the language proficiency of migrants in the Netherlands. Traditionally, the emphasis has been on the relation between earnings and indicators for language proficiency, motivated by the human capital theory. Here we analyze whether there is a relation between proficiency of the destination language and mismatch in the labour market. A lack of language skills may induce the migrant to work in jobs that require a lower education level than the level achieved by the migrant and/or may lead to a lower performance on the job. We use subjective survey information about job satisfaction and the fit between the migrant's education and ability level on the one hand and the job on the other hand. We also use objective information on professional level. For men, we find evidence for a positive relationship between indicators for language proficiency and satisfaction with work type and professional level. For women, we find an impact of language proficiency on performance on the job. The age at migration (or the number of years since migration) often is a more important determinant of job satisfaction and suitability than language proficiency.

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1 Introduction

In this paper we empirically analyze the relationship between language proficiency of migrants in the Netherlands and several labor market outcomes. In particular we aim to address the question whether migrants with poor language skills are selected into lower level jobs that give less satisfaction to the worker. The Netherlands is an interesting country to study, because of its rich variation in the migrant population.[1] Empirical studies for the Netherlands on this topic are scarce, since conventional survey data, such as the Socio-Economic Panel by Statistics Netherlands,[2] did not record the country of origin of survey respondents. A relatively new survey database, the LISS (Longitudinal Internet Studies for the Social Sciences) survey, that does contain this information, is used in our analysis.

Several studies analyzed the determinants of language proficiency of migrants for a variety of destination countries. Often, the study is augmented with an analysis of the relation between language proficiency and the earnings potential of migrant workers. Chiswick (2007) provides a survey of the economics of language for immigrants. Among the available studies some are for countries with English as the main language, as Chiswick and Miller (1994) and Chiswick and Miller (2001) for Canada, while studies are also available for non-English destination countries, such as for Germany (Dustmann, 1994, and Dustmann and Van Soest, 2001) and Israel (Chiswick, 1998). Dustmann and Fabbri (2003) not only analyse earnings but also employment probabilities.

Language skills are part of the individual's human capital. Chiswick (2007) discusses several factors that influence the language skills of migrants.[3] There are several pay-offs for migrants to acquire the language of the destination country. Knowledge of the destination language helps migrants in the daily life, in communication with people on the street, in the shops, in arranging someone's administration. In fact, governments see the acquisition of language skills as an opportunity to integrate migrants into the national society, indicating

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[1] There are migrants from (former) colonies of the Netherlands, like Suriname, who know the Dutch language relatively well, but who often speak their own language among each other. Then there are migrants from western countries, with languages that are related to Dutch (like German) and non-western countries (like Morocco or Asian countries), whose languages are hardly related to the Dutch language.

[2] As opposed to, say, the GSOEP in Germany.

[3] Chiswick (2007) distinguishes three categories, the three E's: exposure, efficiency, and economic incentives.

that there can be externalities to the learning of the language of the destination country, and the pay-off to acquiring language skills can have both a public and a private dimension.[4] The acquisition of language skills is influenced by the migrant's exposure to the language (Chiswick, 2007). Thus, an important potential determinant of language skills is the time since migration. The size of the population of migrants from the same country of origin may matter as exposure to the destination language is limited if it is easier for a migrant to communicate in the language of origin. Family composition is another channel by which exposure may operate. Children of migrants are integrated in the school system where they speak the destination language. One the one hand, this may be a stimulus for the parents to communicate in the destination language, while on the other hand, the children may act as translator for their parents, reducing the incentive for parents to acquire language skills. The ability to learn a new language and to adapt may relate to the migrant's capacity to learn, and therefore the level of education is a potential factor that influences the acquisition of language skills (the efficiency channel, Chiswick, 2007).

Probably the most important private pay-off to language skills of migrants is the impact on the migrant's labour market prospects. If the destination language is a determinant of human capital that increases productivity at the labour market, we may expect a higher language proficiency to pay out in terms of a higher earnings potential. This gives the migrant an additional incentive to acquire language skills. Alternatively, a higher language proficiency level may help a worker in negotiating about wage and job charactertistics conditions, and leads via this alternative route to better jobs. These potential mechanisms reveal an important endogeneity problem in studying the relation between language proficiency and labour market outcomes. Chiswick and Miller (1995) and Dustmann and Van Soest (2001) address this endogeneity issue. The latter instrument language skills using the parental skill level as an exclusion restriction. We follow an approach by Isphording and Otten (2011) who use a measure of linguistic distance between the languages of origin and destination from the linguistic literature, as described in Bakker et al. (2009). In our study a measure of linguistic distance will serve as an intrument for language proficiency. In addition, we will

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[4] The Netherlands is one of the few countries that requires certain groups of migrants to pass a basic Dutch (the language in the Netherlands) language test to acquire a license to stay.

exploit survey information collected in the first place to gain information about the respondents' personality and values as instruments. An additional source of identification that does not rely on instrumental variables comes from the panel structure of our data. The panel nature enables the identification of the correlation between individual specific unobserved characteristics that both influence language proficiency and the labour market outcomes.

Econometrically, we deal with this by setting up a simultaneous two-equations model for language proficiency and a labour market outcome with random effects, with an unrestricted across-equation correlation coefficients for the random effects and error terms.[5]

In this study we use data from the LISS.[6] This is a panel survey among households in the Netherlands that is a rich source of information about various aspects of households, including demographics, labour market states, income and wealth, and so on. The panel was initiated in 2007, but 2008 was the first full year of data collection. We currently use four waves, from the years 2008 through 2011. In the survey, we can identify the country of birth of a respondent. Moreover, other relevant information is available, like the number of years the migrant is residing in the Netherlands, and the language(s) the migrant grew up with. Our analysis consists of two parts. First, we analyze the determinants of the indicators of language proficiency that are available in our sample. Our sample contains subjective information about the proficiency of speaking (fluency) and reading (literacy). We regress the indicators for fluency and literacy on several variables, motivated by the discussion above about possible determinants of language proficiency. This stage allows us to check whether results are in line with earlier studies, done for other destination countries, whereas its outcomes also serve as a test for the quality of our language proficiency indicators. In this first part we also discuss the instrumental variables that we will use in the second part of our analysis.

The second part of our analysis concerns the relation between our indicators for language proficiency and labor market outcomes. Traditionally, the literature concentrated on the relation between language proficiency and earnings, motivated by arguments from human

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[5] Not all endogeneity can be corrected for. For instance, the migration itself may have been selective in the sense that those with a higher ability to acquire language skills may have a higher tendency to migrate. This is a selectivity problem that holds for all empirical studies in the field: only the population that did migrate is part of the analysis, not those who did not.

[6] Longitudinal Internet Survey for Social Sciences.

capital theory. A lack of knowledge of the language spoken in the country of destination may lead to the acceptance of jobs with a required level of education below the level acquired by the migrant, leading to a low level of job satisfaction. The LISS questionnaire contains subjective questions for the degree at which the worker's education level and job suit each other, and similar questions for the required skill level to perform the job. The LISS also collects subjective information about satisfaction with various aspects of jobs. Thus, we are able to analyze whether language proficiency of migrants influences the probability that they get a job that suits their education level and general skills, and whether language proficiency influences the satisfaction with certain aspects of the job. We will also use objective information about professional level and analyze whether poor language skills increases the probability that the migrant is selected into low skilled manual jobs.

In section 2 we describe the data from the LISS survey. In section 3 we describe the measure for linguistic distance. In section 4 we analyze the determinants of language proficiency. Section 5 presents the results of analyzing the relationship between language proficiency and labour market outcomes.

2   Data

Data are drawn from the LISS[7] panel, a panel survey drawn from the population in the Netherlands, consisting of roughly 5000 households (8000 individuals).[8] Within a household all individuals of age 16 or older may participate. The panel started in October 2007 and currently four waves are available for our analysis. The relevant questionnaires for the four waves were conducted yearly in the first months of 2008 through 2011.[9] The LISS survey collects information on a great deal of topics, including the household's economic

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[7] Longitudinal Internet Studies for the Social Sciences.

[8] A detailed description of the sample selection procedure can be found in Scherpenzeel (2009).

[9] In 2011, LISS introduced the 'Immigrant Panel'. This is a new panel consisting of "around 2400 individuals, of which 1700 are of non-Dutch origin" (source: LISS. The remaining 700 of Dutch origin serve as a control group). This is not the panel we are using for our current study. Our study uses the regular panel, initiated in 2007, which also contains immigrants. In 2011, these immigrants are still in the regular panel (the 'Immigrant Panel' was newly drawn), but no refreshment was added. The 'Immigrant Panel' provides less detail about country or language of origin (the emphasis is on the bigger groups of migrants in terms of country of origin) and also does not contain the same question on language proficiency. At the moment only one wave of the 'Immigrant Panel' is available.

situation (income, assets), work and schooling, religion and ethnicity, and health. The survey contains indicators for language proficiency, both for fluency and literacy (details follow). The households participating in the survey are drawn from the municipal registers.[10] This basically only excludes people from abroad who are in the Netherlands on a so called "short stay visa"[11] which is for a period of at most 3 months, issued to people who are visiting friends or relatives, or are in the Netherlands as a tourist. Everybody else who comes to the Netherlands, also if work or study is the main reason for migration, needs to be registered at the GBA to receive a residence permit, whether temporary or permanent.[12] Scherpenzeel (2009) reports that the sample is biased towards households in which at least one adult is capable of understanding the Dutch language[13] and provides some rough numbers indicating the consequence of this selection: she shows that of the gross sample (i.e. the addresses initially drawn from GBA) 3% is classified as 'non usable' which includes addresses that are dropped to language problems, in addition to "among other things, non-existing or non-inhabited addresses, companies, long term infirm or disabled respondents." This relatively small percentage shows that the impact on selection into the panel was limited, although once selected in the panel there can be additional implications for, say, item non-response.[14] The analysis of language proficiency in section 3 will shed more light on the quality of the data.[15]

First we look at the survey questions by which information on fluency and literacy is obtained. These survey questions are not only asked to migrants, but to all respondents in the survey. This makes it possible to compare the outcomes for migrants and Dutch born people, which can be helpful in gaining insight in the quality of the response. The following question is asked:

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[10] Households are drawn from the GBA, "Gemeentelijke basisadministratie".

[11] Visum Kort Verblijf.

[12] Drawing from the municipal registers automatically excludes illegal, non-registered, immigrants.

[13] The questionnaire is computer based and questions appear in Dutch to respondents. However, questionnaires in English are downloadable. It is not known to what extent respondents make use of this opportunity.

[14] Selection bias would be a more serious problem if we were studying the impact of language proficiency on social exclusion. Here we mainly focus on employed workers who at least must have some contacts in the Dutch society.

[15] No impact of relevant background variables on language proficiency would be found if sample selection were to remove too large a share of the sample. However, the analysis in the next section shows that various explanatory variables show a significant impact in the expected direction.

> "When having conversations in Dutch, do you ever have trouble speaking the Dutch language?"[16]

1. yes, often have trouble/do not speak Dutch[17]

2. yes, sometimes

3. no, never

A similar question is asked for reading:

> "When reading newspapers, letters or brochures, do you ever have trouble understanding the Dutch language?"

1. yes, often have trouble/do not speak Dutch

2. yes, sometimes

3. no, never

For our base sample, we select individuals that show no nonresponse to these two questions, and for which basic characteristics (education level, gender, and the number of years they live in the Netherlands) are observed.[18] We identify migrants by the country of birth. First, respondents are asked to report whether they are born in the Netherlands. If the answer is no, they are directed to a next question, and asked whether the country of birth is among any of the following categories: Turkey, Morocco, Dutch Antilles, Suriname, Indonesia, other non-western country (Africa, Latin America, Asia other than Japan),[19] or other

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[16] The phrasing of the question differs from other surveys known from the literature, where respondents are often asked to report their speaking skills on a scale of 1 to 5, ranging from very bad to very good. This way of phrasing the question requires the respondent to be aware of what is 'good' or 'bad' as far as speaking the language is concerned. Dustmann and Van Soest (2001) discuss the issue of measurement error and the phenomenon that migrants may adjust downwards their judgment of their own fluency the longer they are in the country. The phrasing of the question in the LISS is implicitly linked to the event of 'having trouble speaking' the language. On the one hand, this gives the respondent a reference point to judge what is good or bad, but on the other hand the outcome of the response may be related to the respondent's situation. Someone in employment, or doing effort to find a job, may respond differently than someone who stays at home and does the housework.

[17] A priori, the response in this category may be low for a sample drawn from the municipal registers.

[18] Only very few observations are lost by these latter selections.

[19] These further specifications of the categories 'other non-western country' and 'other western country' are explicitly shown in the survey question.

western country (Europe, North America, Japan, Oceania). If any of the latter two categories applies, the respondent is explicitly asked to report the country of birth. The first five countries are asked explicitly because these countries deliver the highest shares of migrants.[20] Originally, our idea was to classify respondents into groups of languages that are more or less related to the Dutch language. This is relatively easy to do for most western countries: countries with English as the main language (US, UK, Australia) can be grouped together, countries with Germanic (German and Scandinavian) languages, a language family to which also the Dutch language belongs, can form a group, and Latin languages may be grouped together (French, Italian, Spanish). The German languages are closest to Dutch, followed by English and the Latin languages. But for the remaining countries it becomes increasingly difficult to classify countries by language, firstly because some languages show hardly any relation to languages in other countries, and secondly because for many countries there is no one to one relationship between language and country (for instance, in Africa language may be determined by tribe, rather than by nation). Therefore we end up by classifying the survey respondents in any of the following categories: English speaking, Germanic, Latin, Countries with English as 2nd official language, Asian countries, Middle East, Africa, and Eastern Europe.[21] In the next section we discuss a measure for linguistic distance, which can also be assigned to migrants from countries of origin with low numbers of observations.

We show the sample descriptives for the pooled data and for the purpose of a sensitivity check we compare different sample selections. Different selections may result in samples with people who have different incentives to learn the Dutch language. We also show sample

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[20] Immigration from Turkey started at the end of the 1960-s/beginning of the 1970-s, mostly by male labour migrants. Families followed. Migration from Morocco started somewhat later, from the 1970-s on. Suriname and Indonesia were former Dutch colonies. When Suriname became independent in 1975, a movement of migration to the Netherlands took place. Indonesia became independent in 1948, and a large share of Indonesian migrants is of older age. The Dutch Antilles is somehow still part of the Kingdom of the Netherlands. There is not one specific year at which a large group of immigrants entered from the Dutch Antilles, but migration happened throughout the years. Most older Indonesian migrants learned Dutch in their country, but this will not generally hold for the younger generations. The Dutch language is also still used in Suriname and the Dutch Antilles, but mainly as an official language. Among each other people speak their own language and especially in Suriname different population groups speak different languages. The respondents from the 'other' non-western and western countries originate from a diversity of countries and we somehow need to classify them into larger groups.

[21] The category 'Latin language' can be subdivided into western (mainly southern European) and non-western (South American) migrants. Migration from Eastern Europe happened more often after the fall of the Berlin wall, and after the admission of some Eastern European countries in the European Union. Also migration from Africa seems to be more recent, after the warfare in several areas.

descriptives for individuals born in the Netherlands for reasons of comparison, but this subsample will not be used in the analysis.

Pooled over the four waves we get a sample of 1600 observations (individuals-years), referring to 659 different individuals born outside the Netherlands. For people born in the Netherlands or Belgium we have 23148 observations (on 8458 individuals). Restricting the sample to working age (older than 22 and younger than 65)[22] we are left with 17159 observation for people born in the Netherlands or Belgium (6491 individuals) and 1303 in other countries (549 individuals). As a second selection we look at individuals who are somehow attached to the labour market, excluding inactive people.[23] This results in a sample of 13498 individuals-years (5297 individuals) born in the Netherlands or Belgium and 943 (414) observations born outside.

Tables 1 and 2 show the descriptives for the native Dutch/Belgium and the respondents born elsewhere, respectively.[24] The migrants have been categorized into 13 different groups described earlier. Different sample selection rules matter. If we include all respondents, the share of Indonesian migrants is more than 10 percent of all migrants in the sample. If we select on age, their share drops to 5.5 percent. This is because a large share of the Indonesian migrants entered the Netherlands when Indonesia became independent in 1948. These older Indonesian migrants usually speak Dutch well. For migrants from Turkey and especially Morocco, selection on age hardly leads to a lower number of observations, because there are not many respondents from these countries that are older than 65. If we select on labour market attachment, their share is somewhat lower again. For the remaining we see that migrants from Turkey, the Dutch Antilles and Suriname form the biggest groups

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[22] At the age of 22, most people will have finished their education and are available for the labour market. At the age of 65 people are usually eligible for the state pension. Many Dutch workers will be eligible for some kind of early retirement arrangement, but it is likely that migrants do not have complete coverage for those arrangements.

[23] We select individuals who are working (in a wage job, in a family company, or as a freelancer or a self-employed), who are unemployed and searching for work, or who do unpaid work while on benefits or volunteer work. We extend this selection by excluding individuals of age 65 or older. Thus, retirees, disabled, individuals doing the housework, and students are excluded.

[24] In Belgium mainly two languages are used, Dutch and French, in two geographically separated areas. The Flemish (the Dutch speaking Belgiums) are known to use the language more purely than the Dutch themselves. All the Belgium respondents in our sample report to never have any problems with speaking or reading the Dutch language. Therefore we add them to the group of native Dutch. Moreover, their number is small: Table 1 shows that of the joint Dutch/Belgium subsample 99.6 percent is born in the Netherlands.

of migrants that come from one country. We see that migrants from Asia, Africa, and the Middle East have smaller shares in our sample, even though migrants from various countries were aggregated in these groups.

There are hardly any native Dutch/Belgium respondents reporting to often have troubles in speaking or reading Dutch, as may be expected. In spite of the exclusion of households in which nobody is capable of understanding Dutch in the LISS, there is still a share of 4 percent of the migrants that reports to have troubles in speaking or reading Dutch. Thus, the survey selection does not seem to have completely removed all variation in response categories. Migrants in the age range 22-65 report lower levels of fluency and literacy (i.e. there are relatively more respondents that report problems, and less that report no problems), compared to the total sample.[25] The subsample of respondents attached to the labour market show somewhat better outcomes for the literacy and fluency indicators. Note, though, that also education levels are higher for this subsample. For the native Dutch/Belgium respondents the fluency and literacy indicators are less responsive to the sample selection rule, although here also those attached to the labour market have better literacy and fluency outcomes, in combination with higher education levels.

In our analysis, we use binary indicators for speaking and reading fluency. These indicators, named 'speak' and 'read', take the value 1 for those who never have problems in speaking or reading, and is zero otherwise. Thus, we aggregate the two gradations of 'yes' when it comes to having troubles with speaking or reading Dutch.[26]

Respondents are asked whether they speak Dutch at home or an other language, and if the latter holds, they are asked to report this other language.[27] Around 70 percent of the migrants speak Dutch at home, which is a larger percentage than the percentage of migrants

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[25] This is largely caused by selecting out the group of older Indonesians.

[26] For the Dutch, we hardly observe any respondents who often find troubles in speaking or reading, and for the migrants, the percentage is low. Moreover, response in the response category with the most severe problems the response is likely to be underrepresented anyhow due to the survey design.

[27] First, they are asked to choose from Arabic, Berber, German, Frisian, Indonesian, Turkish, Flemish, or 'other language'. If the answer is 'other language', they are asked to explicitly type the name of their language. Surprisingly, there were some Dutch born respondents who answered by saying they were speaking an other language than Dutch and who filled out some local Dutch dialect, that officially is not a language different from Dutch. There were also some respondents who filled out two languages, among which is Dutch. For the Dutch/Belgium born sample, 3.7 percent responds by saying they speak a dialect. The percentage gets smaller if we select on age and labour market attachment.

who never experience any troubles in speaking or reading Dutch. This suggests that there are people who have trouble in speaking Dutch who nevertheless speak Dutch at home.[28] A further analysis with the information on speaking Dutch at home (appendix, Table B) reveals that speaking Dutch at home is not so heavily influenced by linguistic distance or country of origin. Education and age since migration are more important determinants. Speaking Dutch at home may also be more prevalent among couples of mixed origin.

The survey records nationality. In the Netherlands, under some circumstances people can have both the Dutch nationality and the nationality of another country, for instance the country of origin. Most of the respondents in the Dutch/Belgium sample have the Dutch nationality. A very small share has both the Dutch and an other nationality. For the foreign subsample around 70 percent has the Dutch nationality. However, almost 60 percent of the sample has exclusively the Dutch nationality, and around 12 percent shares the Dutch nationality in combination with an other one.

Respondents who are not born in the Netherlands are asked to which population group they belong. They are offered the opportunity to answer in more than one category. One of the possibilities is Dutch. Although nationality is clearly defined in the Netherlands, the concept of population group is less clear and there is room for interpretation by the respondent. The answer may be influenced by how they feel attached to their country of origin, how integrated they are in the Dutch society, but also by the size of the group of migrants from their country of origin. We report in Table 2 whether they think they belong to the Dutch population, and/or another group. We also have grouped the same information differently by showing whether the only group they report to belong to is the Dutch population, whether they report to belong to a foreign group, or whether they report to belong to both the Dutch group and a foreign group. Almost 60 percent report to be part of the Dutch population, but almost 70 percent say they belong to another group. The percentage that only reports to belong to the Dutch population is just over 30, whereas the

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[28] Needless to say, the causal relationship between speaking Dutch at home and fluency can run in either direction, but the data show that high (low) fluency does not necessarily lead to (not) speaking at home. For the entire sample of migrants, we find that 53 percent reports to have no problems in speaking Dutch and speak Dutch at home; 20 percent reports both to have problems in speaking Dutch and do not speak Dutch at home; 17.9 percent reports to speak Dutch at home, even though they experience problems sometimes; 9.2 percent never experience problems but do not speak Dutch at home.

percentage belonging only to another group is over 40. Around 25 percent reports to belong both to the Dutch population and to another group. Respondents with a higher labour market attachement less often report that they only belong to the Dutch population, but they also report less often to belong to another group only: they more often report to belong to both.

The remaining variables in our sample are more or less the usual demographic control variables. Women seem to be somewhat overrepresented in the Dutch/Belgium sample, whereas in the migrant sample the percentage of women is almost 60 per cent, but drops to 50 once the sample is restricted to respondents who are attached to the labour market. The average age in the Dutch/Belgium sample is about 2 years higher than in the migrant sample. The average age is lower if we restrict the sample to respondents attached to the labour market. There are more singles but also more couples with children among the migrants than among the Dutch. There are relatively more lone parents among the migrants. The average number of children is slightly higher for the migrants. For both the Dutch and the migrants, labour market attachment seems to be higher for couples with children and lower for singles. Migrants live relatively more often in urban areas than Dutch/Belgium born respondents. The tables also shows the occupational status variable on basis of which the subsample of those attached to the labour market was made. By the selection on age, we remove a large part of the pensioners and students, but not all of them. As expected, the share of pensioners in the migrant sample is lower than in the Dutch/Belgium sample. In the final selection, based on the occupational status, we also remove those who are taking care of the housekeeping. This causes a reduction in the share of women. There are relatively more disabled among the migrants, compared to the Dutch subsample. This may compensate for the lower share of pensioners. Migrants are relatively more often looking for a job, compared to the Dutch.

Education levels between countries are difficult to compare. Therefore, we only use a broad categorization of education levels where we distinguish four levels. Among the migrants, there are relatively more respondents with only a primary level of education.

In the appendix, Table A, we discuss more detailed descriptives by the grouped countries of origin. Interestingly, migrants less often report reading problems than speaking prob-

lems, possibly because speaking requires more active language skills. There is quite some heterogeneity by language/country of origin group, and the ranking is according to our expectations: the closer related the language of origin to Dutch, the less often the migrant reports language problems. The fraction of respondents with the highest and lowest level of education show whether a country delivers more low skilled workers or high skilled knowledge workers. Interestingly, the share of low (high) skilled migrants from Turkey and Morocco is relatively high (low) compared to the native Dutch population.

3 Linguistic distance and the language of origin

Isphording and Otten (2011) used a measure for linguistic distance, described in Bakker et al. (2009) in an analysis of language profiency of migrants in Germany with the GSOEP.[29] The linguistic distance is measured using a lexicostatistical approach. A list of 40 stable elements from a list of words that is commonly used in linguistic[30] is compared between two languages to determine the distance measure. The distance measure is based on the "minimum total number of additions, deletions, and substitutions of symbols necessary to transform one word into another" (Bakker et al, 2009). This number is normalized by dividing it by the maximum necessary changes (thus, it becomes a fraction). Next, a correction is made for arbitrary coincidences between words of different languages, based on the combinations of words from the 40 words list with different meaning.[31] Holman (2011) provides software and a database to compute the distance measure between any pair of languages.[32]

In the previous section we described the construction of region of origin dummies based on the country of birth. The LISS survey provides more information about the language

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[29] Adsera and Pytlikova (2012) use an altenative measure of linguistic distance.

[30] The Swadish list, see Bakker et al. (2009).

[31] After this final correction, the resulting number is not necessarily a fraction any longer, but it is unlikely to exceed 1 by much. Holman (2011), expresses it as a 'percentage' by multiplying it by 100.

[32] To give an impression of the values (expressed in 'percentages'): for German, we have 50.2, for English 63.22, Sranan Tongo (spoken in Suriname) 74.2, Papiamento (spoken at the Antilles) 90.51, Spanish 91.1, Russian 92.2, Standard Arabic 100, Mandarin 100.3, Turkish 102.33. Thus, we see that for languages far away from Dutch, the distance measures are relatively close together (with Spanish remarkably close to Russian), whereas for languages closer to Dutch, like German and English, the differences in the distance measure are relatively far apart. Thus, the distribution of distance measures will be skewed, as also noted by Isphording and Otten, (2011). Thus, it may be good to consider non-linearities once we include the distance measure in a regression for language proficiency.

of origin than can be derived from the country of birth. The following question is included in the survey: "Which language or languages did you grow up speaking?" For various reasons, the answer to this question gives us important information. First, we are able to determine the language of origin, even for countries with no one-to-one correspondence between language and origin. Second, for migrants born in one of the Dutch colonies, we can determine whether they grew up speaking Dutch, an other language, or a combination of Dutch and an other language. For instance, we found that people from Suriname either grew up speaking Sranan Tongo, Hindustani, or Dutch. Third, for migrants who moved to the Netherlands at school age or younger, we can determine whether the migrant grew up speaking Dutch or the language of origin, or possibly both. If migrants attended primary or secondary school in the Netherlands, they have been educated in Dutch. This way, we can better identify the impact of age at migration from the impact of growing up speaking (or being educated in) Dutch.

The question, though, is how to assign the value of the linguistic distance if someone grew up speaking more than one language? If someone reports more than one language, we decided to base the linguistic distance on the value of the country of origin.[33] Next to that, we introduce a dummy variable taking the value one if the one language or one of the languages that one grew up speaking is Dutch.[34]

Adding the information about linguistic distance to the country of birth specific dummies introduced in the previous section enables us to better separate out the effects of language from other country specific characteristics.

4   Determinants of fluency and literacy

In this section we analyze the various determinants of language fluency. Results for literacy are not fundamentally different and are presented in the appendix. For the analysis we use the sample of migrants introduced in Table 2, and results are based on the subsample of

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[33] If someone exclusively grew up speaking Dutch, the value of the linguistic distance is zero.

[34] Inspection of the data indeed showed that people reporting to have grown up speaking Dutch tend to have a childhood migration age or came from a former colony like Indonesia and Suriname. The average age at migration of migrants reporting to have grown up speaking Dutch exclusively was even lower than those reporting more than one language.

migrants older than 22 and younger than 65.[35] Table 3 shows Probit regressions results for fluency (dependent variable is 'speak', see Table 1). Recall that our data is an unbalanced panel with four waves for the years 2008-2011. All presented standard errors have been corrected for possible correlation in unobserved errors across time for the same indvidual (clustering).

An overview of potentially relevant determinants of fluency is given in Chiswick (2007). Table 3 contains different regressions for fluency: we gradually add more regressors to gain insight in the differential impact of various determinants of fluency. The first regression in Table 3 shows the impact of different origin groups, with Asia as a reference group. The coefficients show a ranking that is largely in accordance with the expectations: immigrants from (former) Dutch colonies (Suriname, Indonesia, and Dutch Antilles) have a better fluency, and also immigrants from German/Scandinavian origin, with languages related to Dutch, do relatively well. Immigrants with English and Latin languages follow. For immigrants from the Middle East, Morocco, Eastern Europe, and with English as a second language, there is no evidence that their fluency is better than the reference category Asia. The bottom of Table 3 shows the log-likelihood value and the Pseudo R-squared. The latter indicates that the origin indicator explains about 10% of the fluency indicator.

Next we add to the origin fixed effects the linguistic distance[36] and the dummy variable for those who grew up speaking Dutch (either exclusively or in combination with an other language, see the description in section 3). Linguistic distance is significant and has the expected negative sign: the bigger the linguistic distance, the lower the probability that one reports no problems in speaking Dutch. The dummy for growing up speaking Dutch has the expected positive sign. The pseudo R-squared rises from 0.10 to 0.23, indicating the explanatory power of the two variables.[37] Because the linguistic distance measure is highly skewed, we next add its square. There is some evidence of non-linearities, but they do not add much to the explanation of language proficiency. From now on, throughout the entire

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[35] As a sensitivity analysis, Table C in the appendix presents regressions for the subsample of migrants attached to the labour force (see the discussion around Table 2 for the definition). Results for this alternative sample selection are not fundamentally different.

[36] Numerically we expressed the linguistic distance as a 'fraction' (see discussion section 3).

[37] If only linguistic distance is added, the R-squared goes up from 0.10 to 0.17. The additional rise from 0.17 to 0.23 is due to adding the dummy for growing up speaking Dutch.

paper, we will keep linguistic distance, its square, and the dummy for growing up speaking Dutch in our specification, even if separate coefficients with the squared measure do not show up significantly. Note that the origin specific fixed effects also remain significant. Migrants from Germany and Suriname still do relatively well, after accounting for the fact that the linguistic difference to Dutch is relatively small. Notably the Turkish do much better (than Asians), once we take into account that the linguistic distance to Dutch is relatively big.

Adding education (with higher and university education as reference category) shows that migrants with the lowest education level tend to have more problems in speaking Dutch. This is in accordance with the hypothesis that personal ability plays a role in acquiring language skills. The fourth regression adds the age of migration and its square. Age of migration is computed by subtracting the number of years that the migrant has been in the Netherlands from the age of the migrant. Chiswick and Miller (2001) also include this variable in their analysis, and predict that age of migration has a negative effect on language proficiency. The underlying explanation is that someone who migrates at later age will have more problems in learning the language, because it is easier to learn at younger age. Note that once we add the age of the migrant to the regression, we will not be able to separately identify the effects of age, age at migration, and the number of years since migration. To comply with the literature, we chose to include and present 'age at migration', rather than the 'number of years since migration', as an explanatory variable. The coefficients indeed show that the higher the age at migration, the lower is fluency. The Pseudo R-squared and the log-likelihood value both show that the age at migration has a relatively big impact on the explanation of our fluency indicator: adding the age of migration and its square increases the Pseudo R-squared from 0.24 to 0.33.[38] It is interesting to see that age at migration stil has a relatively big impact on language proficiency, given the fact that we have already included

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[38] In order to address the question whether age at migration merely approximates the difference between migrants who entered the Netherlands during youth, and therefore were educated in the Dutch schooling system, and migrants who entered during adulthood we did an analysis with a selected subsample of migrants who entered at a later than 12 (and therefore did not attend primary school in the Netherlands) and another analysis with a subsample of migrants who entered at age older than 18 (and thus did not attend secondary school in the Netherlands). We found a similar pattern as for the entire sample (a significant negative effect of age at migration and a small positive squared effect). The impact of age at migration on the pseudo R-squared is still substantial, but smaller, also because the impact of area of origin has a relatively bigger impact for those who entered at adulthood.

a dummy for migrants who grew up speaking Dutch. This indicates that age at migration explains more than only the effect of speaking Dutch well because one attended school in the Netherlands. In the next column, we add age and gender. Age had a positive effect on fluency, but its coefficient does not affect so much the impact of age at migration. This implicitly show that the number of years since migration is a more important determinant of speaking fluency than age.[39] Together with age we also added a dummy variable for the female gender. In the literature there is a discussion on whether or not to separate the analysis for men and women, since men and women may have different incentives for learning a language, especially if women are less attached to the labour market. The dummy indicator for female gender is not significant.[40] Table 3 continues with a regression where we included variables for household composition. Notably the impact of children got attention in the literature: on the one hand, children may stimulate the fluency of parents, as they learn the language quickly at school, while on the other hand, the children may serve as translators for their parents, such that the parents themselves exercise the language less actively. Moreover, there may be a differential impact by gender. We included the number of children, as well as indicators for household type (couples without children, couples with children, lone parents, other households, and singles as reference category). The fluency of lone parents seems to be significantly lower than for other household types. The dummies for other household types are not significant. A likelihood ratio test confirms joint significance of the variables added, but the Pseudo R-squared does not show a large explanatory impact of these five variables on our language fluency indicator. Not reported is a regression which includes cross effects of the family indicators with gender. The value of the likelihood ratio test statistic for testing the joint significance of the cross effects with gender is 5.8, indicating that we cannot reject that there are no gender specific household composition effects.

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[39] We also included age squared in a regression, but its effects was not significant. In addition, we checked whether the significant age effect was merely the result of heterogeneity between older people from the former Dutch colonies Suriname and Indonesia, who still learned Dutch more actively, and younger people, by including a cross effect of age and the dummy indicators for Indonesian and Surinam origin. For Suriname, the cross effect with age was not significant, and for Indonesia it was, but it did not remove the significance of the coefficient of age itself.

[40] Not reported here are regressions where we included cross effects for female gender and other variables. We included cross effects of female with the indicators Turkish and Moroccan origin, as these countries are dominantly Islamic, and the position of women may be different in these countries. We did not find any significant effects. Later we report on cross effects of gender with indicators for household composition.

From now on, we will consider the regression including the area of origin, linguistic distance and its square, the dummy for growing up speaking Dutch, the education level, age at migration (and its square), age, gender, and the household composition variables as our base specification. We will check the sensitivity of the outcomes for the addition of some variables that are present in our data, but that may have some problems when it comes to causality. First, we add information about nationality. We add dummy variables for migrants who only have the Dutch nationality, and migrants who do not have the Dutch nationality. Migrants with both the Dutch and an other nationality serve as a reference category. Nowadays, migrants have to pass a language test before they are ready to receive the Dutch nationality. Therefore, the causal relation between speaking fluency and having the Dutch nationality may run both ways. Nevertheless it is interesting to see whether any relationship between the two can be detected. We see that migrants with only the Dutch nationality have a better fluency and migrants with only an other nationality have a worse fluency, than migrants with both the Dutch and another nationality. A variable that does not suffer from this institutional causality problem is the population group that the migrant thinks s/he belongs to. But also for this variable, someone who speaks better Dutch, may be more inclined to report that s/he belongs to the Dutch population group. Migrants who report that they only belong to the Dutch population group have a better fluency. Next we add an indicator for speaking Dutch at home. In the previous section we showed that a large group of people with speaking problems actually does speak Dutch at home. It is likely that speaking Dutch at home happens more often among couples of mixed origin. Chiswick (2007) notices that exposure to a language, for instance by speaking the language at home, helps in improving upon the fluency. A formal 'test' of this hypothesis may require a more dynamic set-up, where speaking at home in the past affects fluency today. In the present regression we only test for a contemporaneous correlation, which also may have causality running the other way: people who speak Dutch well, tend to speak Dutch at home. Nevertheless it is interesting to see the size of the correlation and to see whether it takes away explanatory power of the coefficients that have already been included. The results show that the latter is not the case. The same coefficients remain significant with the same sign. There is only a small change in the value of the coefficients. Speaking Dutch at home does have a significant

relation with speaking fluency, as may be expected.[41]

Finally, we included dummies for the degree of urbanization. A priori, the effect of urbanization is not signed: in an urban area migrants may easier meet Dutch speaking people which increases exposure to Dutch, while on the other hand in urban areas there may be a larger concentration of migrants from the same area of origin, which may decrease contacts with the native Dutch. The reference category in the regression is 'not urban'. None of the urban dummies is significant, although it is interesting to note that we spot kind of a U-shaped pattern: migrants in moderately urban areas do worst in terms of speaking fluency, but they do better the more or less urban is their area. Since none of the coefficients is significant, we should be very careful in drawing any conclusions from this result.

Table C in the appendix shows the same regressions for literacy (reading). The general conclusions about the impacts of the explanatory variables are in general similar to the results for fluency. There are some differences. People from the Dutch Antilles seem to do better when it comes to reading Dutch (compared to speaking Dutch). To a lesser extent, this also holds for migrants from Eastern Europe. The education level seems to have a more pronounced impact on literacy compared to fluency, as can seen by the regression coefficients, and by the increased in the Pseudo R-squared when we add the education dummies. Singles seem to do better when it comes to reading than other household types.

As a sensitivity analysis, we did a regression on a differently selected sample. Table D in the appendix shows results for the base regression for the sample of migrants attached to the labour market (see also Table 2). The results are not much different from the results obtained with the sample that is selected on basis of age.

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[41] If speaking at home is an important determinant of exposure, it may be interesting to see which other variables correlate with the decision to speak at home. Therefore, we ran a probit regression with 'speaking Dutch at home' as the dependent variable. Results are in Table B in the appendix. We see that the natural ordering of areas of origin found in the fluency regressions, is not present in the regression for 'speaking Dutch at home'. The results for linguistic distance are counterintuitive with a dominating positive effect. Further we see that age at migration has a negative impact. Also the lower educated speak Dutch at home less often. Women speak Dutch at home more often. We also included cross effects of the gender dummy with family composition. These cross effects show that men in couples with children more often speak Dutch at home, but there is also an off-setting effect of the number of children: men speak less often Dutch at home the larger is their number of children. Summarizing, it seems that speaking Dutch at home is more influenced by age at migration and education, than by measures of linguistic origin.

4.1 Instrumental variables

To estimate the effect of language proficiency on labour market outcomes, irrespective of whether these are earnings or any other outcome, we need suitable instruments for language proficiency. Dustmann and Van Soest (2001) used parental education. Chiswick and Miller (1995), in estimating the earnings equation, use theoretical exclusion restrictions on variables related to family composition. In their framework, the latter variables enter the equation for fluency but not the earnings equation. Suitable instrumental variables first should add to the explanation of language proficiency and be significant in the first stage regressions. Next it should be reasonable to argue that the variable only indirectly influence labour market outcomes via language proficiency. Both properties of instruments can also be tested statistically, although to test the second property, the exclusion restriction, more than one instrument is required. For the instruments in the literature it can be argued intuitively that parental education may also have a direct effect on earnings, since parental education may be correlated with the human capital of the children. Family characteristics may also have a direct effect on earnings, especially if the estimated earnings equations are not corrected for selectivity in employed. In our analysis, we study other labour market outcomes than earnings, so using family characteristics as exclusion restrictions may be more difficult to defend.

We aim to add to the literature by considering alternative variables as instruments. In this section we mainly discuss their explanatory impact on language proficiency in the first stage regression. In the next section, when it comes to studying labour market outcomes, we discuss the outcomes of statistical tests to shed light on the validity of the exclusion assumptions of our instruments. It should be noted that in our application the identification of the impact of language proficiency on labour market outcomes does not solely rest on the choice of instruments, since we use panel data by which identification of unobserved correlation between language proficiency and labour market outcomes merely comes from observing the same individuals across time.

An important instrument in our analysis is linguistic distance measure, combined with the survey information about the language that one grew up speaking. It seems reasonable

to assume that the linguistic distance measure only affects labour market outcomes through the channel of language proficiency. It is important that we add other controls in the labour market outcomes equations that somehow correlate with linguistic distance, but capture other mechanisms than language skills that may have a direct effect on labour outcomes. Thus, we will include the area of origin fixed effects and the age at migration in the labour market outcomes equations, while linguistic distance and indicators for the language one grew up with are excluded.

The LISS survey collects information on a broad range of subjects and we use variables from different sections of the survey to find instruments for language proficiency. In particular, we use variables from the sections on "personality" and on "politics and values". The "personality survey" presents the respondent statements about personality traits and asks "How accurately each statement describes you?". Five response categories in increasing order are added. We selected the response to two statements that show a significant impact on Dutch language proficiency in the first stage regression.[42]

The first is "I have a rich vocabulary". Note that this statement is not (meant to be) specific for the Dutch language, and moreover, it is not a question about language skills, but rather a question about personality. We found a positive correlation with our indicators for language proficiency. The second personality statement that showed explanatory power for our language proficiency indicator was "I am quick to understand things". A priori it is intuitively clear that this information may be correlated with language proficiency, which we will test below. To be acceptable as exclusion restriction, we need to argue that having a rich vocabulary has no direct effect on labour market outcomes, other than the impact running through the Dutch fluency or literacy. For being quick to understand things we have to make the same assumption which may be harder to defend a priori, but 'language proficiency' and 'being quick to understand' require the same cognitive skills so there are also arguments in favour of exclusion. The outcomes of a formal statistical test will be discussed in the next subsection.

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[42] There were some statements that correlated with our language proficiency indicators if they were the only regressors, but they appeared not significant in combination with the other regressors. (These statements were "I am the life of the party", "I feel little concern for others", and "I don't talk a lot"). There were also statements that did not show any correlation at all ("I have difficulty understanding abstract ideas").

Table 4 contains the sample frequencies for the sample of migrants in the age range 22 through 65 with observed response for the language proficiency indicators.[43] We see that very few respondents say that the statement that they 'have a rich vocabulary' is very inaccurate so in our regression we merge the two lower categories to the reference category. Relatively few observations tell that it is (very or moderately) inaccurate that they are 'quick to understand things', and here we merged the lower three categories to the reference category in our regressions.

The first column of Table 5 shows the regression results and shows the significance of the instruments from the personality section. We also see a higher Pseudo R-squared than in Table 3, showing that the variables also explain part of the variance in the indicator 'speak'. For the remaining variables we still see the same qualitative pattern in the country-of-origin indicators and the importance of age at migration. The coefficients of the education categories are estimated less precisely, which could indicate some degree of multicollinearity with the personality indicators. Thus, the instruments do add to the explanation of language proficiency and consequently satisfy the first condition for instruments. Test results on whether they are also suitable as exclusion restrictions will be presented in the next section.

There are some additional concerns with the instruments that need to be discussed. If the respondents are confronted with 'vocabulary' in the personality section, it is meant to be their general vocabulary, rather than their knowledge of Dutch. But could it be that some of the migrants have interpreted it as their Dutch vocabulary? A similar concern holds about the statement about quickly understanding things. It is not a language question, but could the respondents interpret it as understanding things in Dutch? If this were true, the indicators were more like alternative indicators of Dutch language proficiency rather than personality measures. Somehow, though, it is simple to check whether this is prevailing. A distinct property of our indicator of Dutch language proficiency is that is shows a clear pattern for the country of origin, the linguistic distance measure, and to age at migration. Personality

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[43] In LISS, questionnaires on different sections are sent to the respondents in different months. In this case, the personality questionnaire is sent in a different month than the section that collects information about language proficiency and ethnical background. For that reason, matching different sections of the survey leads to a loss in the number of observations. We found no noticeable differences in the frequency of our outcome variable 'speak' between respondents that did and did not answer the questions in the personaility section.

indicators should not expose these patterns. As a check, we ran ordered probit regressions for the response to the personality questions, including the same remaining regressors as in the language proficiency regression. For "quickly understanding things" we found no effect of age at migration, no pattern of country of origin indicators that was compatible with the interpretation of language distance, and no impact of linguistic distance. That was not true for the vocabulary question: we found a negative impact of age at migration and a pattern of countries of origin that, qualitatively, was consistent with an ordering according to distance of language, although the quantitative impact of this pattern was far less pronounced than we found in the regressions for language proficiency, and moreover, the linguistic distance measure showed up significantly.[44] This may indicate that at least some share of the respondents refer to Dutch vocabulary when answering the personality question about richness of vocabulary. This casts doubt on the suitability of this information for instrumenting Dutch language proficiency. On the other hand, one could argue that it hardly affects the coefficients of age at migration, country of origin, and grew up speaking Dutch (comparing results in Table 5 to Table 3) and still can be used as an instrument. Nevertheless, we found that we should look for alternative candidates and we found one in the "Politics and Values" section of the LISS survey.[45] One of the statements that is posed to the respondents is "It is difficult for a foreigner to be accepted in the Netherlands while retaining his/her own culture". Response could take place in five categories, ranging from "fully disagree" to "fully agree".[46] The response to the question may indicate the willingness or ability to integrate in the Dutch society.[47] In the regression in Table 5 we merged the opinions "fully disagree" and "disagree" to one category "disagree". Dummies for the other categories were not different from the base so we omit them all to reduce the weak instruments problem.[48] We see that respondents who disagree tend to have a higher score on language

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[44] For both personality questions we found an increasing pattern in education, explaining the loss of precision of the education dummies in Table 5.

[45] In this section, respondents are asked for opinions about politics and political views.

[46] We added the category "missing" as we found that response to the politics and values section of the survey was lower for respondents with lower proficiency.

[47] We found that migrants from Turkish or Maroccan origin (mostly Islamic), as well as Africans, indicated more often that it was difficult to be accepted in the Netherlands, whereas the opposite holds for migrants from western countries.

[48] So it is "disagree" versus the rest.

proficiency. We again see that the Pseudo R2 also is higher than in regression without these instruments. Table 5 shows the regression results for the two sets of instruments and it satisfies the first condition for instruments. Intuitively, the exclusion condition is also not unreasonable for this instrument. The variable is about feelings about culture and it seems reasonable that it is related to language, whereas the assumption that there is no direct effect on retaining the own culture on labour market outcomes does not seem unreasonable. Since a priori counterarguments against the use of any instrument as an exclusion restriction always can be formulated, we will do a formal statistical test of exclusion restrictions in the next section.

The two distinct instrumental variables both have their strengths and weaknesses. The first, with the vocabulary question, is attractive because the response to the vocabulary question shows more variation in relation to language proficiency, but has the drawback that for part of the respondents it has been interpreted as a question about the Dutch language. The question about the difficulty to be accepted in the Netherlands does not have this problem, but its outcome shows less variation: it is notably disagree versus the rest. In our application, we will apply both instrument sets and see how sensitive results are.

As a final instrument we add the information whether someone speaks Dutch at home (see results Table 3). It is likely that migrants speak Dutch at home more often if they reside in an area with few compatriots, or if they live in a household with mixed nationality or a Dutch partner. The analysis in Table 3 shows that the variable correlates with the language proficiency indicator, but since it happens at home it does not necessarily have a direct effect on labour market outcomes.

5   Language proficiency and jobs

In the literature, the emphasis has been on the correlation between language profiency and earnings, motivated by the human capital theory.[49] The language proficiency of migrants, however, may be correlated with other aspects of jobs. In particular, a poor proficiency of the Dutch language may lead to migrants performing jobs with a level that is below the

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[49] Dustmann and Fabbri (2003) also analyze employment outcomes.

education level that they acquired. We use different dataseries as indicators for the level of the job. First, we use subjective information about satisfaction with several aspects of the job. As far as migrants have not incorporated the prospect of working at a lower level in their expectations upon migration, this may lead to dissatisfaction with their jobs or careers. The LISS contains several questions that collect information about the satisfaction of workers with various aspects of their job, and it collects information about how well the level of the job suits the education and ability level of migrants. Second, we use more direct, objective, information about the professional level. In particularly interesting is to find out whether migrants with poor language proficiency are more likely to be employed in manual and unskilled professions.

5.1 Language proficiency, educational match, and job satisfaction

As far as job satisfaction is concerned, information about the following aspects is collected and used in our analysis:

"How satisfied are you with:

- *a) your wages or salary"*
- *b) the type of work that you do"*
- *c) your working hours"*
- *d) your career so far"*

Respondents could answer by indicating a number in the range of zero to ten, ranging from "not at all satisfied" to "fully satisfied". There are additional questions to measure the match between education, ability, and the job:

"Please indicate on a scale from 0 to 10 how your highest level of education suits the work that you now perform",

with zero indicating "does not at all suit my work" and ten indicating "suits my work perfectly". A similar question is asked for knowledge and skills:

"Please indicate on a scale from 0 to 10 how your knowledge and skills suit the work you do."

A final question that we use in our analysis is

"Can you indicate on a scale from 0 to 10 whether your knowledge and skills create any problems in fulfilling your position"

with zero indicating "very serious problems" and ten indicating "no problems at all". All these questions are asked to people with a paid job at the moment of the interview. Table E in the appendix shows sample frequencies of the outcomes, also by gender.

The structure of the data collected this way suggests the use of an ordered regression framework like the ordered probit model. But there are two important issues we need to address. First, language proficiency is possibly endogenous: if a better performance of the Dutch language leads to more satisfactory jobs, or jobs that better suit the educational background of migrants, they may invest in language skills to increase job satisfaction. Second, we wish to fully exploit the panel nature of our data and control for unobserved individual effects. These issues are combined in the following model specification. Define l_{it}^* as a latent variable indicating language proficiency, whereas l_{it} is a binary indicator for it (like the indicators 'speak' and 'read' in our data). Then we may define the equation

$$l_{it}^* = z_{it}'\beta + m_i + \epsilon_{it} \text{ with } l_{it} = \iota(l_{it}* > 0) \tag{1}$$

with z_{it} a vector of observable characteristics, uncorrelated with m_i and ϵ_{it}, which are individual specific and idiosyncratic (zero mean) random variables,[50] with $Em_i^2 = \sigma_m^2$ and $E\epsilon_{it}^2 = 1$. Let r_{it} denote one of the job suitability or job satisfaction indicators, and let r_{it}^* be an underlying latent variable.

$$r_{it}^* = \alpha l_{it}^* + g_{it}'\gamma + \theta_i + v_{it} \tag{2}$$

with

$$r_{it} = j \text{ if } c_j < r_{it}^* \leq c_{j+1}, j = 0, ..., 10 \tag{3}$$

with $c_0 = -\infty$ and $c_{11} = +\infty$. In (2) g_{it} is a vector of observable characteristics, uncorrelated with θ_i and v_{it}, which are again (zero mean) random variables, with $E\theta_i^2 = \sigma_\theta^2$ and $Ev_{it}^2 = \sigma_v^2$.

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[50] Due to the limited year to year variation in the language proficiency indicators l_{it} it makes no sense to think about fixed effects estimation.

Then we want to allow for $Em_i\theta_i = \sigma_{m\theta} \neq 0$ and $E\epsilon_{it}v_{it} = \sigma_{\epsilon v} \neq 0$.[51] In section 4 we discussed the choice of instrumental variables, and in the context of our two equations model (1) and (2), these are variables that enter z_{it} but not g_{it}.

To check the impact of allowing for the endogeneity of language proficiency and the individual specific random effects, we estimated three model variants, ranging from a simple, naive, single equation ordered probit model to the complete two equations random effects model specified in (1) and (2).

The first specification is a simple ordered probit model, with l_{it} at the right hand side (instead of l_{it}^*), ignoring possible endogeneity of language proficiency.[52] We did a pooled analysis for men and women together, adding a gender dummy, and we also did separate regressions for men and women. The analysis was done both including and excluding the age at arrival. Before, in Tables 3 and C it was shown that the age at migration is an important determinant of fluency and literacy. As we will see in the regressions below there is some interaction going on between language proficiency and age at migration in the regressions for satisfaction and fit of education. The regressions are for people with a paid job, and we also added the requirement that the age of the respondent is above 22 and below 65.

For reasons of conciseness, we present in Table 6 the coefficients of interest for the various regressions.[53] A **/* indicates significance at the 5/10% level. The left panel of the table shows the coefficients of speaking and reading proficiency if the age at migration is not included among the regressors. The right panel shows the coefficients for fluency and literacy, and also the coefficient of the age at migration. Comparison of the left and right panel shows that it matters a lot for the outcomes whether or not the age at migration is included. Satisfaction with wage and work type show some positive correlation with fluency, at least for the pooled sample of men an women, but the effect disappears once age at migration is included among the regressors. They show that satisfaction with wage and work type is lower, the higher is the age at migration. Satisfaction with working hours does not show

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[51] Note that (2) includes the latent language proficiency l_{it}^*, rather than the binary indicator l_{it}, a procedure also followed by Dustmann and Van Soest (2001).

[52] Among the explanatory variables, we omitted the category 'other household type', thereby merging it with the reference category 'single'.

[53] Tables F and G in the appendix present the full regression results for the variant in which men and women are pooled, including the age at migration.

any relationship with language proficiency, not even if age at migration is excluded. But also for satisfaction with working hours we see a negative impact of age at migration, for both genders. For satisfaction with the career results get less precise once age at migration is included. Separate regressions for men and women show that the effect is more precise for men than for women. For the question whether the education suits the present work we see an effect of speaking fluency that remains significant for men, even after including age at migration among the regressors. For reading proficiency, however, no effect is found. Recall that more migrants report that they have problems with speaking than with reading the Dutch language, so the speaking indicator is probably a more accurate indicator of language proficiency. The question whether knowledge and skills (labelled 'ability' in Table 6) suit the job only shows a significant relationship with language proficiency for men. For women there seems to be no relationship at all, whereas for men the age at migration is the dominant factor. Language proficiency does play a role when it comes to problems in the performance of the job. Migrants with a better language proficiency have less problems in performing their job. For women the impact of fluency is more obvious than for men, but for both men and women literacy plays a role. It is not influenced by age at migration.

There can be several alternative interpretations for the effect of age at migration (or, as discussed before, the years since migration) on job satisfaction, and we discuss five of them. First, it may capture an assimilation effect: the older someone is at the point of migration (or the more years a migrant stays in the Netherlands), the harder (easier) it is for the migrant to assimilate to the country of destination, and in particular to assimilate to the labour market in the country. Thus, language proficiency is nothing but one component of a wider assimilation process, and therefore age at migration is the more important determinant of job satisfaction. Second, age at migration (or number of years since migration) is a proxy for unobserved heterogeneity. The group of migrants staying in the Netherlands for a short time may contain more dissatisfied migrants who in the end will return to their country of origin due to their dissatisfaction with the situation. Since the model variant with unobserved random effects controls for unoberved heterogeneity, the effect of age at migration may disappear or become smaller in the random effects model. Third, the feeling of satisfaction may change with age at migration (or number of years since migration). Migrants with a

higher age at migration may be more dissatisfied with their job in the country of destination because they had already built up a labour history in the country or origin, which looses part of its value upon migration. Alternatively, migrants may have had too high expectations, and that is why they are first dissatisfied, but they adjust their valuation once they learn more about their opportunities in the destination country and get less dissatisfied. We tried two things to check this explanation. The degree of satisfaction is indicated on a scale from zero to 10. If they are "not at all satisfied" (category zero) upon migration, but gradually learn that their prospects are not that bright, they may move up to category 4, maybe even to 5, but we do not expect them to become "very satisfied" or "fully satisfied". We comprised the scale of satisfaction to a binary indicator, taking value zero, if the original 10 point scale category was somewhere in the range of zero through 6, and taking the value 1 for values of 7 and higher. If the explanation holds, we would not expect to find an effect of age at migration anymore. We ran a Probit regression for this binary indicator, but we still found the negative effect of age at migration. An alternative check is to make the intercepts c_j of the ordered probit equation in (2) a function the variable "age at migration" or "years since migration".[54] The coefficients of "age at migration" were not effected. Adding together, there is no evidence for this explanation. Four, it is simply collinearity. Age at migration is a strong predictor of our binary language proficiency indicator. Age at migration may be better able to capture the underlying variation in the latent language proficiency than the binary indicator. According to this interpretation, there is no strong direct effect of age at migration on the job satisfaction variables. Five, the variable age at migration captures the impact of the schooling system, rather than a 'true' age at migration effect: migrants who entered the Netherlands before adulthood received education in the Dutch schooling system and may be able to form better job matches in the Dutch labour market. If this is the reason, we would expect a dichotomy between migrants who entered as a child and migrants who entered at later age, and the relevant variable to include would be a dummy variable indicating entry at childhood. We experimented with the categories entry at age 12 or younger (in which case the migrant got secondary education in the Netherlands) and age

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[54] We parametrized $\tilde{c}_{itj} = c_j exp(\kappa \ln q_{it})$, it indicating observations per time period, and κ a parameter. Although κ was significant in some equations, the coefficients of "age at migration" and language proficiency in the job satisfaction equations were hardly effected. Detailed results are available upon request.

18 and younger. If we include the dummy for entry at age 12 or younger, but exclude age at migration s a continuous variable, the coefficients of the variables 'speak' and 'read' become much more similar to the results in the right panel of Table 6, suggesting that indeed the distinction between entry at young age or older age matters. However, the coefficients of the dummy for entry at age 12 or younger is never significant, as opposed to the continuous age at migration variable in Table 6. The dummy for entry at age 18 or younger is more often significant in the regressions but not to the same extent as the age at migration itself. If we include both age at migration and the dummy variables for entry at young age it turns out that the dummy variables for age at migration are not significant.[55] The results suggests that entry at young age plays a role in explaining the outcomes, but the impact of age at migration captures more than only entry during youth.

Summarizing, in many cases we see that satisfaction with job aspects is more related to age at migration, which may be a more general indicator of assimilation of migrants, and fluency and literacy as such do not always show a separate impact, once age at migration is corrected for. There is, though, some evidence of the positive relation between fluency and the fit of education to work, on satisfaction with the career, and on performance of the job.

Next, we estimated the two-equations system (1) and (2), both with and without random effects.[56] In the model without random effects, the identification of the correlation coefficient of the error terms depends completely on the instrumental variables. In the random effects model, the identification of the correlation coefficient of the random effects comes from the panel structure of the data.[57] Using different methods of estimation that rely on slightly different assumptions gives an indication of the robustness of the results with regard to those

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[55] Also the square of age at migration did not appear significant, which was another indication of the absence of (strong) non-linear effects in age of migration.

[56] We estimated for each dependent variable of interest the two-equations system simultaneously by maximum likelihood. Alternatively, we could have followed a two-step approach, in which we first estimate the parameters of the language proficiency equation, and in the next step the parameters of the ordered equation (2). Estimating the equation simultaneously implies that we get slightly different parameters for the language equation each time, but the simultaneous estimation gives the best fit for the joint distribution of the two outcome variables. Moreover, a two-step approach requires correction of the standard errors in the second step for the first stage estimates.

[57] In the model without random effects, we estimated in the gender specific variants also a gender specific language proficiency equation. Because of the number of observations, we estimated for the random effects specification the language equations on both genders, including a dummy variable for gender. The analysis in Table 3 showed that gender specific differences in the coefficients of the language equations are not precise.

assumptions.

Table 7a shows the parameters of interest for the analysis with fluency (variable 'speak').[58] As instruments we used the linguistic distance (and its square), whether Dutch was among the languages the migrant grew up with, the personality questions about quick response and vocabulary, and speaking Dutch at home. The table shows the parameter of fluency on the job satisfaction and job suitability outcomes (parameter α according to the notation in (2)), and the parameters of the covariance and correlation structure of the idiosyncratic errors and the random effects. By the latter, we can see whether correlation in unobservables between language proficiency and job outcomes is detected.[59]

Fluency does not show a direct significant effect on satisfaction with wage. It interesting to see that both the results with and without random effects show a positive significant correlation in unobservables between fluency and satisfaction with wage for women. For satisfaction with work type, results are different from the naive ordered probit model in Table 6. Both the variant with and without random effects show that, notably for men, a better fluency leads to a higher satisfaction with the work type. The results are somewhat more pronounced for the random effects model. At the same time, we see a negative correlation in unobservables in fluency and satisfaction with the job type. For men, we find a positive and significant effect of fluency on satisfaction with working hours. For satisfaction with career, we find positive coefficient estimates which are significant for men, giving further support to the weak effects we found for naive ordered probit model in Table 6. For the fit of education to work we find a significant effect for men only, which provides additional evidence for the results in Table 6. For the fit of ability to work the precision of the coefficient estimate is not robust to the estimation method. Only for the random effects specification a significant

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[58] The analysis in Table 6 showed that the results for literacy were less pronounced, and that fluency is probably a better indicator of someone's actual language skills. Therefore, we omit results for literacy, for reasons of conciseness.

[59] A complete list of estimation results can be found in Tables G1 through L2 in the appendix. We include the age of migration in each of the ordered equations. We also estimated model variants without age at migration, and, like in the case of the naive ordered probit model, it was found that the impact of fluency shows up signicantly more often when we exclude age at migration. Since the regression analysis is restricted to the working population, the number of observations is smaller and hence some cateogories of the right hand side variables have been merged: we do not distinguish between western and non-western latin origin, and the origin areas of the middle east, and english as a second language have been merged to the reference category Asia; for household composition, we distinguish couples with the rest (singles, other household types) as reference category, and we include the number of children.

effect is found for men. The results for job performance are not entirely robust: we find a positive significant effect of fluency on job performance for women only for the specification without random effects.

We ran the same regressions with a different set of instrumental variables. That is, we removed the question about 'vocabulary' from the personality section of the survey and we replaced it by the statement about difficulty to be accepted from the 'politics and values' section of the survey (see section 3.1 for a more detailed discussion about these instruments). The coefficients of interest are shown in Table 7b.[60] For the model without random effects we loose precision in our coefficient estimates. The estimates for the panel data random effects model are most robust, although also some precision is lost. Since identification in the random effects models hinges less on the instrumental variables, a higher robustness of the random effects model with respect to a change in instruments is also what we may expect. Most stable are the results for satisfaction with work type for men. Results for satisfaction with career remain stable for the pooled sample. Precision is lost for the fit between education and work and abilities and work. A reason for the loss in precision could be that the variable from the 'politics and values' section shows much less variation across sample respondents (it is only one dummy variable) than the variable on vocabulary.

We did additional statistical tests to check whether the exclusion restrictions are valid. The test was performed by adding each instrument separately to the equation for each labour market outcome, while keeping all instrumental variables in the language proficiency equation. Thus, instrument by instrument and outcome variable by outcome variable, we tested whether it added significantly to the labour market outcome, imposing exclusion restrictions for all the remaining instruments. We found that the instruments were not significant, except for the following cases. Vocabulary had a positive and significant impact on satisfaction with work type. This may suggest that workers with a better vocabulary may have a more satisfactory job. However, in Table 7b we had already estimated the model without vocabulary as an instrument, and we found that the qualitative result of language proficiency on satisfaction with work type remained. The exclusion restrictions seem to

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[60] We have not included the full tables of estimation results for reasons for conciseness. Results are available on request.

be more violated when we look at the outcome of problems with knowledge and skills in job performance. Both vocabulary and quickness to understand things add positive to the probability of experiencing no such problems. Speaking Dutch at home adds negatively to this probability. It seems to be the case that vocabulary and quickness to understand things are just other skills that, beside language proficiency, add to the job performance of workers. It turns out that we cannot distinguish between language proficiency and these other skills when it comes to job performance. This may also explain why the impact of language proficiency on job performance is sensitive to the choice of instruments when we compare Tables 7a and 7b.

In conclusion we can say that the simultaneous models notably find effects for men, especially for satisfaction with work type, the fit between education and work, and the fit between ability and work. Results for satisfaction with career are less precise. For women, we notably find an effect of fluency on their job performance of women, but we noticed that for this outcome language proficiency is very hard to instrument.

5.2 Language proficiency and professional level

The analysis so far considered the direct effect of destination language proficiency on subjective outcomes of job satisfaction and indicators for job suitability. In this section we analyse the professional level as an outcome variable that is more like an objective characteristic of a job. Particularly interesting is the question whether migrants with poor language skills are working more often in manual jobs, even if they have an intermediate or higher education level. We will first introduce the available sample information about professional level. We will show the relationship between the professional level and the job satisfaction outcomes of the previous section, which helps us in interpreting the earlier results. Finally we estimate the impact of fluency on the prevalence of manual work among migrants.

Table M in the appendix shows the various professional levels that are distinguished in the LISS questionnaire. We show sample percentages, both for native Dutch and for migrants, in the age range 22 to 65, for which also the language proficiency indicator is observed. At the top of the labour market, we see a relatively (compared to the natives) high representation

of migrants in higher academic professions, which probably are the knowledge migrants.[61] It is likely that for this group, Dutch language skills are of minor importance for their job characteristics, especially if they work at universities or multinational companies. But the higher educated is a small and specific group, also among the natives. Among higher supervisory professions, the migrants show smaller sample frequencies than the Dutch, and actually for almost all intermediate level professions, ranging from intermediate academic down to skilled and supervisory manual work, we see lower sample frequencies of migrants, compared to the native Dutch. The reverse holds for the lower three categories in the table, consisting of semi-skilled and unskilled manual work and agrarian professions. Adding them together, we see a much larger representation of migrants among these professional levels. In general, there will be a strong correlation between education level and professional level, so it is imaginable that part of the higher prevalence of migrants among manual workers can be explained by differences in educational attainment. But language proficiency may also be a determinant.

As an intermediate step, we first check whether there is a relation between the subjective information about job satisfaction and job suitability and the professional levels. We included dummy variables for the professional levels in an ordered probit analysis of job satisfaction and job suitability, taking the semi-skilled, unskilled manual work, and agragrian professions as one reference category. Tables N through P in the appendix show the estimation results. For satisfaction with career and satisfaction with work time we see that, both for men and for women, most professional levels lead to a higher satisfaction than the manual reference category. We also find a better fit of education and the job, and of knowledge and skills and the job if the professional level is higher than manual. For men, we do not find much effect of professional level on satisfaction with wage, except that migrants with a higher acedemic profession are more satisfied with their wage than migrants with manual professions. For women we find a somewhat stronger relation between professional level and satisfaction with wage. For men, we find no relation between the professional level and satisfaction with work time, whereas women with an intermediate professional level seem to be more satisfied than

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[61] Note, though, that the Table shows unweighted sample frequencies, so we should be careful in using them for drawing conclusions for the population as a whole.

manual workers. For men we do not find that migrants with a higher professional level have more or less problems in performing their job than migrants with a manual profession, whereas women with a higher academic profession seem to experience more problems in performing their job than women in manual professions. Over all, the impression is that if there is any relation between job satisfaction and professional level, migrants in manual jobs are less satisfied.

The next step is to analyze whether there is a relationship between language proficiency and having a manual profession. Also in carrying out this analysis, it is important to correct for possible endogeneity and correlation in unobservables: migrants may invest in language skills to get themselves out of manual jobs, and the information about Dutch language proficiency may proxy for other skills of the migrant (for instance, the general ability of the migrant to learn languages) that influence the probability of ending up in a manual profession.

Table 8 shows the estimation results for the whole sample. The left two columns of the table show the results of a simple probit estimation with having a manual job as the dependent variable. The fluency indicator 'speak' has simply been included among the right hand side variables. The results in the two columns at the right are obtained by simultaneously estimating the equation for having a manual job, together with the equation for fluency, comparable to the two equations model in (1) and (2), with the difference that now we do not have an ordered response variable but a binary response variable for having manual work. In Table 8, the variant is labelled as 'bivariate probit', which does not fully cover the method employed, as fluency enter the model equation as a latent variable, like in (2). The model is estimated without random effects.[62] Standard errors are all corrected for clustering. The parameter ρ is the correlation coefficient between the errors of the two equations. We omit the results for the second equation, which is our instrumental equation.[63] For both estimation methods, we find that a higher level of fluency leads to a lower probability to end up in a manual job. We also see that the level of education is an important determinant

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[62] The wave to wave within individual variation in manual work is so small that it is not possible to identify random effects. The variance of the random effect in the manual work equation, which also measures the within individual correlation across time, grew very large during the maximization procedure.

[63] The same instruments for language profiency were used again: linguistic distance and its square, the dummy for growing up speaking Dutch, the personality information, and speaking Dutch at home.

of having a manual job: the lower the education level, the higher is the probability to be in a manual job. There is not much difference between the naive estimates and the simultaneous analysis. Tables 9 and 10 show results for men and women separately. For men (Table 9) we find a significant effect, both for the naive variant and for the simultaneous model. For women (Table 10) we do not find an effect for either variant. This is actually consistent with the earlier results with the subjective labour market outcomes, where found most effects for men.[64]

5.3   Language proficiency and earnings

In this section we analyse language proficiency and earnings. For this purpose we use information on monthly gross income and we select migrants in the age range (22, 65) who are employed. In LISS, this gross income information is updated monthly, and we use the gross income information from the same month in which the information on language proficiency was collected. This way, pooled over the four waves, we have $NT =474$ different income values for $N =216$ different individuals. The mean income is 2667 Euro (with sample standard deviation 1995). For men separately we have $NT =250$, $N =103$, and a mean income of 3079. For women we have $NT =224$, $N =113$, and a mean income 2206. The number of observations is fairly low,[65] and especially the variants with random effects should be interpreted with care. In Table 11 we present results for men and women together, while Tables 12 and 13 present results for men and women separately. The methodology is again a two equation system, and the equation for the language proficiency indicator is of the form (1) again. But rather than having an ordered probit equation, as in (2), the second equation now is a linear equation with the log of monthly income as dependent variable. The error terms of the two equations are allowed to be correlated unrestrictedly. We estimated a variant without random effects, with standard errors corrected for clustering. Due to the

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[64] We also did the same analysis for literacy, using the indicator 'read'. For reasons of conciseness, we do not expose the full results, but the impact of literacy on manual work seemed to be somewhat stronger. Also in the simultaneous model for men, its impact is significant at the 5% level. In the separate analysis for women, though, we still do not find a significant effect.

[65] From 2009 on, the LISS includes imputed income values (see De Vos, 2009, for a description of the imputation procedure). If we use the imputed values, we cannot use the first sample wave of 2008. In the present analysis we only include the observed values.

low number of observations we omit results for the random effects specification.[66]

We omitted the results for the language proficiency equation, as various other versions of the language proficiency equations have already been presented. The same instrumental variables for fluency were used. Comparable to what we found for the subjective information in Table 6, fluency has a positive significant effect on earnings if we ignore the role of age at migration (first columns of the Tables). Once age at migration is corrected for in the earnings equation, we cannot detect a separate effects of fluency on earnings any longer. We again did a sensitivity analysis to see whether the 'age at migration' effect sheerly approximates the difference between entry at youth (at age younger than and including 12, or at age younger than and including 18), but for men the impact of language proficiency remains significant if we include a dummy variable for entry at youth, but exclude 'age at migration', so 'age at migration' explains more than only having received secundary schooling in the Netherlands.

6   Conclusions

Language proficiency of migrants may affect labour market outcomes of migrant workers. The analysis in the paper addresses whether a lower proficiency of the destination country's language leads to jobs that are less satisfactory in certain aspects or to jobs of a lower level, compared to the other background characteristics of the worker. We used a Dutch panel survey to analyze the issue for migrants in the Netherlands. The analysis of the determinants of language proficiency using the proficiency indicators available in the data shows intuitively appealing results. In particular, migrants with a language of origin that is more closely related to the Dutch language attain a higher proficiency level of the destination language. We use a measure for linguistic distance that comes from the linguistic literature, combined with survey information about the language(s) that migrants grew up speaking. The age at migration is an important determinant of language proficiency, and has a relatively large impact on the explanation of fluency and literacy.

As labour market outcomes we analyzed subjective information about satisfaction with

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[66] Random effect estimates were computed, but standard errors are probably not reliable, unless we further cut the number of observables in our model specification.

various job aspects and also subjective information about the match between education and job level. The impact of fluency on labour market outcome is found to be strongest for men. Higher fluency leads to more satisfaction with work type, and also to a better fit between education level and job, and knowledge/skills and job. Somewhat weaker is the relation between fluency and satisfaction with career. For women we do not find much evidence, except that they seem to experience less problems in performing their job if their level of proficiency is higher.

The difference in outcomes between men and women is also found when we analyze the professional level as a (more objective) labour outcome. Men with a lower fluency are more likely to end up in a manual job. For women, no statistically significant relation could be detected. An analysis of the relation between the (objective) professional levels and the subjective labour market outcomes on job satisfaction and job match showed that migrants in manual job are in general less satisfied with various aspects of work.

An analysis with earnings suffered from a low number of observations. Both for men and for women we did not find a significant impact of fluency on earnings, unless age at migration is omitted from the earnings equation. A sensitivity analysis showed that the impact of this age at migration variable is not simply a proxy for having been in the Netherlands at schooling age. Instead, it seems that the impact of fluency on earnings is just a component of a larger integration process of migrants. Consistent with the absence of finding an independent effect of fluency on earnings is the absence of such an effect on the satisfaction with wage outcome variable.

Throughout the analysis of the impact of language proficiency on the different labour market outcome variables, we took care to address the endogeneity problem, as the development of language proficiency itself may be driven by its potential impact on the outcomes. We exploited the panel nature of our data to identify individual specific time invariant correlation in unobservables. The identification of such correlation depends less on the specific choice of instruments. Maybe our most important instrument is a measure for linguistic distance coming from the linguistic literature, combined with survey information on the languages that someone grew up speaking. Other instruments came from survey questions about personality (the individual's self-reported vocabulary and quickness to understand things),

the individual's self-reported opinion about difficulty to be accepted in the Netherlands, and speaking Dutch at home. We did sensitivity analysis by estimating simultaneous equation models with different sets of instruments and both with and without random effects. We also did some tests for exclusion restrictions. The precision of estimates of the effects of proficiency on the subjective outcomes differs somewhat but overall results point in the same direction.

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A Descriptive statistics by ethnic group

Table A shows some descriptives by ethnic group. We focus on the table selected on the basis of age, shown in the second pane of Table A. The first two lines compare the native Dutch/Belgium with the entire group of migrants. Among the native Dutch/Belgium, the percentages of respondents that report no problems in speaking and reading Dutch are 92 and 90. For the migrants, these percentages are much lower, 57 and 63. Remarkable is that for the foreign born the percentage reporting no problems in reading is higher than that for speaking, possibly indicating that reading is more like a passive activity in which the reader can determine his or her own pace. There is considerable heterogeneity in the responses depending on the group of origin. The ranking is in line with the expectation: people from former Dutch colonies report relatively often to have no problems with speaking. For Suriname, Indonesia, and the Dutch Antilles the percentages are 85, 78, and 68. Among

people German origin, whose language belongs to the same family as Dutch, 78 percent reports not to experience any speaking problems. For respondents with English and Latin languages of origin the speaking performance is still a little above the average for migrants (59 per cent wihtout any speaking problems for both groups). People from Asia experience speaking problems most often: only 21 percent reports no problems. Below average is also the speaking performance of the Turkish, Moroccan, people from countries in which English is a 2nd language, Eastern Europe, and Africa, with respective percentages of 44, 42, 41, 44, and 50 for the absence of speaking problems. People from the Middle East report in only 31 percent of the cases to have no speaking problems. People from Indonesia, Germany, and other western countries report to <u>only</u> belong to the Dutch poplation more often than the average migrant. People from Turkey, Suriname, and Asia most often report to belong to an other population group than the Dutch. People from Morocco, and the Dutch Antilles relatively often report that they belong <u>both</u> to the Dutch population <u>and</u> to another population. People from (former) Dutch colonies relatively often <u>only</u> have the Dutch nationality. Relatively few of the people from Turkey, English and Latin speaking countries report to have only the Dutch nationality. People from Turkey, Morocco, and the Middle East relatively often report to have both the Dutch nationality and an other nationality. It is also interesting to look at the lowest and highest education level by origin. Do immigrants mainly have education levels, or are they highly educated knowledge workers? For some groups, we see an overrepresentation of low educated people, compared to the Dutch respondents. The percentage of low educated is especially high for the Turkish and Moroccan group. Whereas only 6 percent of the Dutch report to belong to the lowest education group, the percentages are 27 and 30 for the Turkish and Moroccan. At the same time, the percentages of highly educated are relatively low for these groups. Among the Dutch 34 percent is highly educated, whereas these percentages are 13 and 16 for immigrants from Turkey and Morocco. Some groups show a higher percentage of lower educated than the Dutch, but the percentages of highly educated is comparable to the Dutch. This holds for immigrants from Suriname, people with an Latin language, and English as a second language. People from German countries and Asia report both a lower percentage of low educated and a higher percentage of highly educated. Also people from English speaking countries, the Middle East and Eastern

Europe show a fairly large percentage of higher educated, but their share of lower educated is somewhat higher compared to the Dutch. If we interpret membership of a sportsclub or a cultural club as an indicator of social intergration, then we see that immigrants from western countries are relatively often a member of a sportsclub. Notably people from Turkey and the Middle East are underrepresented as far as membership of a sportsclub is concerned, followed by migrants from Indonesia, Africa, Morocco, the Dutch Antilles and Asia. People from English speaking countries, Morocco, and Africa, are relatively often a member of a cultural club, people from Turkey, the Dutch Antilles, Eastern Europe, and Indonesia are underrepresented.

Table 1: Sample of native Dutch and Belgium
Sample percentages and means of pooled sample

Variable	All Observations $NT = 23148$	22<age<65 $NT = 17159$	Attached to lab. market $NT = 13498$
Born in the Netherlands	99.6	99.6	99.6
Troubles speaking Dutch?			
yes, often/don't speak Dutch	0.3	0.2	0.2
yes, sometimes	8.3	7.7	7.2
no, never	91.4	92.1	92.6
Trouble understanding reading?			
yes, often/don't speak Dutch	0.1	0.1	0.1
yes, sometimes	10.2	9.3	9.1
no, never	89.7	90.6	90.9
Speak (never problems)	91.4	92.1	92.6
Read (never problems)	89.7	90.6	90.9
Speak Dutch at home or other language?			
Dutch at home	95.8	96.4	96.4
Dutch dialect	3.7	3.3	3.2
Two languages	0.0	0.0	0.0
Mother born in the Netherlands	95.4	95.8	95.7
Father born in the Netherlands	96.3	96.4	96.5
Both parents born abroad	1.7	1.6	1.7
Dutch Nationality	99.6	99.6	99.6
Other Nationality	0.7	0.6	0.6
Only Dutch Nationality	99.3	99.4	99.4
Only other nationality	0.4	0.4	0.4
Dutch and other nationality	0.4	0.2	0.2
Female	53.4	54.6	50.4
Age (mean, std)	47.4	45.7	43.6
	(16.7)	(11.4)	(11.1)
Household type			
Single	16.4	15.5	15.0
Couple without children	37.4	34.6	31.2
Couple with children	40.7	44.6	48.0
Lone parent	4.6	4.4	5.0
Other household type	0.9	0.9	0.8
Number of household members (mean, std)	2.7	2.8	2.8
	(1.3)	(1.3)	(1.3)
Number of children (mean, std)	0.9	1.0	1.0
	(1.2)	(1.1)	(1.1)
Has partner	78.1	79.2	79.2

Table 1 (continued): Sample of native Dutch and Belgium
Sample percentages and means of pooled sample

Variable	All Observations $NT = 23148$	22<age<65 $NT = 17159$	Attached to lab. market $NT = 13498$
Urbanisation			
Extremely urban	12.5	12.4	12.7
Very urban	26.0	26.2	26.7
Moderately urban	22.6	23.0	22.7
Slightly urban	22.8	22.5	22.2
Not urban	16.1	15.9	15.7
Occupational status			
In paid employment	49.4	64.8	84.6
Works/assists in family busines	1.5	1.9	2.5
Autonomous professional, freel, self-empl.	5.4	6.7	8.7
Job seeker following job loss	1.3	1.8	2.2
First time job seeker	0.2	0.1	0.2
Exempted from job seeking following job	0.3	0.3	
Attends school or is studying	9.3	1.7	
Takes care of the housekeeping	9.4	10.3	
Is pensioner, [voluntary] early retirem	16.5	5.2	
Has (partial) work disability	3.8	5.0	
Performs unpaid work while retaining ben.	0.1	0.2	0.2
Performs voluntary work	1.9	1.3	1.7
Does something else	0.8	0.7	
Is too young to have an occupation	0.1	0.0	
Education level			
Primary education	10.0	6.2	4.8
Lower vocational/professional training	26.9	24.5	21.3
Higher sec and middle voc/prof training	33.6	35.4	36.9
Higher voc/prof training, university	29.5	33.9	36.9
Member of sports club	37.2	37.4	39.5
Member of cultural association	13.9	12.5	11.6

Table 2: Sample of Migrants
Sample percentages and means of pooled sample

Variable	All Observations $NT = 1600$	22<age<65 $NT = 1303$	Attached to lab. market $NT = 943$
Origin (language group/area)			
Turkey	10.1	12.2	11.0
Morocco	6.4	7.6	7.0
Dutch Antilles	9.6	9.3	9.2
Suriname	10.4	11.2	13.0
Indonesia	10.7	5.5	5.5
German/Scandinavian (language area)	11.4	9.7	9.1
English (language area)	7.8	8.0	8.1
Latin languages	8.9	10.2	10.4
English as official (2nd) language	2.9	3.6	3.8
Asia	3.8	4.6	3.9
African	3.0	3.5	3.9
Eastern Europe	9.1	9.4	9.2
Middle East	5.9	5.1	5.7
Troubles speaking Dutch?			
yes, often/don't speak Dutch	3.9	4.4	3.6
yes, sometimes	33.9	38.6	36.9
no, never	62.2	57.0	59.5
Trouble understanding reading?			
yes, often/don't speak Dutch	3.7	4.4	3.7
yes, sometimes	28.8	32.8	30.3
no, never	67.6	63.2	66.0
Speak (never problems)	62.2	57.0	59.5
Read (never problems)	67.6	63.2	66.0
Speak Dutch at home or other language?			
Dutch at home	70.9	68.9	72.1
Dutch dialect	0.5	0.5	0.4
Two languages	0.4	0.4	0.1
Dutch Nationality	72.4	69.5	71.4
Other Nationality	37.3	40.9	38.2
Only Dutch Nationality	62.7	59.1	61.8
Only other nationality	27.6	30.5	28.6
Dutch and other nationality	9.7	10.4	9.5
Belong to Dutch population group	59.5	55.9	57.8
Other population group	64.1	69.0	69.9
Only Dutch population group	35.9	31.0	30.1
Only other population group	40.5	44.1	42.2
Both Dutch and Other group	23.6	24.9	27.7
Female	57.2	58.0	50.2
Age (mean, std)	45.1	43.0	41.8
	(15.2)	(10.6)	(9.4)

Table 2 (continued): Sample of Migrants
Sample percentages and means of pooled sample

Variable	All Observations $NT = 1600$	$22<\text{age}<65$ $NT = 1303$	Attached to lab. market $NT = 943$
Household type			
Single	17.4	16.4	17.4
Couple without children	27.6	23.9	20.6
Couple with children	42.7	47.4	49.8
Lone parent	11.0	10.9	10.6
Other household type	1.3	1.5	1.6
Number of household members (mean, std)	2.8	2.9	2.9
	(1.4)	(1.3)	(1.3)
Number of children (mean, std)	1.0	1.1	1.1
	(1.1)	(1.1)	(1.0)
Has partner	70.3	71.2	70.4
Urbanisation			
Extremely urban	24.4	26.0	25.7
Very urban	33.5	33.7	34.2
Moderately urban	22.8	23.0	24.5
Slightly urban	14.1	12.2	10.4
Not urban	5.2	5.0	5.2
Occupational status			
In paid employment	47.1	57.2	79.8
Works/assists in family busines	1.2	1.5	2.0
Autonomous professional, freel, self-empl.	3.7	4.4	6.0
Job seeker following job loss	4.5	5.5	7.6
First time job seeker	1.1	1.2	1.9
Exempted from job seeking following job	0.8	1.0	
Attends school or is studying	9.1	4.5	
Takes care of the housekeeping	10.9	11.8	
Is pensioner, [voluntary] early retirem	13.6	3.8	
Has (partial) work disability	4.9	5.8	
Performs unpaid work while retaining ben.	0.5	0.6	0.9
Performs voluntary work	1.3	1.3	1.8
Does something else	1.1	1.2	
Is too young to have an occupation	0.3	0.1	
Education level			
Primary education	14.3	12.7	9.5
Lower vocational/professional training	20.5	20.3	17.7
Higher sec and middle voc/prof training	32.6	32.8	34.9
Higher voc/prof training, university	32.7	34.2	37.9
Member of sports club	29.4	29.8	32.9
Member of cultural association	8.9	7.7	7.1

Table 3: Probit regressions speaking fluency for sample of migrants,
$22 < \text{age} < 65$, NT=1303

Variable	Coef.	Std.	Coef.	Std.	Coef.	Std.	Coef.	Std.
Turkey	0.68*	0.36	1.06**	0.39	1.28**	0.36	1.37**	0.38
Moroccan	0.51	0.37	0.73*	0.40	0.93**	0.38	1.04**	0.39
Dutch Antilles	1.20**	0.37	0.94**	0.39	0.97**	0.39	1.02**	0.40
Suriname	1.85**	0.38	1.12**	0.42	1.14**	0.41	1.26**	0.42
Indonesia	1.55**	0.42	0.74	0.46	0.86*	0.45	0.88*	0.46
German/Scand.	1.53**	0.38	1.37**	0.43	1.11**	0.49	1.18**	0.51
English	1.00**	0.38	0.90**	0.42	0.73	0.47	0.79*	0.48
Latin, western	1.06**	0.39	1.46**	0.42	1.51**	0.41	1.59**	0.42
Latin, nonwestern	1.06**	0.38	1.02**	0.45	1.08**	0.44	1.14**	0.44
English 2nd lang.	0.60	0.44	0.33	0.45	0.41	0.44	0.46	0.43
Africa	0.73*	0.44	0.79	0.54	0.91*	0.54	0.98*	0.55
Eastern Europe	0.62*	0.37	1.03**	0.40	1.11**	0.38	1.12**	0.38
Middle East	0.34	0.40	0.70	0.43	0.82**	0.41	0.85**	0.43
Linguistic Distance			-0.83**	0.25	0.89	0.99	0.71	1.04
Linguistic Distance squared					-1.81*	1.07	-1.58	1.13
Grew up speaking Dutch			1.03**	0.15	1.06**	0.15	1.05**	0.15
Prim. Education							-0.52**	0.20
Lower voc./prof.							-0.15	0.18
Higher sec./middle voc.							-0.06	0.15
Age at migration								
Sqr. Of age at migr.								
Age								
Female								
# Children								
couple without children								
Couple with children								
Lone parent								
Other household								
Only Dutch Nat.								
Only Other Nat.								
Only Dutch population group								
Only other pop. Group								
Speak Dutch at home								
Extremely urban								
Very urban								
moderately urban								
slightly urban								
Intercept	-0.78	0.32	-0.59	0.45	-0.70	0.42	-0.67	0.42
Likelihood Value	-800.7		-686.2		-683.3		-675.3	
Pseudo R2	0.10		0.23		0.23		0.24	

Reference categories dummy variables: Asia; Higher professional/vocational training, university; Single; Not urban; Both Dutch and other nationality; Both Dutch and other population group.

**/*: significant at 5/10 % level; standard errors adjusted for clustering.

Table 3: Probit regressions speaking fluency for sample of migrants (continued)
$22 < \text{age} < 65$, $NT=1303$

Variable	Coef.	Std.	Coef.	Std.	Coef.	Std.	Coef.	Std.
Turkey	0.83**	0.34	0.86**	0.34	0.89**	0.34	1.01**	0.34
Moroccan	0.84**	0.34	0.85**	0.34	0.88**	0.34	0.95**	0.34
Dutch Antilles	1.36**	0.33	1.34**	0.32	1.43**	0.32	1.28**	0.31
Suriname	1.73**	0.34	1.64**	0.33	1.73**	0.33	1.66**	0.32
Indonesia	0.76**	0.39	0.52	0.38	0.53	0.38	0.55	0.38
German/Scand.	1.53**	0.43	1.45**	0.41	1.48**	0.42	1.59**	0.42
English	0.86**	0.41	0.75*	0.41	0.75*	0.41	0.95**	0.42
Latin, western	1.52**	0.36	1.46**	0.35	1.48**	0.35	1.69	0.36
Latin, nonwestern	1.31**	0.35	1.24**	0.34	1.28**	0.34	1.32**	0.33
English 2nd lang.	0.46	0.35	0.47	0.34	0.42	0.35	0.32	0.34
Africa	1.10*	0.57	1.12*	0.60	1.12**	0.56	1.15*	0.59
Eastern Europe	1.21**	0.32	1.22**	0.31	1.20**	0.31	1.25**	0.31
Middle East	1.12**	0.37	1.07**	0.38	1.09**	0.38	1.04**	0.37
Linguistic Distance	1.58	1.13	1.86	1.20	1.92	1.19	2.27*	1.29
Linguistic Distance squared	-1.79	1.20	-2.03	1.29	-2.04	1.26	-2.41*	1.37
Grew up speaking Dutch	0.70**	0.16	0.67**	0.16	0.68**	0.16	0.61**	0.16
Prim. Education	-0.59**	0.22	-0.62**	0.23	-0.59**	0.22	-0.57**	0.22
Lower voc./prof.	-0.39**	0.18	-0.45**	0.18	-0.50**	0.18	-0.47**	0.18
Higher sec./middle voc.	-0.21	0.15	-0.19**	0.15	-0.18	0.15	-0.24	0.15
Age at migration	-0.90**	0.19	-0.91**	0.19	-0.98**	0.18	-0.93**	0.19
Sqr. Of age at migr.	0.08*	0.04	0.06	0.04	0.07*	0.04	0.08**	0.04
Age			0.20**	0.07	0.21**	0.07	0.12*	0.07
Female			-0.02	0.13	0.05	0.13	0.04	0.13
# Children					0.02	0.09	0.00	0.09
couple without children					-0.16	0.20	-0.13	0.20
Couple with children					-0.18	0.24	-0.15	0.24
Lone parent					-0.51	0.31	-0.44	0.31
Other household					-0.79	0.61	-0.82	0.62
Only Dutch Nat.							0.66**	0.16
Only Other Nat.							0.39**	0.18
Only Dutch population group								
Only other pop. Group								
Speak Dutch at home								
Extremely urban								
Very urban								
moderately urban								
slightly urban								
Intercept	0.41	0.40	-0.33	0.46	-0.24	0.48	-0.38	0.49
Likelihood Value	-592.3		-582.9		-577.6		-561.0	
Pseudo R2	0.33		0.35		0.35		0.37	

Reference categories dummy variables: Asia; Higher professional/vocational training, university; Single; Not urban; Both Dutch and other nationality; Both Dutch and other population group.

**/*: significant at 5/10 % level; standard errors adjusted for clustering.

Table 3: Probit regressions speaking fluency for sample of migrants (continued)
$22 <$ age < 65, NT=1303

Variable	Coef.	Std.	Coef.	Std.	Coef.	Std.
Turkey	1.02**	0.34	1.09**	0.34	0.95**	0.34
Moroccan	0.96**	0.34	0.93**	0.34	0.94**	0.34
Dutch Antilles	1.52**	0.32	1.53**	0.33	1.47**	0.33
Suriname	1.94**	0.34	1.66**	0.33	1.78**	0.35
Indonesia	0.57	0.37	0.56	0.38	0.54	0.38
German/Scand.	1.49**	0.41	1.34**	0.41	1.46**	0.42
English	0.78*	0.41	0.69	0.41	0.76*	0.43
Latin, western	1.48**	0.35	1.36**	0.34	1.51**	0.35
Latin, nonwestern	1.24**	0.33	1.18**	0.33	1.31**	0.34
English 2nd lang.	0.44	0.34	0.49	0.36	0.44	0.36
Africa	1.13*	0.58	1.08*	0.56	1.18**	0.54
Eastern Europe	1.21**	0.30	1.16**	0.31	1.29**	0.32
Middle East	1.13**	0.38	1.12**	0.39	1.07**	0.39
Linguistic Distance	2.12*	1.23	2.24*	1.20	2.07*	1.19
Linguistic Distance squared	-2.18*	1.29	-2.36*	1.27	-2.20*	1.25
Grew up speaking Dutch	0.60**	0.16	0.56**	0.16	0.72**	0.16
Prim. Education	-0.57**	0.22	-0.52**	0.23	-0.57**	0.22
Lower voc./prof.	-0.52**	0.18	-0.48**	0.18	-0.50**	0.18
Higher sec./middle voc.	-0.20	0.15	-0.16	0.15	-0.18	0.16
Age at migration	-0.95**	0.18	-0.93**	0.18	-1.00**	0.19
Sqr. Of age at migr.	0.07*	0.04	0.08*	0.04	0.08**	0.04
Age	0.18**	0.07	0.17**	0.07	0.23**	0.07
Female	0.01	0.13	0.01	0.13	0.04	0.13
# Children	0.03	0.09	0.05	0.09	0.03	0.10
couple without children	-0.17	0.20	-0.17	0.20	-0.12	0.20
Couple with children	-0.20	0.24	-0.24	0.24	-0.15	0.24
Lone parent	-0.51	0.32	-0.56*	0.31	-0.47	0.31
Other household	-0.77	0.61	-0.76	0.62	-0.71	0.59
Only Dutch Nat.			0.57	0.13		
Only Other Nat.			-0.50	0.49		
Only Dutch population group	0.24	0.18				
Only other pop. Group	-0.13	0.13				
Speak Dutch at home			0.57**	0.13		
Extremely urban					-0.22	0.33
Very urban					-0.36	0.32
moderately urban					-0.60*	0.33
slightly urban					-0.16	0.35
Intercept	-0.22	0.50	-0.50	0.49	-0.03	0.60
Likelihood Value	-573.6		-562.2		-570.0	
Pseudo R2	0.36		0.37		0.36	

Reference categories dummy variables: Asia; Higher professional/vocational training, university; Single;
  Not urban; Both Dutch and other nationality; Both Dutch and other population group.
**/*: significant at 5/10 % level; standard errors adjusted for clustering.

Table 4: Descriptive statistics instrumental variables from Personality and Politics and Values section $22 <$ age < 65, NT=1111

Personality section	very inaccurate	moderately inaccurate	in between	moderately accurate	very accurate
I have a rich vocabulary	1.9	11.7	32.6	40.9	13.0
I am quick to understand things	0.2	3.8	22.7	53.5	19.9

Politics and Values section

It is difficult for a foreigner to be accepted in the Netherlands while retaining his/her own culture

fully disagree	disagree	in between	agree	fully agree	missing
3.0	14.7	27.4	35.3	11.8	7.9

Table 5: Probit regressions speaking fluency for sample of migrants
including instrumental variables from "personality" and "politics and values" section
$22 <$ age < 65, NT=1111

Variable	Coef.	Std.	Coef.	Std.
Turkey	0.77*	0.40	0.87**	0.39
Moroccan	0.52	0.39	0.56	0.38
Dutch Antilles	1.39**	0.37	1.46**	0.37
Suriname	1.75**	0.37	1.83**	0.37
Indonesia	0.46	0.44	0.56	0.42
German/Scand.	1.76**	0.47	1.72**	0.48
English	0.99**	0.45	0.97**	0.46
Latin, western	1.58**	0.40	1.58**	0.38
Latin, nonwestern	1.38**	0.40	1.34**	0.39
English 2nd lang.	0.43	0.39	0.36	0.39
Africa	1.15*	0.63	1.08*	0.64
Eastern Europe	1.23**	0.36	1.23**	0.36
Middle East	1.13**	0.47	1.07**	0.46
Linguistic Distance	0.74	1.46	1.34	1.45
Linguistic Distance squared	-0.74	1.56	-1.44	1.55
Grew up speaking Dutch	0.68**	0.19	0.67**	0.18
Prim. Education	-0.27	0.27	-0.41	0.27
Lower voc./prof.	-0.30	0.21	-0.38*	0.20
Higher sec./middle voc.	0.11	0.18	0.03	0.17
Age at migration	-0.84**	0.21	-0.89**	0.20
Sqr. Of age at migr.	0.03	0.04	0.04	0.04
Age	0.25**	0.07	0.25**	0.07
Female	-0.04	0.14	-0.07	0.14
# Children	-0.89	1.16	-0.88	1.15
couple without children	-0.22	0.22	-0.24	0.21
Couple with children	0.00	0.28	-0.06	0.28
Lone parent	-0.40	0.36	-0.41	0.36
Other household	-1.27**	0.72	-1.33*	0.68
Rich vocabulary:in between	0.25	0.17		
Rich vocabulary: accurate	0.70**	0.18		
Rich vocabulary:very accurate	0.85**	0.23		
Quickly understand:accurate	0.42**	0.13	0.56**	0.13
Quickly understand:very accurate	0.61**	0.19	0.86**	0.18
foreigner diff. accepted:disagree			0.41**	0.13
Intercept	-1.36**	0.59	-0.92	0.58
Likelihood Value	-445.9		-455.5	
Pseudo R2	0.41		0.40	

Reference categories dummy variables: Asia; Higher professional/vocational training, university; Single;
   Not urban; Both Dutch and other nationality; Both Dutch and other population group.
**/*: significant at 5/10 % level; standard errors adjusted for clustering.

Table 6: Regression coeffients language proficiency indicators on satisfaction
of migrants (22<age<65, with paid job)
with job characteristics and fit between education/skills and job
Method: simple ordered probit

		Coefficients of interest					
		Reggressions without age at migration		Regressions including age at migration			
Dependent variable:	gender:	speak	read	speak	age migr.	read	age migr.
Satisfaction with wage	all	0.21*	0.06	0.08	-0.0121*	-0.06	-0.0145**
	M	0.24	0.16	0.03	-0.0164	0.00	-0.0170*
	F	0.11	-0.10	0.02	-0.0116	-0.22	-0.0148*
Satisfaction with work type	all	0.24**	0.22	0.15	-0.0081	0.14	-0.0094*
	M	0.26	0.12	0.07	-0.0145*	-0.04	-0.0166
	F	0.18	0.30	0.16	-0.0018	0.29	-0.0010
Satisfaction w. working hours	all	0.10	0.07	-0.04	-0.0135**	-0.04	-0.0131**
	M	0.21	0.17	-0.03	-0.0177**	0.02	-0.0168*
	F	0.06	-0.02	-0.04	-0.0123*	-0.12	-0.0131*
Satisfaction with career	all	0.33**	0.17	0.22*	-0.0102*	0.06	-0.0138**
	M	0.38**	0.18	0.13	-0.0190**	-0.03	-0.0224**
	F	0.27	0.17	0.26	-0.0009	0.14	-0.0035
Fit education to work	all	0.33**	0.20	0.25**	-0.0070	0.10	-0.0108**
	M	0.47**	0.23	0.34*	-0.0092	0.07	-0.0162**
	F	0.17	0.11	0.17	0.0005	0.10	-0.0012
Fit ability to work	all	0.29**	0.23*	0.18	-0.0090	0.12	-0.0112**
	M	0.39**	0.20	0.19	-0.0141*	0.01	-0.0186*
	F	0.14	0.17	0.11	-0.0027	0.15	-0.0027
No problems with knowledge	all	0.26**	0.44**	0.29**	0.0024	0.47**	0.0029
and skills in performance job	M	0.28*	0.55**	0.31*	0.0023	0.59**	0.0041
	F	0.32**	0.41**	0.37**	0.0061	0.46**	0.0056
*/**: significance at 5/10% level							

Table 7a: Regression coeffients language proficiency indicators on satisfaction
of migrants (22<age<65, with paid job)
with job characteristics and fit between education/skills and job
Instruments include 'vocabulary'
Method: simultaneous equations:
ordered probit corrected for endogeneity language proficiency

		Coefficients of interest						
		without random effects		with random effects				
Dependent variable:	gender:	speak	$\rho_{\epsilon v}$	speak	$\rho_{\epsilon v}$	σ_m	σ_θ	$\rho_{\theta m}$
Satisfaction with wage	all	0.11	-0.05	0.09	-0.02	2.06**	1.37**	-0.01
	M	0.20	-0.20	0.11	0.15	2.08**	1.51**	0.03
	F	-0.32	0.49**	-0.20	0.18	2.10**	1.39**	0.47
Satisfaction with work type	all	0.35**	-0.38**	0.33**	-0.25*	2.15**	1.51**	-0.58**
	M	0.46**	-0.58**	0.42**	-0.32**	2.16**	1.61**	-0.80**
	F	0.16	-0.09	0.23	-0.12	2.11**	1.68**	-0.41**
Satisfaction w. working hours	all	0.13	-0.19	0.14	-0.03	2.03**	1.14**	-0.44**
	M	0.40**	-0.56**	0.38**	-0.08	2.13**	1.39**	-0.80**
	F	-0.03	0.08	0.04	0.01	2.01**	1.24**	-0.17
Satisfaction with career	all	0.37**	-0.36**	0.34**	-0.30**	2.43**	1.50**	-0.66**
	M	0.49**	-0.57**	0.34**	-0.28*	2.20**	1.44**	-0.69**
	F	0.09	0.09	0.24	-0.07	2.14**	1.41**	-0.41**
Fit education to work	all	0.27**	-0.24**	0.17*	-0.11	2.28**	1.31**	-0.28
	M	0.47**	-0.52**	0.29**	-0.18	2.11**	1.20**	-0.65**
	F	0.06	0.05	0.02	0.01	2.14**	1.39**	0.19
Fit ability to work	all	0.17	-0.17	0.12	-0.11	2.05**	1.01**	-0.31
	M	0.28	-0.34	0.26**	-0.08	2.12**	1.01**	-0.74**
	F	-0.05	0.11	-0.04	0.02	2.04**	1.13**	0.03
No problems with knowledge	all	0.21	-0.01	0.18	-0.15	1.95**	0.59**	-0.24
and skills in performance job	M	0.16	0.03	-0.01	0.23	1.92**	0.55**	0.40
	F	0.33*	-0.14	0.20	-0.42*	1.95**	0.55**	-0.15
*/**: significance at 5/10% level								

Table 7b: Regression coeffients language proficiency indicators on satisfaction
of migrants (22<age<65, with paid job)
with job characteristics and fit between education/skills and job
Instruments include 'difficulty to be accepted'
Method: simultaneous equations:
ordered probit corrected for endogeneity language proficiency

		Coefficients of interest						
		without random effects		with random effects				
Dependent variable:	gender:	speak	$\rho_{\epsilon v}$	speak	$\rho_{\epsilon v}$	σ_m	σ_θ	$\rho_{\theta m}$
Satisfaction with wage	all	0.07	0.00	-0.01	0.07	2.41**	1.38**	0.14
	M	0.04	-0.01	0.01	0.25	2.34**	1.52**	0.17
	F	-0.24	0.40	0.01	-0.13	2.31**	1.27**	0.08
Satisfaction with work type	all	0.27**	-0.29**	0.20**	-0.15	2.25**	1.39**	-0.44**
	M	0.38**	-0.50**	0.27**	-0.19	2.28**	1.42**	-0.69**
	F	0.12	-0.04	0.10	-0.09	2.39**	1.34**	0.02
Satisfaction w. working hours	all	0.10	-0.16	0.10	0.02	2.22**	1.11**	-0.38**
	M	0.28	-0.43	0.15	0.15	2.28**	1.04**	-0.60**
	F	0.02	0.00	0.11	-0.15	2.26**	1.28**	-0.30
Satisfaction with career	all	0.30**	-0.27*	0.18**	-0.15	3.10**	1.36**	-0.54**
	M	0.37	-0.44*	0.14	-0.09	2.43**	1.27**	-0.49**
	F	0.11	0.08	0.14	-0.01	2.38**	1.34**	-0.31
Fit education to work	all	0.16	-0.10	0.10	-0.11	2.74**	1.29**	-0.16
	M	0.34	-0.35	0.15*	-0.06	2.36**	1.08**	-0.45**
	F	-0.02	0.15	0.05	-0.16	2.47**	1.37**	0.15
Fit ability to work	all	0.10	-0.09	0.07	-0.08	2.32**	0.99**	-0.20
	M	0.16	-0.19	0.18*	0.32	2.57**	0.99**	-0.66**
	F	-0.06	0.11	-0.01	-0.22	2.37**	1.10**	0.11
No problems with knowledge	all	0.12	0.10	0.05	0.00	2.13**	0.56**	0.31
and skills in performance job	M	-0.09	0.34	-0.05	0.28	2.11**	0.58**	0.56
	F	0.34**	-0.15	0.16*	-0.51**	2.20**	0.48**	0.03

*/**: significance at 5/10% level

Table 8: Dependent variable: Manual Work, both men and women, 22 < age < 65

Variable	Simple Probit		Bivariate Probit	
	Coef.	Std.	Coef.	Std.
Speak	-0.40**	0.17	-0.40**	0.18
Turkey	0.32	0.31	0.27	0.34
Moroccan	-0.26	0.35	-0.25	0.35
Dutch Antilles	-0.85**	0.34	-0.44	0.46
Suriname	-0.33	0.32	0.10	0.47
Indonesia	0.21	0.40	0.34	0.41
German/Scand.	-0.24	0.37	0.18	0.44
English	-0.70**	0.34	-0.49	0.38
Latin	0.01	0.35	0.32	0.39
Africa	0.80*	0.44	1.04*	0.60
Eastern Europe	-0.38	0.36	-0.33	0.42
Prim. Education	1.97**	0.28	1.78**	0.37
Lower voc./prof.	1.76**	0.25	1.52**	0.31
Higher sec./middle voc.	0.78**	0.22	0.74**	0.24
Age at migration/10	0.27	0.24	-0.02	0.30
Age at migration/10 squared	-0.02	0.05	-0.01	0.06
Age	-0.14	0.09	-0.10	0.11
Female	-0.10	0.16	-0.09	0.17
# Children	0.61	0.80	0.44	0.92
Couple	-0.18	0.18	-0.12	0.19
Intercept	-0.98*	0.50	-0.89	0.55
ρ (corr. coef. error terms)			0.29	0.18
NT	920		876	
N	430		413	

Reference categories dummy variables: Asia; Higher professional/vocational training, university; Single;
For the 'bivariate probit', results for the
language proficiency equation are omitted from the table
**/*: significant at 5/10 % level; standard errors adjusted for clustering.

Table 9: Dependent variable: Manual Work, subsample of Men, 22 < age < 65

	Simple Probit		Bivariate Probit	
Variable	Coef.	Std.	Coef.	Std.
Speak	-0.55**	0.26	-0.57**	0.27
Turkey	0.33	0.44	-0.05	0.60
Moroccan	-0.20	0.54	-0.35	0.57
Dutch Antilles	-0.61	0.54	-0.33	0.73
Suriname	-0.16	0.44	0.18	0.55
Indonesia	0.46	0.54	0.59	0.55
German/Scand.	-0.72	0.57	-0.36	0.67
English	-1.17**	0.57	-0.98	0.64
Latin	-0.35	0.48	0.03	0.59
Africa	1.09	0.67	1.19	0.84
Eastern Europe	-0.65	0.67	-0.66	0.72
Prim. Education	1.88**	0.43	1.30*	0.69
Lower voc./prof.	1.64**	0.36	1.26**	0.50
Higher sec./middle voc.	0.67**	0.31	0.58	0.37
Age at migration/10	0.35	0.36	-0.21	0.51
Age at migration/10 squared	-0.05	0.09	-0.02	0.09
Age	0.10	0.14	0.12	0.15
# Children	2.40*	1.24	1.57	1.36
Couple	-0.43	0.27	-0.27	0.31
Intercept	-1.88**	0.78	-1.03	1.24
ρ (corr. coef. error terms)			0.46	0.28
NT	418		406	
N	183		176	

Reference categories dummy variables: Asia; Higher professional/vocational training, university; Single;

For the 'bivariate probit', results for the

language proficiency equations are omitted from the table

**/*: significant at 5/10 % level; standard errors adjusted for clustering.

Table 10: Dependent variable: Manual Work, subsample of women, 22 < age < 65

Variable	Simple Probit		Bivariate Probit	
	Coef.	Std.	Coef.	Std.
Speak	-0.26	0.22	0.04	0.54
Turkey	0.33	0.45	0.05	0.64
Moroccan	-0.51	0.51	-0.55	0.56
Dutch Antilles	-0.82	0.46	-0.93	0.97
Suriname	-0.72	0.49	-1.13	1.52
Indonesia	-0.08	0.56	-0.13	0.65
German/Scand.	-0.05	0.48	-0.26	1.13
English	-0.22	0.50	-0.38	0.77
Latin	0.34	0.48	0.24	0.73
Africa	0.96	0.56	1.02	0.69
Eastern Europe	-0.12	0.43	-0.44	0.72
Prim. Education	2.56**	0.43	2.78**	0.51
Lower voc./prof.	2.16**	0.38	2.24**	0.50
Higher sec./middle voc.	1.13**	0.33	1.12**	0.33
Age at migration/10	0.39	0.33	0.52	0.66
Age at migration/10 squared	-0.05	0.07	-0.06	0.09
Age	-0.34**	0.13	-0.42**	0.18
# Children	-0.55	1.21	-0.51	1.28
Couple	-0.11	0.23	-0.16	0.27
Intercept	-0.75	0.63	-0.57	0.68
ρ (corr. coef. error terms)			-0.07	0.57
NT	502		470	
N	247		237	

Reference categories dummy variables: Asia; Higher professional/vocational training, university; Single;

For the 'bivariate probit', results for the

language proficiency equations are omitted from the table

**/*: significant at 5/10 % level; standard errors adjusted for clustering.

Table 11: Dependent variable: log of gross monthly earnings, $22 <$ age < 65
Estimation method: simultaneous equations without random effects

Variable	Coef.	Std.	Coef.	Std.
Speak	0.14**	0.04	0.06	0.06
Turkey	0.09	0.13	0.07	0.12
Moroccan	0.21	0.18	0.18	0.19
Dutch Antilles	0.23	0.14	0.31**	0.14
Suriname	0.01	0.17	0.12	0.17
Indonesia	-0.11	0.15	-0.11	0.12
German/Scand.	0.03	0.19	0.12	0.18
English	-0.21	0.20	-0.16	0.19
Latin	0.08	0.15	0.16	0.16
Africa	0.05	0.21	0.03	0.17
Eastern Europe	0.14	0.14	0.17	0.13
Prim. Education	-0.35**	0.12	-0.42**	0.10
Lower voc./prof.	-0.40**	0.12	-0.47**	0.12
Higher sec./middle voc.	-0.22**	0.07	-0.25**	0.07
Age at migration/10			-0.04	0.13
Age at migration/10 squared			-0.01	0.03
Age/10	0.53*	0.32	0.57*	0.30
Age/10 squared	-0.05	0.04	-0.05	0.03
Female	-0.38	0.07	-0.38**	0.07
# Children	0.30	0.44	0.25	0.40
Couple	-0.02	0.08	0.01	0.07
Year 2008	0.07	0.05	0.08	0.05
Year 2009	0.05	0.05	0.05	0.05
Year 2010	0.04	0.03	0.04	0.03
Intercept	6.55**	0.72	6.54**	0.69
$\rho_{\epsilon v}$ (corr. coef.)	-0.31	0.10	-0.15	0.16
τ (std. dev. earnings)	0.46**	0.05	0.44**	0.04

Reference categories dummy variables: Asia/Middle East/English 2nd language; Year 2011

Higher professional/vocational training, university; Single;

Results for the language proficiency equations are omitted from the table

**/*: significant at 5/10 % level; standard errors adjusted for clustering.

Table 12: Dependent variable: log of gross monthly earnings, $22 < \text{age} < 65$, males only
Estimation method: simultaneous equations without random effects

Variable	Coef.	Std.	Coef.	Std.
Speak	0.16**	0.05	0.10	0.10
Turkey	0.29	0.16	0.17	0.16
Moroccan	0.09	0.17	-0.04	0.17
Dutch Antilles	0.24	0.18	0.24	0.17
Suriname	0.01	0.22	-0.04	0.20
Indonesia	-0.03	0.22	-0.06	0.18
German/Scand.	0.33	0.21	0.27	0.19
English	-0.18	0.25	-0.19	0.24
Latin	0.15	0.17	0.17	0.19
Africa	-0.25*	0.14	-0.27**	0.13
Eastern Europe	0.23	0.19	0.13	0.20
Prim. Education	-0.24**	0.15	-0.37**	0.16
Lower voc./prof.	-0.30**	0.11	-0.34**	0.12
Higher sec./middle voc.	-0.18**	0.09	-0.21**	0.08
Age at migration/10			0.16	0.14
Age at migration/10 squared			-0.06**	0.03
Age/10	1.22**	0.40	1.10**	0.42
Age/10 squared	-0.12**	0.05	-0.10**	0.05
# Children	0.40	0.49	0.42	0.48
Couple	0.09	0.12	0.08	0.10
Year 2008	0.09	0.07	0.09	0.07
Year 2009	0.01	0.05	0.01	0.05
Year 2010	0.01	0.03	0.01	0.03
Intercept	4.73**	0.88	5.10**	0.97
$\rho_{\epsilon v}$ (corr. coef.)	-0.33*	0.18	-0.12	0.33
τ (std. dev. earnings)	0.37**	0.05	0.34**	0.03

Reference categories dummy variables: Asia/Middle East/English 2nd language;

Higher professional/vocational training, university; Single;

Results for the language proficiency equations are omitted from the table

**/*: significant at 5/10 % level; standard errors adjusted for clustering.

Table 13: Dependent variable: log of gross monthly earnings, 22 < age < 65, females only
Estimation method: simultaneous equations without random effects (RE)

Variable	Coef.	Std.	Coef.	Std.
Speak	0.10*	0.05	0.14	0.11
Turkey	-0.19	0.20	-0.20	0.21
Moroccan	0.29	0.36	0.26	0.34
Dutch Antilles	0.21	0.18	0.12	0.23
Suriname	0.05	0.25	-0.04	0.36
Indonesia	-0.18	0.23	-0.13	0.24
German/Scand.	-0.22	0.29	-0.33	0.41
English	-0.18	0.23	-0.17	0.27
Latin	-0.06	0.23	-0.09	0.27
Africa	0.10	0.21	0.20	0.25
Eastern Europe	-0.02	0.18	-0.06	0.24
Prim. Education	-0.51**	0.16	-0.43**	0.17
Lower voc./prof.	-0.49**	0.20	-0.42**	0.18
Higher sec./middle voc.	-0.32**	0.11	-0.26	0.12
Age at migration/10			-0.15	0.18
Age at migration/10 squared			0.06	0.04
Age/10	0.01	0.31	-0.02	0.32
Age/10 squared	0.00	0.04	0.00	0.04
# Children	0.04	0.62	0.04	0.63
Couple	-0.13	0.08	-0.15	0.12
Year 2008	0.01	0.06	-0.04	0.07
Year 2009	0.05	0.06	-0.01	0.08
Year 2010	0.02	0.06	0.00	0.06
Intercept	7.72**	0.69	7.90**	0.70
$\rho_{\epsilon v}$ (corr. coef.)	-0.32**	0.15	-0.42**	0.24
τ (std. dev. earnings)	0.48**	0.07	0.49**	0.09

Reference categories dummy variables: Asia/Middle East/English 2nd language;

Higher professional/vocational training, university; Single;

Results for the language proficiency equations are omitted from the table

**/*: significant at 5/10 % level; standard errors adjusted for clustering.

Table A: Descriptives by origin

Origin	speak	read	member of sportsclub	member of cultural club	only Dutch pop. group	other pop. group	both dutch and other	Only Dutch nat.	only other nat.	both Dutch + oth. nat.	# years here	age	lowest educ.	higest educ
Dutch/Belgium	91	90	37	14	n.a.	n.a.	n.a.	99	0	0	31	49	10	29
Foreign	62	68	29	9	36	41	24	63	28	10	27	47	14	33
Turkish	46	46	14	3	3	70	27	38	37	25	23	39	26	12
Moroccan	41	43	28	12	8	50	42	49	32	19	22	41	28	13
Dutch Antilles	67	84	22	4	25	32	44	89	5	6	24	46	8	26
Suriname	86	89	31	12	6	62	32	92	7	1	30	50	16	35
Indonesia	89	88	24	13	78	5	17	96	4	0	53	65	9	37
German/Scandin.	79	85	40	12	63	28	9	55	36	9	32	52	9	35
English	63	70	49	17	54	38	9	38	49	13	26	44	10	45
Latin language	62	69	32	10	45	34	21	42	48	10	26	46	17	32
English 2nd lang	43	49	39	5	45	30	26	83	11	6	23	44	11	43
Asia	22	23	26	9	35	52	13	58	42	0	17	43	3	50
Africa	48	46	23	12	46	46	8	56	40	4	18	40	17	29
Eastern Europe	49	58	29	4	36	44	20	48	42	10	17	42	10	39
Middle East	43	53	24	0	17	49	34	60	21	19	17	42	21	45

Table A (continued): Descriptives by origin; 22<age<65

Origin	speak	read	member of sportsclub	member of cultural club	only Dutch pop. group	other pop. group	both dutch and other	Only Dutch nat.	only other nat.	both Dutch + oth. nat.	# years here	age	lowest educ.	higest educ.
Dutch/Belgium	92	91	37	13	n.a.	n.a.	n.a.	99	0	0	25	48	6	34
Foreign	57	63	30	8	31	44	25	59	31	10	24	45	12	34
Turkish	46	46	14	3	3	70	27	38	37	25	23	39	26	12
Moroccan	39	41	27	11	8	48	43	48	32	19	22	42	29	13
Dutch Antilles	66	85	24	3	24	31	45	88	6	7	23	45	5	26
Suriname	86	89	32	9	7	62	31	92	8	0	29	49	12	33
Indonesia	78	79	22	6	71	4	25	97	3	0	43	53	0	35
German/Scandin.	77	86	44	10	58	31	10	51	40	9	27	46	3	37
English	59	65	44	19	49	41	10	35	55	11	27	46	9	53
Latin language	61	68	35	10	46	32	22	43	47	11	25	46	14	35
English 2nd lang	43	49	39	5	45	30	26	83	11	6	23	44	11	43
Asia	22	23	26	9	35	52	13	58	42	0	17	43	3	50
Africa	48	46	23	12	46	46	9	59	39	2	19	40	15	30
Eastern Europe	43	54	33	4	34	48	18	47	44	9	17	43	8	44
Middle East	33	40	20	0	16	48	36	54	21	25	18	48	12	63

Table A (continued): Descriptives by origin; subsample attached to labour market

Origin	speak	read	member of sportsclub	member of cultural club	only Dutch pop. group	other pop. group	both dutch and other	Only Dutch nat.	only other nat.	both Dutch + oth. nat.	# years here	age	lowest educ.	higest educ.
Dutch/Belgium	93	91	40	12	5	1	1	99	0	0	24	45	5	37
Foreign	59	66	33	7	30	42	28	62	29	10	23	44	10	38
Turkish	42	46	15	3	5	67	28	36	42	22	22	38	16	13
Moroccan	50	47	32	18	8	36	56	53	26	21	21	39	17	15
Dutch Antilles	63	84	29	1	21	26	53	87	7	6	21	45	5	33
Suriname	89	91	35	8	5	70	25	93	7	1	29	48	10	33
Indonesia	75	75	29	4	58	6	37	96	4	0	38	50	0	46
German/Scandin.	76	84	45	7	53	34	13	50	43	7	23	44	0	41
English	63	72	42	14	50	41	9	33	53	14	26	45	11	54
Latin language	63	72	36	9	37	40	23	39	55	6	23	43	17	42
English 2nd lang	47	53	48	3	50	17	33	83	8	8	21	40	14	36
Asia	24	24	24	6	46	43	11	68	32	0	19	45	0	46
Africa	43	41	29	12	51	38	11	68	30	3	20	42	11	38
Eastern Europe	51	66	39	6	41	36	23	62	29	9	18	42	6	51
Middle East	35	39	22	0	19	48	33	57	20	22	18	48	13	63

Table B: Probit regressions Dutch spoken at home by migrants
$22 < \text{age} < 65$, $NT=1303$

Variable	Coef.	Std.	Coef.	Std.	Coef.	Std.
Turkey	-0.97**	0.38			-0.98**	0.38
Moroccan	-0.21	0.36			-0.21	0.36
Dutch Antilles	-0.34	0.36			-0.36	0.36
Suriname	0.77**	0.35			0.80**	0.35
Indonesia	-0.14	0.60			-0.13	0.61
German/Scand.	0.86**	0.44			0.89**	0.44
English	0.34	0.35			0.37	0.35
Latin, western	0.72*	0.41			0.70*	0.41
Latin, nonwestern	0.73*	0.38			0.72*	0.38
English 2nd lang.	-0.71**	0.35			-0.72	0.36
Africa	0.31	0.40			0.32	0.39
Eastern Europe	0.28	0.32			0.27	0.32
Middle East	-0.02	0.39			-0.01	0.39
Linguistic Distance	-3.32**	1.40	-0.97	1.12	-3.35**	1.41
Linguistic Distance squared	2.70**	1.35	-0.15	0.88	2.75**	1.36
Grew up speaking Dutch	0.65**	0.17	0.58**	0.16	0.65**	0.17
Prim. Education	-0.35*	0.19	-0.38*	0.20	-0.33*	0.19
Lower voc./prof.	-0.13	0.19	-0.13	0.18	-0.11	0.19
Higher sec./middle voc.	-0.07	0.15	-0.13	0.15	-0.06	0.15
Age at migration	-0.59**	0.21	-0.32*	0.19	-0.60**	0.21
Sqr. Of age at migr.	0.04	0.04	0.00	0.04	0.04	0.04
Age	1.30**	0.48	1.31**	0.47	1.28**	0.49
Age squared	-0.12**	0.06	-0.12**	0.05	-0.12**	0.06
Female	0.35**	0.13	0.34**	0.13	0.53	0.33
# Children	-0.22**	0.10	-0.24**	0.10	-0.28*	0.17
couple without children	0.10	0.21	0.06	0.21	0.09	0.30
Couple with children	0.39	0.26	0.29	0.25	0.66	0.41
Lone parent	0.11	0.32	-0.02	0.31	-0.09	0.62
Other household	-0.45	0.41	-0.41	0.36	-0.10	0.57
Female × # Children					-0.49	0.54
Female × couple without children					-0.06	0.44
Female × Couple with children					-0.60	0.79
Female × Lone parent					0.10	0.72
Female × Other household					0.09	0.20
Intercept	-1.38	1.05	-1.41	1.00	-1.41	1.06
Likelihood Value	-556.0		-610.5		-553.8	
Pseudo R2	0.31		0.24		0.31	

Reference categories dummy variables:

Asia; Higher professional/vocational training, university; Single.

**/*: significant at 5/10 % level; standard errors adjusted for clustering.

Table C: Probit regressions literacy for sample of migrants
$22 <$ age < 65, NT=1303

Variable	Coef.	Std.	Coef.	Std.	Coef.	Std.	Coef.	Std.
Turkey	0.63*	0.33	0.87**	0.32	1.05**	0.30	1.22**	0.32
Moroccan	0.51	0.34	0.66*	0.34	0.81**	0.32	1.01**	0.34
Dutch Antilles	1.77**	0.33	1.59**	0.34	1.60**	0.33	1.76**	0.34
Suriname	1.96**	0.35	1.42**	0.36	1.41**	0.35	1.71**	0.35
Indonesia	1.54**	0.40	0.91**	0.41	1.00**	0.40	1.07**	0.41
German/Scand.	1.80**	0.36	1.56**	0.38	1.32**	0.44	1.53**	0.47
English	1.12**	0.35	0.98**	0.37	0.80**	0.41	0.96**	0.44
Latin, western	1.24**	0.39	1.47**	0.39	1.50**	0.38	1.67**	0.39
Latin, nonwestern	1.17**	0.37	1.06**	0.40	1.10**	0.39	1.26**	0.38
English 2nd lang.	0.70*	0.41	0.50	0.40	0.57	0.38	0.66*	0.38
Africa	0.62	0.42	0.59	0.45	0.68	0.44	0.85*	0.46
Eastern Europe	0.83**	0.35	1.08**	0.35	1.14**	0.33	1.17**	0.33
Middle East	0.48	0.38	0.71*	0.38	0.80**	0.36	0.85**	0.36
Linguistic Distance			-0.72**	0.23	0.86	1.00	0.41	1.11
Linguistic Distance squared					-1.67	1.07	-1.12	1.21
Grew up speaking Dutch			0.65**	0.14	0.68**	0.14	0.67**	0.14
Prim. Education							-0.90**	0.19
Lower voc./prof.							-0.35**	0.17
Higher sec./middle voc.							0.02	0.15
Age at migration								
Sqr. Of age at migr.								
Age								
Female								
# Children								
couple without children								
Couple with children								
Lone parent								
Other household								
Only Dutch Nat.								
Only Other Nat.								
Only Dutch population group								
Only other pop. Group								
Speak Dutch at home								
Extremely urban								
Very urban								
moderately urban								
slightly urban								
Intercept	-0.73**	0.29	-0.41	0.39	-0.49	0.35	-0.50	0.36
Likelihood Value	-743.0		-685.9		-683.3		-654.8	
Pseudo R2	0.13		0.20		0.23		0.24	

Reference categories dummy variables: Asia; Higher professional/vocational training, university; Single; Not urban; Both Dutch and other nationality; Both Dutch and other population group.

**/*: significant at 5/10 % level; standard errors adjusted for clustering.

Table C: Probit regressions literacy for sample of migrants (continued)

Variable	Coef.	Std.	Coef.	Std.	Coef.	Std.	Coef.	Std.
Turkey	0.77**	0.29	0.81**	0.30	0.81**	0.29	0.90**	0.30
Moroccan	0.81**	0.31	0.83**	0.31	0.81**	0.30	0.85**	0.31
Dutch Antilles	1.99**	0.29	1.98**	0.28	1.96**	0.28	1.78**	0.27
Suriname	2.06**	0.33	1.99**	0.32	2.09**	0.32	2.02**	0.32
Indonesia	0.98**	0.35	0.74**	0.34	0.73**	0.34	0.74**	0.35
German/Scand.	1.73**	0.42	1.65**	0.42	1.71**	0.41	1.78**	0.42
English	0.98**	0.40	0.86**	0.41	0.84**	0.39	1.03**	0.41
Latin, western	1.57**	0.36	1.50**	0.36	1.51**	0.35	1.70**	0.37
Latin, nonwestern	1.38	0.31	1.33**	0.29	1.34**	0.29	1.36**	0.28
English 2nd lang.	0.67**	0.29	0.66**	0.28	0.60**	0.29	0.49*	0.29
Africa	0.89**	0.45	0.91*	0.48	0.81*	0.49	0.82*	0.51
Eastern Europe	1.20**	0.28	1.21**	0.28	1.20**	0.28	1.26**	0.27
Middle East	1.02**	0.32	0.91**	0.33	0.90**	0.33	0.84**	0.33
Linguistic Distance	1.27	1.21	1.66	1.30	1.64	1.26	2.08	1.36
Linguistic Distance squared	-1.41	1.28	-1.74	1.39	-1.70	1.33	-2.16	1.45
Grew up speaking Dutch	0.33**	0.15	0.31**	0.15	0.31**	0.15	0.23	0.15
Prim. Education	-0.97**	0.21	-1.02**	0.22	-1.01**	0.21	-0.99**	0.22
Lower voc./prof.	-0.54**	0.17	-0.61**	0.18	-0.65**	0.18	-0.60**	0.18
Higher sec./middle voc.	-0.08	0.15	-0.07	0.15	-0.05	0.15	-0.12	0.14
Age at migration	-0.78**	0.20	-0.79**	0.19	-0.82**	0.18	-0.77**	0.18
Sqr. Of age at migr.	0.08*	0.04	0.06	0.04	0.07	0.04	0.07*	0.04
Age			0.22**	0.07	0.23**	0.07	0.13*	0.07
Female			-0.08	0.13	-0.05	0.13	-0.07	0.13
# Children					0.03	0.08	0.01	0.08
couple without children					-0.43**	0.19	-0.38*	0.20
Couple with children					-0.29	0.23	-0.26	0.23
Lone parent					-0.26	0.30	-0.20	0.30
Other household					-1.10**	0.54	-1.10**	0.54
Only Dutch Nat.							0.68**	0.16
Only Other Nat.							0.54**	0.19
Only Dutch population group								
Only other pop. Group								
Speak Dutch at home								
Extremely urban								
Very urban								
moderately urban								
slightly urban								
Intercept	0.41	0.36	-0.37	0.41	-0.15	0.43	-0.29	0.45
Likelihood Value	-603.7		-592.2		-584.8		-566.3	
Pseudo R2	0.30		0.31		0.32		0.34	

Reference categories dummy variables: Asia; Higher professional/vocational training, university; Single;
   Not urban; Both Dutch and other nationality; Both Dutch and other population group.

**/*: significant at 5/10 % level; standard errors adjusted for clustering.

Table C: Probit regressions literacy for sample of migrants (continued)
$22 < \text{age} < 65$, NT=1303

Variable	Coef.	Std.	Coef.	Std.	Coef.	Std.
Turkey	0.90**	0.30	0.96**	0.29	0.86**	0.29
Moroccan	0.80**	0.31	0.84**	0.30	0.85**	0.31
Dutch Antilles	1.96**	0.28	2.02**	0.29	1.97**	0.28
Suriname	2.25**	0.34	2.01**	0.32	2.13**	0.33
Indonesia	0.69**	0.34	0.74**	0.35	0.74**	0.34
German/Scand.	1.68**	0.41	1.59**	0.40	1.68**	0.41
English	0.84**	0.40	0.79**	0.39	0.85**	0.39
Latin, western	1.45**	0.36	1.40**	0.34	1.53**	0.34
Latin, nonwestern	1.24**	0.28	1.26**	0.28	1.37**	0.29
English 2nd lang.	0.57**	0.29	0.68**	0.28	0.64**	0.29
Africa	0.77	0.50	0.76	0.49	0.86*	0.47
Eastern Europe	1.17**	0.27	1.16**	0.27	1.29**	0.29
Middle East	0.86**	0.34	0.90**	0.34	0.88**	0.34
Linguistic Distance	1.81	1.28	1.87	1.24	1.85	1.26
Linguistic Distance squared	-1.83	1.36	-1.94	1.31	-1.91	1.33
Grew up speaking Dutch	0.19	0.16	0.20	0.16	0.36**	0.15
Prim. Education	-0.96**	0.21	-0.96**	0.21	-0.99**	0.21
Lower voc./prof.	-0.64**	0.18	-0.63**	0.17	-0.65**	0.18
Higher sec./middle voc.	-0.06	0.15	-0.03	0.15	-0.04	0.15
Age at migration	-0.79**	0.18	-0.79**	0.19	-0.82**	0.19
Sqr. Of age at migr.	0.07	0.04	0.07*	0.04	0.07*	0.04
Age	0.19**	0.07	0.19**	0.07	0.24**	0.07
Female	-0.09	0.13	-0.10	0.13	-0.06	0.13
# Children	0.06	0.08	0.06	0.09	0.04	0.09
couple without children	-0.43**	0.20	-0.43**	0.19	-0.40**	0.19
Couple with children	-0.33	0.24	-0.35	0.23	-0.27	0.23
Lone parent	-0.26	0.30	-0.29	0.30	-0.24	0.30
Other household	-0.99**	0.54	-1.03*	0.55	-1.02*	0.53
Only Dutch Nat.						
Only Other Nat.						
Only Dutch population grou	0.09	0.19				
Only other pop. Group	-0.36**	0.15				
Speak Dutch at home			0.50**	0.13		
Extremely urban					-0.15	0.30
Very urban					-0.19	0.28
moderately urban					-0.45	0.30
slightly urban					-0.10	0.33
Intercept	0.11	0.45	-0.36	0.44	-0.07	0.55
Likelihood Value	-576.1		-572.7		-579.9	
Pseudo R2	0.33		0.33		0.32	

Reference categories dummy variables: Asia; Higher professional/vocational training, university; Single;
   Not urban; Both Dutch and other nationality; Both Dutch and other population group.
**/*: significant at 5/10 % level; standard errors adjusted for clustering.

Table D: Probit regressions Fluency and literacy
Subsample of migrants attached to the labour force, $NT =723$

Variable	fluency		literacy	
	Coef.	Std.	Coef.	Std.
Turkey	0.72**	0.37	0.77**	0.32
Moroccan	0.94**	0.37	0.84**	0.35
Dutch Antilles	1.35**	0.39	2.11**	0.36
Suriname	1.85**	0.40	2.36**	0.38
Indonesia	0.57	0.43	0.70*	0.40
German/Scand.	1.29**	0.50	1.81**	0.53
English	0.92*	0.50	1.28**	0.51
Latin, western	1.56**	0.38	1.98**	0.41
Latin, nonwestern	1.32**	0.38	1.59**	0.32
English 2nd lang.	0.34	0.41	0.76**	0.36
Africa	0.89	0.57	0.69	0.48
Eastern Europe	1.10**	0.36	1.42**	0.33
Middle East	1.09**	0.42	0.82**	0.39
Linguistic distance	2.15	1.41	1.45	1.55
Linguistic distance squared	-2.24	1.49	-1.41	1.64
Grew up speaking Dutch	0.65**	0.20	0.21	0.19
Prim. Education	-0.63**	0.27	-1.40**	0.30
Lower voc./prof.	-0.62**	0.20	-0.90**	0.22
Higher sec./middle voc.	-0.19**	0.17	-0.02	0.17
Age at migration	-1.07**	0.23	-1.00**	0.24
Sqr. Of age at migr.	0.10**	0.05	0.10*	0.06
Age	0.22**	0.08	0.30**	0.09
Female	0.32**	0.14	0.02	0.15
# Children	-0.08	0.12	-0.03	0.12
couple without children	-0.10	0.24	-0.33	0.24
Couple with children	0.00	0.28	-0.16	0.28
Lone parent	-0.69**	0.35	-0.35	0.34
Other household	-0.86	0.76	-0.77	0.72
Intercept	-0.23	0.54	-0.39	0.52
Likelihood Value	-413.65		-397.60	
Pseudo R2	0.35		0.34	

Reference categories dummy variables:

Asia; Higher professional/vocational training, university; Single.

**/*: significant at 5/10 % level; standard errors adjusted for clustering.

Table E: Response to job satisfaction and job suitability questions
of migrants, 22<age<65, with paid job

Both men and women:							
Response category	Satisfaction Wage	Satisfaction type of work	Satisfaction hours	Satisfaction career	Fit education and work	Fit abilities work	Job performance
0	4.5	2.9	0.7	2.1	12.4	5.6	0.6
1	1.2	0.6	0.4	1.1	3.6	1.9	1.4
2	4.5	1.3	2.3	2.0	5.6	1.8	1.0
3	6.1	2.6	1.7	2.3	2.8	3.0	1.8
4	6.3	2.0	2.4	3.3	6.6	4.7	3.2
5	13.3	8.0	8.1	9.0	7.4	6.6	4.6
6	13.8	9.3	11.3	14.3	11.7	10.2	5.5
7	20.8	19.5	21.3	23.9	15.7	18.1	12.4
8	19.5	28.1	27.6	26.3	17.9	26.4	20.4
9	7.2	16.1	13.7	10.4	8.2	13.9	21.6
10	3.0	9.7	10.4	5.3	8.2	7.8	27.7
Nobs	694	701	700	700	728	728	726

Men only:							
Response category	Satisfaction wage	Satisfaction type of work	Satisfaction hours	Satisfaction career	Fit education and work	Fit abilities work	Job performance
0	3.2	2.0	0.3	1.4	9.3	4.4	0.3
1	0.9	0.3	0.0	0.9	4.4	1.1	1.6
2	3.5	1.1	2.3	2.3	4.1	1.6	1.4
3	5.8	2.3	0.9	1.7	3.3	3.6	2.5
4	6.3	2.3	3.4	4.0	6.3	3.6	2.7
5	15.0	8.8	9.7	10.2	7.7	7.1	3.8
6	13.0	10.2	10.0	14.7	13.7	8.7	5.5
7	18.4	21.0	20.2	22.4	18.3	18.9	12.6
8	19.6	24.9	28.8	24.4	18.3	29.0	17.5
9	10.1	17.6	13.1	11.9	7.7	15.0	22.5
10	4.3	9.6	11.4	6.2	7.1	7.1	29.6
Nobs	347	353	351	353	366	366	365

Women only:							
Response category	Satisfaction Wage	Satisfaction type of work	Satisfaction hours	Satisfaction career	Fit education and work	Fit abilities work	Job performance
0	5.8	3.7	1.2	2.9	15.5	6.9	0.8
1	1.4	0.9	0.9	1.4	2.8	2.8	1.1
2	5.5	1.4	2.3	1.7	7.2	1.9	0.6
3	6.3	2.9	2.6	2.9	2.2	2.5	1.1
4	6.3	1.7	1.4	2.6	6.9	5.8	3.6
5	11.5	7.2	6.6	7.8	7.2	6.1	5.3
6	14.7	8.3	12.6	13.8	9.7	11.6	5.5
7	23.1	18.1	22.4	25.4	13.0	17.4	12.2
8	19.3	31.3	26.4	28.2	17.4	23.8	23.3
9	4.3	14.7	14.3	8.9	8.8	12.7	20.8
10	1.7	9.8	9.5	4.3	9.4	8.6	25.8
Nobs	347	348	349	347	362	362	361

Table F: Regressions for satisfaction of migrants with job characteristics and fit between education/skills and jobs, including fluency ('speak')

Variable:	Satisfaction wage		Satisfaction type of work		Satisfaction worktime		Satisfaction career		Fit education and work		Fit abilities work		Job performance	
	Coef.	Std.	Coef.	Std.	Coef.	Std.	Coef.	Std.	Coef.	Std.	Coef.	Std.	Coef.	Std.
Speak	0.08	0.13	0.15	0.13	-0.04	0.11	0.22*	0.13	0.25**	0.13	0.18	0.13	0.29**	0.11
Turkey	-0.02	0.31	-0.57	0.28	-0.21	0.25	-0.52*	0.29	-0.04	0.26	-0.45*	0.26	-0.04	0.27
Moroccan	0.13	0.34	-0.07	0.33	-0.19	0.32	-0.26	0.31	0.05	0.32	-0.14	0.30	0.03	0.34
Dutch Antilles	0.22	0.31	0.25	0.26	-0.18	0.27	0.03	0.29	0.29	0.27	0.09	0.26	-0.17	0.27
Suriname	0.10	0.31	0.10	0.27	0.16	0.25	0.05	0.28	0.47*	0.27	0.11	0.25	0.17	0.26
Indonesia	-0.16	0.34	-0.53*	0.31	-0.31	0.30	-0.60*	0.33	0.06	0.28	-0.32	0.30	-0.40	0.30
German/Scand.	0.20	0.31	-0.03	0.30	0.07	0.26	-0.19	0.32	0.70**	0.32	0.08	0.31	0.35	0.27
English	0.11	0.32	-0.01	0.28	-0.40	0.25	-0.26	0.27	0.36	0.25	0.06	0.24	-0.10	0.28
Latin	0.03	0.31	-0.14	0.28	-0.20	0.24	-0.25	0.29	0.13	0.29	-0.25	0.27	-0.10	0.29
English 2nd lang.	-0.05	0.33	-0.25	0.27	-0.17	0.26	0.04	0.29	0.23	0.35	-0.38	0.29	-0.45	0.27
Africa	-0.17	0.32	-0.28	0.30	-0.55*	0.30	-0.22	0.30	-0.22	0.40	-0.31	0.35	0.01	0.28
Eastern Europe	0.18	0.29	0.07	0.30	0.00	0.25	0.12	0.30	0.20	0.30	0.03	0.26	0.05	0.28
Middle East	-0.30	0.38	-0.75**	0.37	0.02	0.36	-0.66*	0.39	-0.60**	0.29	-0.82**	0.32	0.11	0.34
Prim. Education	-0.45*	0.25	-0.03	0.22	-0.27	0.25	-0.19	0.22	-0.45**	0.23	-0.07	0.22	-0.16	0.20
Lower voc./prof.	-0.16	0.16	-0.31	0.15	-0.16	0.15	-0.23	0.14	-0.67	0.16	-0.34**	0.15	0.01	0.14
Higher sec./middle voc.	-0.05	0.13	-0.10	0.13	-0.12	0.12	-0.14	0.13	-0.07	0.12	-0.06	0.12	-0.13	0.11
Age at migration/10	-0.012*	0.007	-0.008	0.006	-0.014**	0.006	-0.010*	0.006	-0.007	0.005	-0.009*	0.006	0.002	0.005
Age/10	0.012*	0.007	0.016**	0.006	0.004	0.007	0.018**	0.006	0.013**	0.006	0.011**	0.006	0.000	0.005
Female	-0.28*	0.12	-0.12	0.11	-0.10	0.11	-0.14	0.11	-0.13	0.11	-0.21	0.10	-0.11	0.10
# Children	-0.20**	0.09	-0.12	0.10	-0.20**	0.10	-0.07	0.09	0.05	0.09	-0.12	0.09	-0.09	0.09
couple without children	-0.16	0.17	-0.12	0.17	-0.36**	0.16	-0.10	0.18	-0.40**	0.16	-0.15	0.16	-0.02	0.16
Couple with children	0.48**	0.22	0.43**	0.22	0.46**	0.24	0.30	0.21	0.04	0.22	0.35	0.20	0.09	0.21
Lone parent	0.28	0.28	0.42	0.27	0.49	0.30	0.22	0.26	0.18	0.29	0.43	0.26	0.17	0.23
Intercept1	-1.56	0.39	-1.60	0.36	-2.88	0.39	-1.72	0.37	-0.78	0.35	-1.53	0.32	-2.53	0.37
Intercept2	-1.44	0.40	-1.52	0.36	-2.70	0.37	-1.53	0.37	-0.60	0.35	-1.38	0.33	-2.07	0.36
Intercept3	-1.12	0.39	-1.36	0.36	-2.24	0.36	-1.29	0.36	-0.37	0.35	-1.25	0.32	-1.89	0.36
Intercept4	-0.83	0.38	-1.13	0.36	-2.05	0.36	-1.09	0.37	-0.26	0.36	-1.08	0.32	-1.67	0.37
Intercept5	-0.59	0.39	-0.99	0.36	-1.84	0.36	-0.88	0.37	-0.04	0.35	-0.86	0.32	-1.40	0.36
Intercept6	-0.18	0.39	-0.57	0.35	-1.40	0.35	-0.46	0.36	0.19	0.36	-0.60	0.33	-1.13	0.37
Intercept7	0.19	0.39	-0.22	0.35	-0.99	0.35	0.01	0.36	0.53	0.36	-0.27	0.32	-0.88	0.36
Intercept8	0.76	0.39	0.34	0.35	-0.40	0.35	0.66	0.37	0.98	0.35	0.24	0.32	-0.45	0.36
Intercept9	1.54	0.39	1.13	0.36	0.39	0.34	1.51	0.36	1.61	0.36	1.01	0.32	0.10	0.36
Intercept10	2.19	0.39	1.81	0.36	0.97	0.35	2.15	0.38	2.05	0.37	1.66	0.33	0.70	0.36
Nobs =	694		701		700		700		728		728		726	
Likelihood Value	-1465.8		-1344.6		-1334.8		-1353.3		-1580.3		-1490.5		-1343.1	
Pseudo R2	0.02		0.03		0.02		0.03		0.04		0.03		0.02	

Table G: Regressions for satisfaction of migrants with job characteristics and fit between education/skills and jobs, including literacy ('read')

Variable:	Satisfaction wage		Satisfaction type of work		Satisfaction worktime		Satisfaction career		Fit education and work		Fit abilities work		Job performance	
	Coef.	Std.	Coef.	Std.	Coef.	Std.	Coef.	Std.	Coef.	Std.	Coef.	Std.	Coef.	Std.
Read	-0.06	0.14	0.14	0.14	-0.04	0.12	0.06	0.14	0.10	0.13	0.12	0.13	0.47**	0.12
Turkey	0.01	0.31	-0.58**	0.28	-0.21	0.25	-0.49*	0.30	-0.03	0.27	-0.45*	0.26	-0.12	0.27
Moroccan	0.16	0.35	-0.07	0.33	-0.18	0.32	-0.23	0.32	0.07	0.32	-0.14	0.30	-0.02	0.33
Dutch Antilles	0.29	0.32	0.23	0.28	-0.17	0.28	0.09	0.30	0.32	0.27	0.09	0.27	-0.35	0.27
Suriname	0.19	0.32	0.10	0.28	0.16	0.25	0.15	0.29	0.55**	0.27	0.14	0.26	0.03	0.26
Indonesia	-0.12	0.35	-0.55*	0.32	-0.31	0.30	-0.57*	0.34	0.07	0.28	-0.33	0.30	-0.50*	0.29
German/Scand.	0.28	0.32	-0.04	0.31	0.07	0.26	-0.12	0.33	0.75**	0.32	0.09	0.31	0.20	0.28
English	0.16	0.33	-0.02	0.28	-0.40*	0.25	-0.21	0.28	0.38	0.26	0.06	0.25	-0.22	0.28
Latin	0.08	0.32	-0.15	0.29	-0.19	0.24	-0.21	0.31	0.15	0.29	-0.26	0.28	-0.23	0.29
English 2nd lang.	-0.02	0.35	-0.26	0.27	-0.17	0.26	0.05	0.30	0.23	0.36	-0.40	0.29	-0.54**	0.27
Africa	-0.15	0.33	-0.27	0.30	-0.55	0.30	-0.19	0.31	-0.20	0.40	-0.30	0.35	-0.04	0.28
Eastern Europe	0.21	0.31	0.05	0.31	0.00	0.25	0.14	0.31	0.21	0.31	0.01	0.27	-0.07	0.27
Middle East	-0.29	0.39	-0.76**	0.38	0.02	0.36	-0.65*	0.39	-0.60**	0.28	-0.83**	0.33	0.03	0.32
Prim. Education	-0.50**	0.25	-0.02	0.22	-0.28	0.25	-0.23	0.23	-0.47**	0.24	-0.07	0.23	-0.05	0.21
Lower voc./prof.	-0.19	0.17	-0.31	0.15	-0.16	0.15	-0.26*	0.15	-0.69**	0.16	-0.35	0.15	0.07	0.14
Higher sec./middle voc.	-0.05	0.13	-0.11	0.13	-0.11	0.12	-0.15	0.13	-0.08	0.12	-0.07	0.12	-0.14	0.11
Age at migration/10	-0.015	0.007	-0.009*	0.005	-0.013**	0.006	-0.014**	0.005	-0.011**	0.005	-0.011**	0.005	0.003	0.005
Age/10	0.013	0.007	0.016**	0.006	0.004	0.007	0.020**	0.006	0.014**	0.006	0.012**	0.006	0.000	0.005
Female	-0.28	0.12	-0.11	0.11	-0.10	0.11	-0.13	0.11	-0.13	0.11	-0.21**	0.10	-0.10	0.10
# Children	-0.20**	0.09	-0.12	0.10	-0.20**	0.10	-0.08	0.09	0.04	0.09	-0.12	0.09	-0.10	0.09
couple without children	-0.16	0.17	-0.10	0.17	-0.37**	0.16	-0.09	0.17	-0.39**	0.16	-0.14	0.16	0.02	0.16
Couple with children	0.49**	0.22	0.44**	0.22	0.46*	0.24	0.32	0.21	0.06	0.22	0.37*	0.20	0.11	0.21
Lone parent	0.27	0.27	0.41	0.27	0.49	0.30	0.20	0.26	0.16	0.28	0.41	0.25	0.17	0.23
Intercept1	-1.61	0.40	-1.61	0.36	-2.88	0.38	-1.78	0.38	-0.85	0.35	-1.57	0.32	-2.49	0.37
Intercept2	-1.50	0.40	-1.53	0.36	-2.70	0.36	-1.58	0.38	-0.67	0.35	-1.41	0.33	-2.03	0.36
Intercept3	-1.18	0.39	-1.37	0.36	-2.24	0.36	-1.35	0.37	-0.43	0.36	-1.29	0.32	-1.86	0.36
Intercept4	-0.88	0.39	-1.14	0.36	-2.04	0.35	-1.15	0.37	-0.33	0.36	-1.11	0.32	-1.63	0.36
Intercept5	-0.64	0.39	-1.00	0.36	-1.84	0.35	-0.94	0.37	-0.11	0.35	-0.89	0.32	-1.36	0.35
Intercept6	-0.24	0.39	-0.58	0.35	-1.39	0.35	-0.52	0.37	0.12	0.36	-0.63	0.33	-1.09	0.36
Intercept7	0.13	0.39	-0.23	0.35	-0.99	0.35	-0.05	0.37	0.46	0.36	-0.30	0.33	-0.83	0.36
Intercept8	0.70	0.39	0.34	0.35	-0.39	0.35	0.59	0.37	0.91	0.35	0.20	0.32	-0.40	0.36
Intercept9	1.49	0.39	1.13	0.36	0.39	0.34	1.44	0.37	1.53	0.36	0.97	0.32	0.16	0.36
Intercept10	2.13	0.40	1.81	0.36	0.98	0.35	2.08	0.38	1.97	0.37	1.62	0.33	0.76	0.36
Nobs =	694		701		700		700		728		728		726	
Likelihood Value	-1466.0		-1344.8		-1334.8		-1355.6		-1582.8		-1491.5		-1337.3	
Pseudo R2	0.02		0.03		0.02		0.03		0.04		0.03		0.02	

Table G1: Regressions for satisfaction of migrants with job characteristics and fit between education/skills and jobs, including fluency ('speak²')
Results from the simultaneous equations model without random effects

Variable:	Satisfaction wage		Satisfaction type of work		Satisfaction worktime		Satisfaction career		Fit education and work		Fit abilities work		Job performance	
	Coef.	Std.	Coef.	Std.	Coef.	Std.	Coef.	Std.	Coef.	Std.	Coef.	Std.	Coef.	Std.
Speak	0.11	0.15	0.35**	0.10	0.13	0.11	0.37**	0.12	0.27**	0.12	0.17	0.11	0.21	0.17
Turkey	0.11	0.24	-0.29	0.23	-0.11	0.22	-0.37	0.24	-0.08	0.23	-0.15	0.21	-0.07	0.20
Moroccan	0.28	0.27	0.14	0.26	-0.14	0.29	-0.05	0.27	0.02	0.28	0.17	0.27	0.03	0.29
Dutch Antilles	0.28	0.33	0.24	0.27	-0.23	0.29	-0.08	0.31	0.19	0.33	0.46*	0.28	-0.29	0.29
Suriname	0.07	0.39	-0.11	0.31	0.04	0.32	-0.32	0.35	0.23	0.34	0.38	0.29	-0.02	0.38
Indonesia	0.01	0.27	-0.21	0.23	-0.19	0.23	-0.41	0.26	0.15	0.25	0.15	0.24	-0.41*	0.23
German/Scand.	0.19	0.33	-0.19	0.30	-0.08	0.27	-0.44	0.33	0.47	0.35	0.32	0.30	0.20	0.32
English	0.24	0.27	0.04	0.27	-0.47**	0.22	-0.26	0.26	0.32	0.27	0.38*	0.22	-0.21	0.25
Latin	0.15	0.28	-0.08	0.27	-0.15	0.23	-0.33	0.29	0.02	0.30	0.08	0.27	-0.25	0.29
Africa	-0.11	0.28	-0.20	0.35	-0.66**	0.25	-0.28	0.33	-0.33	0.46	0.04	0.40	-0.05	0.24
Eastern Europe	0.35	0.27	0.19	0.27	-0.03	0.23	0.16	0.30	0.28	0.29	0.47	0.22	-0.03	0.23
Prim. Education	-0.33	0.28	0.49**	0.23	-0.08	0.30	0.29	0.28	-0.12	0.29	0.17	0.24	-0.04	0.29
Lower voc./prof.	-0.01	0.22	0.10	0.18	0.04	0.19	0.14	0.19	-0.33	0.21	-0.09	0.18	0.14	0.19
Higher sec./middle voc.	0.01	0.13	0.02	0.15	-0.03	0.13	-0.03	0.15	0.06	0.14	0.10	0.13	-0.11	0.12
Age at migration/10	-0.04	0.13	0.16	0.10	0.00	0.10	0.13	0.11	0.08	0.11	0.01	0.10	0.12	0.14
Age/10	0.10	0.08	0.02	0.08	-0.02	0.08	0.05	0.08	0.01	0.08	0.04	0.07	-0.04	0.08
Female	-0.23**	0.12	-0.05	0.12	-0.10	0.11	-0.08	0.12	-0.07	0.12	-0.11	0.10	-0.05	0.10
# Children	0.20	0.63	1.13*	0.66	1.03*	0.58	1.06	0.65	2.03**	0.62	0.89	0.58	-0.02	0.62
Couple	0.02	0.15	-0.14	0.15	-0.17	0.14	-0.12	0.15	-0.35**	0.15	-0.12	0.13	-0.13	0.14
Intercept1	-1.34**	0.35	-1.37**	0.36	-2.67**	0.36	-1.57**	0.37	-0.89**	0.34	-1.22**	0.30	-2.69**	0.33
Intercept2	-1.26**	0.35	-1.30**	0.36	-2.61**	0.36	-1.38**	0.37	-0.70**	0.34	-1.07**	0.31	-2.28**	0.32
Intercept3	-0.92**	0.35	-1.14**	0.36	-2.13**	0.34	-1.17**	0.36	-0.48	0.34	-0.96**	0.30	-2.08**	0.32
Intercept4	-0.61*	0.34	-0.91**	0.36	-1.93**	0.33	-1.01**	0.36	-0.38	0.35	-0.78**	0.30	-1.88**	0.33
Intercept5	-0.38	0.34	-0.77**	0.35	-1.71**	0.33	-0.82**	0.36	-0.18	0.34	-0.57**	0.30	-1.59**	0.32
Intercept6	0.03	0.34	-0.40	0.34	-1.31**	0.32	-0.44	0.35	0.03	0.34	-0.32	0.30	-1.33**	0.32
Intercept7	0.38	0.34	-0.10	0.34	-0.92**	0.32	0.01	0.35	0.35	0.34	-0.02	0.30	-1.07**	0.32
Intercept8	0.93**	0.34	0.43	0.34	-0.34	0.32	0.63*	0.35	0.79**	0.35	0.48	0.30	-0.62*	0.32
Intercept9	1.70**	0.35	1.18**	0.35	0.44	0.32	1.43**	0.36	1.42**	0.35	1.27**	0.30	-0.04	0.32
Intercept10	2.35**	0.36	1.83**	0.36	1.03**	0.33	2.04**	0.38	1.87**	0.36	1.91**	0.32	0.57*	0.32
ρ	-0.05	0.17	-0.38**	0.11	-0.19	0.13	-0.36**	0.13	-0.24*	0.15	-0.17	0.13	-0.01	0.21
Nobs =	690		691		691		691		679		679		679	
Likelihood Value	-1628.0		-1512.7		-1503.0		-1519.9		-1720.0		-1631.2		-1491.0	

Table G2: Regressions for fluency ('speak')
Results from the simultaneous equations model without random effects

Variable:	Satisfaction wage		Satisfaction type of work		Satisfaction worktime		Satisfaction career		Fit education and work		Fit abilities work		Job performance	
	Coef.	Std.	Coef.	Std.	Coef.	Std.	Coef.	Std.	Coef.	Std.	Coef.	Std.	Coef.	Std.
Female	0.00	0.16	0.03	0.16	0.02	0.16	0.04	0.16	-0.02	0.16	-0.02	0.16	-0.01	0.16
Turkey	0.62*	0.33	0.58*	0.32	0.58*	0.33	0.55*	0.32	0.65*	0.33	0.63*	0.34	0.56	0.35
Moroccan	0.12	0.36	0.13	0.35	0.12	0.36	0.08	0.35	0.09	0.37	0.10	0.37	0.08	0.36
Dutch Antilles	1.00**	0.41	0.95**	0.38	1.03**	0.39	0.88**	0.38	0.96**	0.40	1.00**	0.41	1.06**	0.40
Suriname	1.34	0.40	1.38**	0.40	1.38**	0.39	1.37**	0.40	1.29**	0.39	1.32**	0.40	1.37**	0.42
Indonesia	0.23	0.42	0.27	0.42	0.26	0.42	0.26	0.42	0.20	0.42	0.23	0.42	0.22	0.44
German/Scand.	0.91*	0.50	0.85**	0.43	0.96**	0.46	0.96**	0.47	1.02**	0.50	0.98**	0.50	1.00**	0.51
English	0.49	0.45	0.41	0.40	0.52	0.41	0.50	0.41	0.54	0.44	0.51	0.45	0.54	0.45
Latin	0.83**	0.30	0.83**	0.29	0.83**	0.29	0.90**	0.30	0.86**	0.31	0.86**	0.31	0.89**	0.32
Africa	0.35	0.65	0.54	0.67	0.52	0.67	0.57	0.67	0.21	0.68	0.18	0.68	0.19	0.68
Eastern Europe	0.65**	0.31	0.63**	0.30	0.63**	0.31	0.65**	0.31	0.69**	0.32	0.68**	0.32	0.69**	0.32
Linguistic Distance	2.00	2.18	2.64**	1.30	1.83	1.57	2.72*	1.42	1.98	1.59	1.79	1.69	1.33	1.64
Linguistic Distance squared	-1.89	2.14	-2.47*	1.36	-1.72	1.61	-2.38	1.49	-1.80	1.67	-1.73	1.79	-1.30	1.75
Grew up speaking Dutch	0.60**	0.26	0.58**	0.21	0.55**	0.22	0.76**	0.20	0.75**	0.22	0.65**	0.23	0.53*	0.28
Age/10	0.24	0.11	0.25**	0.10	0.24**	0.10	0.25**	0.10	0.24**	0.11	0.24**	0.11	0.26**	0.11
Prim. Education	-0.60	0.38	-0.61*	0.37	-0.61	0.37	-0.67*	0.37	-0.64*	0.38	-0.59	0.38	-0.56	0.39
Lower voc./prof.	-0.51**	0.24	-0.50**	0.24	-0.49**	0.24	-0.56**	0.24	-0.55**	0.25	-0.48**	0.24	-0.42*	0.24
Higher sec./middle voc.	0.08	0.21	0.09	0.21	0.09	0.21	0.06	0.21	0.04	0.20	0.07	0.20	0.10	0.20
Couple	0.38	0.21	0.38*	0.21	0.38*	0.21	0.38*	0.21	0.40	0.21	0.41**	0.21	0.41**	0.20
# Children	-1.23	0.95	-1.36	0.95	-1.33	0.94	-1.41	0.95	-1.23	0.96	-1.22	0.95	-1.16	0.95
Age at migration/10	-0.55**	0.10	-0.57**	0.10	-0.55**	0.10	-0.57***	0.10	-0.54	0.11	-0.55**	0.11	-0.58***	0.12
wschat3	0.37	0.22	0.33*	0.19	0.29	0.21	0.40**	0.19	0.42**	0.21	0.37*	0.21	0.40*	0.23
wschat4	0.77**	0.24	0.71**	0.21	0.67**	0.23	0.72**	0.22	0.82**	0.23	0.75**	0.23	0.73**	0.23
wschat5	0.80**	0.31	0.89**	0.24	0.80**	0.27	0.79**	0.25	0.78**	0.28	0.85**	0.29	1.03**	0.33
begrsnel4	0.35**	0.17	0.37**	0.14	0.39**	0.16	0.36**	0.15	0.25	0.19	0.37**	0.17	0.44**	0.18
begrsnel5	0.65**	0.27	0.58**	0.25	0.66**	0.25	0.53**	0.25	0.56**	0.28	0.70**	0.26	0.78**	0.29
nethhome	0.71**	0.21	0.60**	0.19	0.66**	0.20	0.52**	0.21	0.65**	0.20	0.63**	0.22	0.63**	0.26
Intercept	-2.12**	0.56	-2.11**	0.54	-2.05**	0.55	-2.24**	0.55	-2.16**	0.60	-2.11**	0.58	-2.13**	0.60

Table H1: Regressions for satisfaction of migrants with job characteristics and fit between education/skills and jobs, including fluency ('speak'), males only

Results from the simultaneous equations model without random effects

Variable:	Satisfaction wage		Satisfaction type of work		Satisfaction worktime		Satisfaction career		Fit education and work		Fit abilities work		Job performance	
	Coef.	Std.	Coef.	Std.	Coef.	Std.	Coef.	Std.	Coef.	Std.	Coef.	Std.	Coef.	Std.
Speak	0.20	0.41	0.46**	0.12	0.40**	0.20	0.49**	0.19	0.47**	0.16	0.28	0.21	0.16	0.40
Turkey	0.23	0.36	0.17	0.34	0.17	0.33	0.12	0.38	-0.01	0.34	-0.40	0.34	-0.02	0.37
Moroccan	0.19	0.36	0.19	0.38	-0.16	0.50	0.15	0.42	-0.23	0.40	-0.01	0.41	0.09	0.38
Dutch Antilles	0.05	0.71	-0.09	0.49	-0.80	0.50	-0.16	0.53	0.04	0.52	0.17	0.53	-0.62	0.59
Suriname	-0.04	0.66	-0.16	0.40	-0.34	0.49	-0.32	0.48	0.08	0.42	0.25	0.42	0.07	0.51
Indonesia	-0.01	0.38	-0.10	0.32	-0.18	0.34	-0.30	0.35	0.32	0.31	0.23	0.29	-0.48	0.34
German/Scand.	-0.07	0.50	0.00	0.42	0.09	0.48	-0.23	0.47	0.64	0.44	0.13	0.37	0.31	0.47
English	0.46	0.32	0.21	0.34	-0.29	0.31	0.09	0.33	0.55	0.34	0.45	0.29	-0.05	0.28
Latin	0.14	0.58	-0.01	0.33	-0.21	0.33	-0.33	0.40	-0.15	0.40	-0.01	0.40	-0.15	0.53
Africa	0.13	0.45	-0.41	0.52	-0.62	0.41	-0.21	0.50	-1.13	0.56	-0.63	0.69	-0.01	0.29
Eastern Europe	0.28	0.50	0.33	0.46	0.15	0.38	0.23	0.51	0.32	0.43	0.57*	0.30	-0.10	0.31
Prim. Education	-0.24	0.75	0.70**	0.32	0.41	0.43	0.53	0.42	0.64*	0.38	0.69**	0.35	-0.14	0.64
Lower voc./prof.	-0.19	0.43	0.17	0.29	0.21	0.31	0.27	0.30	-0.21	0.28	0.23	0.26	0.03	0.37
Higher sec./middle voc.	0.06	0.22	0.06	0.23	0.06	0.19	0.00	0.24	0.17	0.22	0.23	0.19	-0.13	0.18
Age at migration/10	0.02	0.39	0.28*	0.15	0.23	0.21	0.25	0.20	0.26	0.18	0.07	0.21	0.10	0.39
Age/10	0.11	0.12	-0.04	0.11	0.04	0.12	0.07	0.12	0.00	0.12	-0.05	0.10	0.03	0.11
# Children	0.66	1.21	1.18	0.93	1.65*	0.99	1.33	0.95	2.51**	0.91	1.34	0.90	-0.24	1.16
Couple	-0.21	0.32	-0.24	0.24	-0.52	0.26	-0.15	0.26	-0.28	0.21	0.00	0.24	-0.17	0.31
Intercept1	-1.26*	0.76	-1.24**	0.59			-0.90	0.65	-0.48	0.56	-1.35**	0.58	-2.79**	0.70
Intercept2	-1.14	0.76	-1.19**	0.59			-0.75	0.64	-0.18	0.56	-1.25**	0.58	-2.07**	0.65
Intercept3	-0.83	0.74	-1.01*	0.58			-0.51	0.62	0.03	0.56	-1.11**	0.56	-1.83**	0.65
Intercept4	-0.49	0.71	-0.78	0.57	-1.24**	0.59	-0.39	0.61	0.16	0.55	-0.84	0.55	-1.61**	0.66
Intercept5	-0.26	0.71	-0.61	0.55	-0.90	0.57	-0.14	0.60	0.38	0.54	-0.64	0.54	-1.38**	0.68
Intercept6	0.20	0.68	-0.20	0.53	-0.46	0.52	0.25	0.57	0.59	0.53	-0.34	0.53	-1.15*	0.70
Intercept7	0.53	0.66	0.09	0.52	-0.16	0.50	0.66	0.56	0.96*	0.52	-0.07	0.52	-0.90	0.71
Intercept8	1.01	0.63	0.60	0.51	0.36	0.49	1.21**	0.54	1.45**	0.51	0.45	0.49	-0.45	0.71
Intercept9	1.68**	0.60	1.18**	0.50	1.11**	0.47	1.84**	0.54	2.05**	0.50	1.30**	0.46	0.06	0.72
Intercept10	2.38**	0.56	1.83**	0.50	1.60**	0.49	2.41**	0.55	2.45**	0.51	1.97**	0.48	0.67	0.72
ρ	-0.20	0.46	-0.58**	0.12	-0.56**	0.18	-0.57**	0.19	-0.52**	0.18	-0.34	0.23	0.03	0.48
Nobs =	354		354		354		354		349		349		349	
Likelihood Value	-810.2		-746.9		-708.3		-759.4		-826.7		-781.7		-748.9	

Table H2: Regressions for fluency ('speak'), males only
Results from the simultaneous equations model without random effects

Variable:	Satisfaction wage		Satisfaction type of work		Satisfaction worktime		Satisfaction career		Fit education and work		Fit abilities work		Job performance	
	Coef.	Std.	Coef.	Std.	Coef.	Std.	Coef.	Std.	Coef.	Std.	Coef.	Std.	Coef.	Std.
Turkey	0.17	0.63	0.07	0.48	-0.10	0.54	-0.06	0.51	0.05	0.49	0.13	0.54	0.20	0.66
Moroccan	-0.18	0.62	-0.13	0.51	-0.21	0.51	-0.23	0.51	-0.40	0.53	-0.29	0.56	-0.22	0.57
Dutch Antilles	0.57	0.55	0.61	0.53	0.79	0.55	0.45	0.54	0.23	0.54	0.38	0.55	0.60	0.61
Suriname	0.64	0.68	0.77	0.55	0.98*	0.58	0.73	0.56	0.43	0.53	0.43	0.54	0.36	0.56
Indonesia	0.30	0.52	0.33	0.51	0.48	0.51	0.34	0.50	0.09	0.51	0.17	0.53	0.12	0.64
German/Scand.	0.53	0.82	0.46	0.60	0.61	0.64	0.44	0.66	0.71	0.68	0.52	0.71	0.49	0.91
English	-0.05	0.71	-0.11	0.58	-0.05	0.52	-0.19	0.59	-0.13	0.59	-0.20	0.65	-0.20	0.79
Latin	0.82*	0.47	0.76*	0.44	0.75*	0.44	0.83*	0.45	0.85*	0.46	0.86*	0.46	0.89*	0.47
Africa	0.15	0.82	0.06	0.81	0.23	0.80	0.14	0.77	0.06	0.80	0.15	0.81	0.15	0.83
Eastern Europe	0.44	0.52	0.41	0.44	0.38	0.48	0.41	0.44	0.40	0.45	0.39	0.47	0.46	0.49
Linguistic Distance	2.27	2.75	3.21**	1.53	3.02*	1.54	3.10*	1.68	1.63	1.68	2.11	1.90	1.60	2.62
Linguistic Distance squared	-2.16	2.74	-3.02*	1.67	-2.63	1.76	-2.87	1.89	-1.47	1.82	-2.19	2.11	-1.95	3.03
Grew up speaking Dutch	0.71**	0.33	0.66**	0.28	0.61**	0.26	0.83**	0.27	1.04**	0.27	0.86**	0.29	0.72*	0.39
Age/10	0.06	0.16	0.08	0.15	0.07	0.15	0.10	0.15	0.11	0.15	0.09	0.16	0.10	0.16
Prim. Education	-0.92	0.59	-0.89*	0.52	-0.90*	0.52	-0.99*	0.53	-1.01*	0.52	-0.94*	0.53	-0.90*	0.54
Lower voc./prof.	-0.48	0.38	-0.41	0.31	-0.47	0.33	-0.46	0.33	-0.45	0.34	-0.39	0.32	-0.35	0.33
Higher sec./middle voc.	0.02	0.31	0.06	0.28	0.02	0.28	0.03	0.28	0.06	0.28	0.05	0.29	0.10	0.30
Couple	0.34	0.33	0.39	0.33	0.42	0.33	0.42	0.33	0.43	0.34	0.42	0.35	0.39	0.38
# Children	-1.24	1.33	-1.13	1.26	-0.89	1.31	-1.13	1.28	-1.53	1.30	-1.47	1.28	-1.36	1.38
Age at migration/10	-0.67**	0.21	-0.69**	0.14	-0.75**	0.16	-0.71**	0.15	-0.65**	0.15	-0.65**	0.16	-0.66**	0.18
wschat3	0.48	0.37	0.38	0.24	0.43	0.27	0.54**	0.25	0.54**	0.28	0.53	0.33	0.57	0.35
wschat4	0.71**	0.34	0.63**	0.24	0.53*	0.31	0.80**	0.29	0.87**	0.30	0.68**	0.30	0.60	0.39
wschat5	0.60	0.74	0.95**	0.30	0.91**	0.38	0.77**	0.35	0.85**	0.41	0.76	0.46	1.01**	0.50
begrsnel4	0.51**	0.21	0.37*	0.20	0.57**	0.20	0.34	0.22	0.09	0.26	0.43*	0.23	0.54	0.44
begrsnel5	0.41	0.34	0.35	0.28	0.40	0.25	0.28	0.26	0.10	0.32	0.59*	0.36	0.48	0.64
nethhome	0.73	0.46	0.62**	0.23	0.50	0.33	0.32	0.33	0.43	0.29	0.52	0.36	0.68	0.66
Intercept	-0.81	0.83	-0.86	0.75	-0.85	0.79	-0.80	0.82	-0.78	0.87	-0.78	0.82	-0.71	0.93

Table I1: Regressions for satisfaction of migrants with job characteristics and fit between education/skills and jobs, including fluency ('speak'), females only

Results from the simultaneous equations model without random effects

Variable:	Satisfaction wage		Satisfaction type of work		Satisfaction worktime		Satisfaction career		Fit education and work		Fit abilities work		Job performance	
	Coef.	Std.	Coef.	Std.	Coef.	Std.	Coef.	Std.	Coef.	Std.	Coef.	Std.	Coef.	Std.
Speak	-0.32	0.25	0.16	0.22	-0.03	0.16	0.09	0.34	0.06	0.18	-0.05	0.15	0.33*	0.19
Turkey	0.52	0.40	-0.57*	0.34	0.00	0.31	-0.64	0.41	0.28	0.36	0.37	0.37	-0.12	0.38
Moroccan	0.87**	0.43	0.31	0.42	0.15	0.38	-0.07	0.40	0.66	0.42	0.71*	0.38	-0.07	0.50
Dutch Antilles	1.03**	0.52	0.70*	0.41	0.17	0.37	0.23	0.62	0.50	0.48	1.02**	0.39	-0.13	0.40
Suriname	1.28	0.80	0.24	0.71	0.35	0.55	0.24	1.00	0.84	0.65	1.11**	0.52	-0.45	0.68
Indonesia	0.10	0.45	-0.41	0.33	-0.33	0.43	-0.46	0.42	0.12	0.40	0.26	0.37	-0.45	0.34
German/Scand.	1.16**	0.56	-0.09	0.55	-0.13	0.39	-0.14	0.75	0.71	0.55	0.84*	0.47	-0.05	0.51
English	0.40	0.54	-0.03	0.51	-0.48	0.37	-0.43	0.61	0.37	0.45	0.58	0.37	-0.64	0.43
Latin	0.66	0.41	-0.08	0.38	-0.15	0.33	-0.17	0.48	0.21	0.40	0.35	0.35	-0.43	0.40
Africa	-0.02	0.72	0.33	0.44	-0.46	0.46	0.08	0.44	0.74	0.64	0.91**	0.37	-0.15	0.49
Eastern Europe	0.78**	0.38	0.15	0.38	-0.18	0.32	0.28	0.45	0.39	0.43	0.66**	0.35	-0.05	0.37
Prim. Education	-0.64	0.40	0.37	0.36	-0.36	0.48	0.20	0.41	-0.86**	0.33	-0.39	0.28	0.02	0.36
Lower voc./prof.	-0.16	0.30	-0.09	0.25	-0.12	0.25	-0.08	0.32	-0.27	0.29	-0.27	0.26	0.23	0.25
Higher sec./middle voc.	-0.19	0.17	-0.10	0.19	-0.24	0.16	-0.07	0.18	-0.01	0.19	0.01	0.18	-0.10	0.16
Age at migration/10	-0.30*	0.18	0.04	0.17	-0.07	0.12	0.00	0.22	0.03	0.15	-0.06	0.14	0.20	0.14
Age/10	0.28**	0.13	0.17	0.12	0.00	0.11	0.13	0.15	0.06	0.12	0.16	0.11	-0.09	0.11
# Children	-0.49	1.07	0.86	1.11	0.17	0.82	0.50	1.14	1.36	1.05	0.22	0.96	0.09	0.92
Couple	0.17	0.19	0.00	0.19	0.06	0.19	-0.09	0.19	-0.46**	0.20	-0.17	0.18	-0.13	0.17
Intercept1	-0.40	0.63	-1.02*	0.56	-2.53**	0.57	-1.61**	0.67	-0.65	0.57	-0.59	0.52	-2.65	0.47
Intercept2	-0.35	0.62	-0.94*	0.56	-2.44**	0.57	-1.40**	0.67	-0.52	0.57	-0.40	0.53	-2.45	0.45
Intercept3	-0.03	0.59	-0.78	0.57	-2.07**	0.58	-1.21*	0.67	-0.25	0.57	-0.30	0.52	-2.31	0.47
Intercept4	0.22	0.57	-0.53	0.56	-1.80**	0.55	-1.01	0.65	-0.19	0.57	-0.18	0.52	-2.15	0.46
Intercept5	0.44	0.55	-0.41	0.56	-1.68**	0.55	-0.87	0.64	0.02	0.56	0.06	0.51	-1.77	0.46
Intercept6	0.76	0.53	-0.04	0.55	-1.33**	0.54	-0.51	0.62	0.24	0.57	0.27	0.51	-1.46	0.46
Intercept7	1.10**	0.51	0.27	0.55	-0.86	0.53	-0.03	0.59	0.51	0.56	0.62	0.50	-1.18	0.46
Intercept8	1.69**	0.49	0.80	0.54	-0.28	0.52	0.67	0.56	0.87	0.56	1.12**	0.50	-0.74	0.47
Intercept9	2.55**	0.48	1.76**	0.55	0.47	0.50	1.66**	0.54	1.52**	0.56	1.85**	0.50	-0.07	0.48
Intercept10	3.09**	0.52	2.41**	0.57	1.11**	0.50	2.29**	0.57	1.99**	0.56	2.44**	0.49	0.56	0.49
ρ	0.49**	0.22	-0.09	0.23	0.08	0.17	0.09	0.37	0.05	0.20	0.11	0.17	-0.14	0.23
Nobs =	336		337		337		337		330		330		330	
Likelihood Value	-781.0		-728.1		-745.6		-729.3		-837.9		-810.4		-715.2	

Table I2: Regressions for fluency ('speak'), females only
Results from the simultaneous equations model without random effects

Variable:	Satisfaction wage		Satisfaction type of work		Satisfaction worktime		Satisfaction career		Fit education and work		Fit abilities work		Job performance	
	Coef.	Std.	Coef.	Std.	Coef.	Std.	Coef.	Std.	Coef.	Std.	Coef.	Std.	Coef.	Std.
Turkey	0.69	0.48	0.91**	0.44	0.86*	0.44	0.91**	0.46	0.95**	0.50	0.91*	0.49	0.87*	0.49
Moroccan	0.20	0.54	0.31	0.57	0.27	0.56	0.31	0.56	0.35	0.60	0.33	0.59	0.32	0.58
Dutch Antilles	1.64**	0.58	1.28**	0.54	1.38**	0.56	1.33**	0.57	1.60**	0.58	1.66**	0.61	1.48**	0.57
Suriname	2.78**	0.66	2.27**	0.61	2.39**	0.60	2.32**	0.66	2.41**	0.61	2.49**	0.61	2.50**	0.65
Indonesia	0.25	0.65	0.19	0.61	0.19	0.61	0.19	0.61	0.18	0.63	0.18	0.64	0.20	0.66
German/Scand.	2.16**	0.84	1.21	0.75	1.52*	0.83	1.31*	0.75	1.71*	0.88	1.83**	0.88	1.39*	0.73
English	1.87**	0.83	1.06	0.79	1.34	0.83	1.22	0.81	1.48	0.86	1.59*	0.86	1.13	0.78
Latin	1.09**	0.46	1.04**	0.44	1.09**	0.45	1.06**	0.44	1.14**	0.50	1.16**	0.50	1.09**	0.50
Africa	0.68	0.87	1.02	0.92	1.03	0.91	1.04	0.90	0.39	0.90	0.36	0.90	0.36	0.88
Eastern Europe	1.00**	0.48	0.96	0.46	1.00**	0.47	0.99**	0.46	1.16**	0.51	1.15**	0.50	1.00**	0.50
Linguistic Distance	-3.15	2.73	1.92	2.69	0.62	2.79	1.43	3.58	0.32	3.12	-0.42	2.84	1.03	2.19
Linguistic Distance squared	3.36	2.75	-1.56	2.75	-0.24	2.90	-1.03	3.39	0.09	3.21	0.80	2.96	-0.69	2.29
Grew up speaking Dutch	0.18	0.45	0.64*	0.34	0.62*	0.33	0.65	0.52	0.72*	0.38	0.66*	0.38	0.45	0.44
Age/10	0.33	0.14	0.37**	0.13	0.35**	0.13	0.37**	0.13	0.37	0.14	0.37**	0.14	0.41	0.14
Prim. Education	-0.39	0.43	-0.28	0.43	-0.32	0.42	-0.31	0.44	-0.32	0.43	-0.32	0.43	-0.25	0.43
Lower voc./prof.	-0.43	0.38	-0.37	0.38	-0.37	0.38	-0.34	0.38	-0.54	0.38	-0.53	0.38	-0.42	0.37
Higher sec./middle voc.	0.14	0.33	0.25	0.33	0.26	0.32	0.28	0.34	0.12	0.31	0.11	0.32	0.12	0.31
Couple	0.36	0.26	0.42	0.26	0.41	0.27	0.40	0.26	0.49*	0.28	0.48*	0.28	0.48*	0.28
# Children	-1.34	1.29	-1.96	1.36	-1.82	1.32	-1.81	1.34	-1.34	1.35	-1.25	1.35	-1.48	1.40
Age at migration/10	-0.60**	0.13	-0.52**	0.12	-0.53**	0.12	-0.52**	0.13	-0.56**	0.13	-0.57**	0.13	-0.62**	0.14
wschat3	0.19	0.25	0.15	0.34	0.08	0.31	0.09	0.37	0.15	0.32	0.14	0.31	0.22	0.30
wschat4	0.80**	0.34	0.77**	0.32	0.74**	0.32	0.72**	0.33	0.78**	0.35	0.78**	0.35	0.72**	0.32
wschat5	0.74	0.45	0.80*	0.44	0.73	0.45	0.73	0.50	0.70	0.51	0.70	0.48	0.97**	0.45
begrsnel4	0.23	0.21	0.37	0.24	0.33	0.23	0.33	0.26	0.34	0.26	0.35	0.24	0.43*	0.23
begrsnel5	1.09**	0.42	1.06**	0.40	1.13**	0.35	1.13**	0.40	1.16**	0.37	1.18**	0.36	1.23**	0.35
nethhome	0.52*	0.27	0.47	0.29	0.47*	0.28	0.48	0.30	0.63**	0.31	0.65**	0.30	0.53*	0.30
Intercept	-2.29**	1.09	-3.08**	0.86	-2.92**	0.84	-3.10**	1.04	-3.29**	0.97	-3.20**	0.96	-3.15**	0.96

Table J1: Regressions for satisfaction of migrants with job characteristics and fit between education/skills and jobs, including fluency ('speak')

Results from the simultaneous equations model with random effects

Variable:	Satisfaction wage Coef.	Std.	Satisfaction type of work Coef.	Std.	Satisfaction worktime Coef.	Std.	Satisfaction career Coef.	Std.	Fit education and work Coef.	Std.	Fit abilities work Coef.	Std.	Job performance Coef.	Std.
Speak	0.09	0.11	0.33**	0.10	0.14	0.09	0.34**	0.13	0.17*	0.09	0.12	0.08	0.18	0.15
Turkey	0.06	0.42	-0.79*	0.47	-0.21	0.35	-0.95*	0.54	-0.09	0.40	-0.25	0.33	-0.20	0.29
Moroccan	0.71	0.50	0.17	0.53	-0.17	0.42	-0.31	0.56	0.06	0.43	0.24	0.39	0.05	0.31
Dutch Antilles	0.41	0.47	0.07	0.55	-0.36	0.43	-0.59	0.63	0.43	0.49	0.57	0.42	-0.46	0.51
Suriname	-0.09	0.69	-0.51	0.64	-0.13	0.50	-1.16	0.84	0.45	0.62	0.42	0.51	-0.35	0.76
Indonesia	-0.05	0.53	-0.22	0.60	0.01	0.47	-0.54	0.66	0.42	0.52	0.35	0.42	-0.43	0.37
German/Scand.	0.61	0.51	-0.47	0.58	-0.17	0.44	-0.73	0.58	0.98	0.57	0.45	0.42	0.09	0.58
English	0.62	0.45	0.33	0.50	-0.36	0.38	-0.34	0.54	0.77*	0.44	0.68*	0.37	-0.19	0.36
Latin	0.34	0.46	-0.43	0.50	-0.28	0.38	-0.68	0.56	0.14	0.47	0.22	0.39	-0.47	0.46
Africa	0.15	0.55	-0.91	0.59	-0.90*	0.48	-0.68	0.72	-0.38	0.57	0.00	0.45	-0.15	0.46
Eastern Europe	0.45	0.42	0.13	0.47	0.06	0.36	0.38	0.52	0.19	0.44	0.52	0.36	-0.13	0.36
Prim. Education	-0.53	0.40	0.55	0.37	0.11	0.33	0.78	0.50	-0.49	0.37	0.09	0.30	0.13	0.36
Lower voc./prof.	-0.07	0.28	0.24	0.32	0.33	0.28	0.57	0.44	-0.68	0.37	-0.04	0.25	0.26	0.31
Higher sec./middle voc.	0.12	0.21	0.14	0.25	0.06	0.20	0.15	0.28	0.03	0.21	0.18	0.18	-0.03	0.18
Age at migration/10	0.02	0.21	0.46**	0.20	0.16	0.18	0.46*	0.27	0.11	0.21	0.04	0.16	0.28	0.25
Age/10	0.01	0.13	-0.19	0.15	-0.18	0.12	-0.13	0.18	-0.10	0.14	-0.05	0.10	-0.11	0.14
Female	-0.26	0.18	-0.03	0.20	-0.13	0.16	-0.15	0.21	-0.16	0.19	-0.09	0.15	-0.04	0.12
# Children	0.09	0.95	0.70	1.12	1.02	0.82	1.55	1.10	2.32**	0.99	0.54	0.77	-0.36	0.67
Couple	0.12	0.20	-0.01	0.24	-0.08	0.19	-0.09	0.24	-0.34	0.23	-0.09	0.17	-0.12	0.17
Intercept1	-2.49**	0.55	-2.87**	0.68	-3.86**	0.55	-2.83**	0.68	-1.97**	0.58	-2.06**	0.48	-3.07**	0.45
Intercept2	-2.36**	0.55	-2.75**	0.67	-3.77**	0.54	-2.53**	0.67	-1.64**	0.57	-1.84**	0.48	-2.61**	0.42
Intercept3	-1.80**	0.55	-2.45**	0.67	-3.11**	0.52	-2.18**	0.66	-1.23**	0.57	-1.66**	0.47	-2.39**	0.41
Intercept4	-1.30**	0.54	-2.02**	0.66	-2.83**	0.51	-1.92**	0.66	-1.07*	0.57	-1.39**	0.47	-2.18**	0.41
Intercept5	-0.92*	0.54	-1.75**	0.65	-2.50**	0.51	-1.58**	0.65	-0.72	0.57	-1.08**	0.47	-1.86**	0.41
Intercept6	-0.22	0.54	-1.08*	0.65	-1.91**	0.50	-0.97	0.65	-0.36	0.57	-0.73	0.46	-1.56**	0.41
Intercept7	0.39	0.54	-0.57	0.64	-1.35**	0.49	-0.26	0.65	0.18	0.57	-0.29	0.46	-1.27**	0.41
Intercept8	1.36	0.54	0.30	0.64	-0.53	0.49	0.72	0.65	0.90	0.57	0.39	0.46	-0.75*	0.41
Intercept9	2.65	0.55	1.52**	0.64	0.59	0.49	1.97**	0.66	1.92**	0.58	1.45**	0.46	-0.07	0.41
Intercept10	3.69	0.56	2.51**	0.65	1.44**	0.49	2.92**	0.68	2.62**	0.59	2.31**	0.47	0.63	0.41
ρ	-0.02	0.16	-0.25*	0.14	-0.03	0.14	-0.30**	0.15	-0.11	0.17	-0.11	0.16	-0.15	0.23
σ_m	2.06**	0.42	2.15**	0.40	2.03**	0.38	2.43**	0.57	2.28**	0.44	2.05**	0.38	1.95**	0.37
σ_θ	1.37**	0.10	1.51**	0.18	1.14**	0.13	1.50**	0.25	1.31**	0.13	1.01**	0.11	0.59**	0.14
$\rho_{\theta m}$	-0.01	0.19	-0.58**	0.12	-0.44**	0.17	-0.66**	0.15	-0.28	0.19	-0.31	0.20	-0.24	0.61
Nobs =	690		691		691		691		679		679		679	
Likelihood Value	-1487.4		-1394.3		-1406.9		-1395.5		-1592.3		-1542.4		-1436.2	

Table J2: Regressions for fluency ('speak')
Results from the simultaneous equations model with random effects

Variable:	Satisfaction wage		Satisfaction type of work		Satisfaction worktime		Satisfaction career		Fit education and work		Fit abilities work		Job performance	
	Coef.	Std.	Coef.	Std.	Coef.	Std.	Coef.	Std.	Coef.	Std.	Coef.	Std.	Coef.	Std.
Female	0.19	0.37	0.04	0.34	0.07	0.37	0.19	0.39	0.04	0.43	-0.08	0.37	-0.12	0.37
Turkey	1.66*	0.88	1.54*	0.83	1.52*	0.84	1.92*	1.09	1.94**	0.92	1.82**	0.87	1.43*	0.84
Moroccan	0.70	0.95	0.63	0.90	0.87	1.19	1.07	1.06	0.57	0.97	0.65	0.94	0.39	0.96
Dutch Antilles	1.87**	0.89	2.23**	0.85	2.16**	0.88	2.16**	0.96	2.27**	0.93	2.34**	0.90	2.49**	0.93
Suriname	4.10**	1.21	3.35**	0.97	3.19**	0.98	3.88**	1.17	3.60**	1.19	3.45**	1.09	3.46**	1.15
Indonesia	0.39	1.13	0.68	1.12	0.18	1.06	0.68	1.36	0.58	1.22	0.87	1.15	0.77	1.12
German/Scand.	1.78*	1.06	2.21**	1.03	1.96*	1.04	1.57	1.11	2.34*	1.25	2.02*	1.07	2.14**	1.00
English	0.77	0.90	0.61	0.86	0.69	0.89	0.82	1.01	1.15	1.01	1.15	0.94	0.90	0.86
Latin	1.98**	0.85	2.08**	0.78	1.84**	0.79	2.36**	0.93	2.38**	0.92	2.22**	0.84	2.05**	0.85
Africa	1.96*	1.08	2.08**	1.01	1.71*	1.04	2.12*	1.18	1.67	1.13	1.68	1.08	1.51	0.94
Eastern Europe	1.26	0.77	1.53*	0.82	1.41*	0.82	1.30	0.96	1.87**	0.93	1.65*	0.97	1.74**	0.85
Linguistic Distance	5.62	3.45	4.28*	2.50	3.83	2.94	6.10**	2.85	3.74	4.25	3.08	3.10	2.83	2.68
Linguistic Distance squared	-5.65	3.52	-4.24	2.63	-4.08	3.03	-5.94**	2.98	-3.79	4.28	-3.35	3.16	-3.14	2.82
Grew up speaking Dutch	1.24**	0.56	1.16**	0.43	1.09**	0.48	1.66**	0.51	1.80**	0.59	1.42**	0.54	0.88	0.77
Age/10	0.60**	0.24	0.68**	0.23	0.72**	0.25	0.77**	0.32	0.64**	0.25	0.51**	0.23	0.63**	0.26
Prim. Education	-1.56**	0.71	-0.97*	0.58	-1.28**	0.62	-1.73**	0.87	-1.16*	0.67	-0.92	0.58	-0.87	0.59
Lower voc./prof.	-0.94*	0.56	-1.05**	0.51	-1.30**	0.56	-1.65**	0.80	-1.33**	0.67	-0.93	0.60	-0.95*	0.53
Higher sec./middle voc.	-0.16	0.46	-0.12	0.46	-0.31	0.47	-0.34	0.55	-0.11	0.48	-0.10	0.46	-0.24	0.45
Couple	0.35	0.42	0.43	0.40	0.47	0.42	0.29	0.45	0.31	0.46	0.36	0.42	0.49	0.40
# Children	-2.00	1.89	-1.62	1.79	-1.88	1.84	-2.47	2.01	-0.51	2.01	-0.59	1.89	-0.73	1.87
Age at migration/10	-1.31**	0.29	-1.32**	0.28	-1.30**	0.28	-1.55**	0.38	-1.34**	0.30	-1.20**	0.30	-1.23**	0.33
wschat3	0.18	0.40	0.15	0.33	-0.05	0.39	0.35	0.34	-0.08	0.40	0.04	0.39	0.07	0.39
wschat4	0.96*	0.50	0.96**	0.39	0.67	0.45	0.87**	0.41	0.68	0.48	0.77	0.50	0.64	0.49
wschat5	1.11*	0.63	1.31**	0.49	0.95*	0.57	1.23**	0.52	0.98	0.64	1.23**	0.64	1.66**	0.60
begrsnel4	0.32	0.37	0.48*	0.29	0.51	0.33	0.34	0.30	0.16	0.37	0.38	0.36	0.74**	0.39
begrsnel5	0.61	0.52	0.68*	0.39	0.76	0.47	0.53	0.43	0.71	0.48	0.88*	0.49	0.91*	0.47
nethhome	1.10**	0.38	0.99**	0.32	1.04**	0.35	0.76**	0.36	1.02**	0.37	0.98**	0.39	0.81	0.57
Intercept	-3.16**	1.41	-3.43**	1.30	-3.04**	1.35	-3.35**	1.40	-3.27**	1.58	-2.91**	1.43	-3.01**	1.30

Table K1: Regressions for satisfaction of migrants with job characteristics and fit between education/skills and jobs, including fluency ('speak'), males only

Results from the simultaneous equations model with random effects

	Satisfaction wage		Satisfaction type of work		Satisfaction worktime		Satisfaction career		Fit education and work		Fit abilities work		Job performance	
Variable:	Coef.	Std.	Coef.	Std.	Coef.	Std.	Coef.	Std.	Coef.	Std.	Coef.	Std.	Coef.	Std.
Speak	0.11	0.16	0.42**	0.13	0.38**	0.16	0.34**	0.13	0.29**	0.12	0.26**	0.11	-0.01	0.15
Turkey	0.23	0.54	-0.46	0.59	-0.47	0.57	-0.52	0.58	-0.66	0.50	-0.99**	0.48	-0.08	0.34
Moroccan	0.52	0.62	0.03	0.64	-0.58	0.62	-0.22	0.62	-0.86	0.60	-0.27	0.53	0.15	0.38
Dutch Antilles	0.60	0.71	-0.62	0.72	-1.48**	0.70	-0.53	0.67	-0.38	0.65	-0.27	0.58	-0.33	0.67
Suriname	0.12	0.95	-1.03	0.83	-1.12	0.86	-0.77	0.83	-0.16	0.76	-0.53	0.72	0.36	0.72
Indonesia	0.45	1.10	0.02	0.73	-0.09	0.73	-0.11	0.68	0.48	0.65	0.25	0.58	-0.30	0.42
German/Scand.	0.34	0.84	-0.44	0.75	-0.38	0.70	-0.39	0.70	0.90	0.69	-0.16	0.60	0.69	0.56
English	1.04*	0.60	0.52	0.58	-0.75	0.54	-0.11	0.56	0.69	0.56	0.26	0.47	0.17	0.37
Latin	0.68	0.70	-0.56	0.65	-0.75	0.66	-0.67	0.62	-0.38	0.61	-0.36	0.54	0.03	0.46
Africa	0.27	0.89	-1.80**	0.75	-1.77**	0.78	-1.20	0.75	-2.25**	0.72	-1.33*	0.68	0.03	0.51
Eastern Europe	0.34	0.56	0.25	0.58	-0.08	0.57	0.59	0.64	0.14	0.56	0.32	0.52	0.05	0.43
Prim. Education	-0.79	0.55	0.72	0.50	0.62	0.54	0.84	0.51	0.19	0.48	0.71*	0.41	-0.40	0.44
Lower voc./prof.	-0.49	0.47	0.53	0.46	0.69	0.46	0.56	0.47	-0.30	0.41	0.47	0.36	-0.13	0.36
Higher sec./middle voc.	0.26	0.35	0.27	0.33	0.39	0.33	0.12	0.32	0.27	0.28	0.37	0.25	-0.20	0.21
Age at migration/10	0.06	0.33	0.53**	0.25	0.55*	0.32	0.34	0.27	0.29	0.24	0.23	0.21	-0.01	0.26
Age/10	-0.15	0.20	-0.41**	0.19	-0.39*	0.23	-0.20	0.19	-0.20	0.16	-0.30**	0.15	0.03	0.14
# Children	0.02	1.69	1.38	1.44	1.92	1.31	1.71	1.47	2.60**	1.26	0.88	1.09	-0.94	0.90
Couple	0.01	0.36	-0.14	0.34	-0.54*	0.31	0.05	0.33	-0.20	0.30	0.10	0.27	-0.04	0.23
Intercept1	-3.24**	0.84	-3.49**	0.88			-2.99**	0.82	-2.23**	0.73	-2.77**	0.73	-3.25**	0.62
Intercept2	-3.05**	0.83	-3.40**	0.87			-2.78**	0.81	-1.75**	0.72	-2.63**	0.72	-2.46**	0.51
Intercept3	-2.49**	0.81	-3.14**	0.86			-2.43**	0.80	-1.41**	0.71	-2.44**	0.71	-2.21**	0.50
Intercept4	-1.90**	0.80	-2.76**	0.85	-3.50**	0.89	-2.23**	0.80	-1.20*	0.71	-2.08**	0.69	-1.97**	0.50
Intercept5	-1.53*	0.80	-2.47**	0.84	-2.93**	0.86	-1.80**	0.79	-0.86	0.71	-1.81**	0.69	-1.73**	0.49
Intercept6	-0.74	0.79	-1.81**	0.83	-2.25**	0.83	-1.15	0.78	-0.52	0.71	-1.42	0.67	-1.48**	0.49
Intercept7	-0.15	0.79	-1.32	0.82	-1.79**	0.82	-0.45	0.78	0.06	0.71	-1.05	0.67	-1.20**	0.48
Intercept8	0.78	0.79	-0.45	0.82	-0.98	0.80	0.51	0.78	0.84	0.71	-0.38	0.65	-0.69	0.48
Intercept9	2.05**	0.79	0.55	0.82	0.22	0.78	1.61**	0.79	1.79**	0.72	0.72	0.65	-0.11	0.47
Intercept10	3.30**	0.82	1.60*	0.84	1.03	0.78	2.57**	0.81	2.40**	0.74	1.59**	0.66	0.57	0.47
ρ	0.15	0.22	-0.32**	0.16	-0.08	0.21	-0.28**	0.17	-0.18	0.21	-0.08	0.29	0.23	0.25
σ_m	2.08**	0.41	2.16**	0.40	2.13**	0.45	2.20**	0.43	2.11**	0.38	2.12**	0.42	1.92**	0.33
σ_θ	1.51**	0.17	1.61**	0.28	1.39**	0.35	1.44**	0.24	1.20**	0.21	1.01**	0.25	0.55**	0.15
$\rho_{\theta m}$	0.03	0.26	-0.80**	0.09	-0.80**	0.11	-0.69**	0.14	-0.65**	0.16	-0.74**	0.15	0.40	0.55
Nobs =	690		691		691		691		679		679		679	
Likelihood Value	-860.1		-821.4		-796.6		-829.3		-901.2		-867.9		-845.8	

Table K2: Regressions for fluency ('speak')
Results from the simultaneous equations model with random effects

Variable:	Satisfaction wage		Satisfaction type of work		Satisfaction worktime		Satisfaction career		Fit education and work		Fit abilities work		Job performance	
	Coef.	Std.	Coef.	Std.	Coef.	Std.	Coef.	Std.	Coef.	Std.	Coef.	Std.	Coef.	Std.
Female	0.16	0.35	0.11	0.35	0.16	0.37	0.21	0.38	0.13	0.36	0.06	0.37	-0.21	0.36
Turkey	1.41	0.87	1.50*	0.84	1.28	0.83	1.60*	0.91	1.79**	0.88	1.69*	0.91	1.58*	0.86
Moroccan	0.60	1.11	0.72	0.87	0.57	1.02	0.89	0.93	0.73	0.99	0.60	0.97	0.39	0.94
Dutch Antilles	1.88**	0.89	2.09**	0.88	2.09**	0.87	1.94**	0.89	2.11**	0.89	2.08**	0.91	2.52**	0.95
Suriname	3.91**	1.16	3.44**	1.02	3.50**	1.02	3.46**	1.04	3.40**	1.09	3.71**	1.25	3.16**	1.00
Indonesia	0.45	1.16	0.59	1.13	0.58	1.12	0.50	1.19	0.63	1.16	0.91	1.20	0.44	1.08
German/Scand.	2.05**	1.13	1.95*	1.03	2.21**	1.02	1.89*	1.05	2.66**	1.13	2.47**	1.16	2.43	1.15
English	0.96	0.98	0.37	0.85	0.79	0.86	0.66	0.91	1.15	0.99	1.17	0.95	1.12	1.00
Latin	1.93**	0.83	2.03**	0.81	1.96**	0.80	2.00**	0.84	2.28**	0.86	2.28**	0.92	1.83**	0.81
Africa	1.82*	1.01	1.93*	1.03	1.80*	0.98	2.02*	1.05	1.73	1.07	1.74	1.15	1.41	1.01
Eastern Europe	1.25	0.76	1.29	0.82	1.39*	0.83	1.31	0.84	1.73**	0.83	1.70*	0.98	1.68	0.85
Linguistic Distance	3.44	3.17	5.17**	2.37	4.24*	2.43	5.16**	2.61	2.39	2.74	3.37	2.63	1.74	3.16
Linguistic Distance squared	-3.45	3.29	-5.09**	2.51	-3.99*	2.55	-5.09*	2.73	-2.44	2.91	-3.36	2.76	-1.77	3.39
Grew up speaking Dutch	1.13**	0.55	1.19**	0.42	1.11	0.44	1.46**	0.49	1.67**	0.51	1.40**	0.49	1.33**	0.53
Age/10	0.61**	0.23	0.66**	0.23	0.79**	0.27	0.69**	0.24	0.59**	0.22	0.60**	0.24	0.55**	0.22
Prim. Education	-1.45**	0.70	-1.07*	0.61	-1.28**	0.64	-1.36*	0.70	-0.98	0.62	-0.98	0.60	-1.09*	0.64
Lower voc./prof.	-1.09*	0.60	-1.18**	0.55	-1.32**	0.57	-1.34**	0.63	-1.23**	0.60	-1.15*	0.60	-1.20*	0.62
Higher sec./middle voc.	-0.15	0.47	-0.16	0.45	-0.34	0.49	-0.19	0.48	-0.05	0.45	-0.11	0.46	-0.24	0.47
Couple	0.26	0.42	0.40	0.41	0.36	0.41	0.41	0.42	0.49	0.41	0.52	0.43	0.39	0.40
# Children	-2.02	1.91	-1.80	1.83	-1.35	1.88	-2.53	1.94	-1.23	1.93	-0.85	1.99	-0.93	1.87
Age at migration/10	-1.35**	0.31	-1.31**	0.27	-1.45**	0.34	-1.37**	0.31	-1.23**	0.26	-1.28**	0.28	-1.12**	0.25
wschat3	0.14	0.40	0.15	0.33	0.02	0.36	0.26	0.37	0.13	0.37	0.02	0.38	-0.04	0.41
wschat4	1.01**	0.47	0.84**	0.40	0.70	0.42	1.17**	0.44	1.07**	0.44	0.79*	0.44	0.84*	0.46
wschat5	1.20**	0.60	1.34**	0.51	1.36**	0.54	1.33**	0.55	1.30**	0.57	1.03**	0.59	1.01	0.75
begrsnel4	0.13	0.37	0.41	0.29	0.51*	0.31	0.29	0.32	0.06	0.35	0.38	0.33	0.33	0.49
begrsnel5	0.39	0.52	0.64	0.39	0.48	0.44	0.47	0.45	0.46	0.46	1.03**	0.45	0.54	0.62
nethhome	1.04**	0.36	1.02**	0.32	0.83**	0.34	0.86**	0.35	0.94**	0.36	0.83**	0.36	1.29**	0.43
Intercept	-2.67*	1.40	-3.30**	1.31	-3.38**	1.29	-3.32**	1.36	-3.36**	1.43	-3.37	1.50	-2.99**	1.42

Table L1: Regressions for satisfaction of migrants with job characteristics and fit between education/skills and jobs, including fluency ('speak'), females only

Results from the simultaneous equations model with random effects

Variable:	Satisfaction wage		Satisfaction type of work		Satisfaction worktime		Satisfaction career		Fit education and work		Fit abilities work		Job performance	
	Coef.	Std.	Coef.	Std.	Coef.	Std.	Coef.	Std.	Coef.	Std.	Coef.	Std.	Coef.	Std.
Speak	-0.20	0.18	0.23	0.16	0.04	0.14	0.24	0.16	0.02	0.16	-0.04	0.12	0.20	0.17
Turkey	0.54	0.57	-1.22*	0.71	-0.06	0.55	-1.40**	0.65	0.49	0.62	0.55	0.50	-0.16	0.43
Moroccan	1.34**	0.62	0.28	0.78	0.09	0.61	-0.32	0.68	0.89	0.70	0.83	0.59	0.03	0.43
Dutch Antilles	1.49	0.98	0.54	0.94	0.12	0.68	-0.23	0.74	1.00	0.71	1.43**	0.58	-0.20	0.66
Suriname	1.21	0.92	-0.42	1.00	0.17	0.79	-0.91	0.95	1.42	0.88	1.51**	0.74	-0.41	0.96
Indonesia	-0.04	0.70	-0.49	0.86	-0.08	0.69	-0.80	0.79	0.24	0.78	0.68	0.64	-0.49	0.52
German/Scand.	1.64**	0.77	-0.44	0.82	-0.22	0.66	-0.88	0.72	0.98	0.71	0.99*	0.58	-0.06	0.72
English	0.48	0.68	0.08	0.73	-0.16	0.74	-0.59	0.71	0.28	0.68	1.01*	0.57	-0.58	0.50
Latin	0.96	0.63	-0.10	0.71	-0.13	0.57	-0.54	0.68	0.61	0.67	0.92	0.58	-0.53	0.55
Africa	0.67	0.81	1.08	0.94	-0.07	0.73	0.22	0.89	1.67*	0.84	2.09**	0.84	0.03	0.68
Eastern Europe	1.15**	0.58	0.12	0.70	0.01	0.53	0.23	0.63	0.03	0.65	0.86	0.52	-0.03	0.48
Prim. Education	-0.65	0.55	0.73	0.56	0.02	0.49	0.67	0.56	-0.87	0.54	-0.35	0.44	0.29	0.45
Lower voc./prof.	-0.15	0.49	0.08	0.45	0.20	0.41	0.39	0.44	-0.47	0.50	-0.14	0.37	0.33	0.33
Higher sec./middle voc.	-0.22	0.33	-0.01	0.35	-0.19	0.28	0.13	0.31	0.00	0.29	0.22	0.27	-0.02	0.23
Age at migration/10	-0.41	0.34	0.29	0.29	0.03	0.26	0.31	0.31	-0.08	0.31	-0.13	0.23	0.31	0.28
Age/10	0.39*	0.22	0.19	0.21	-0.06	0.17	0.05	0.20	0.05	0.20	0.20	0.17	-0.11	0.16
# Children	-0.19	1.36	1.00	1.46	-0.06	1.25	1.45	1.31	0.41	1.29	-0.22	1.20	-0.38	0.93
Couple	0.33	0.30	0.35	0.31	0.38	0.27	-0.06	0.27	-0.63**	0.27	-0.14	0.24	-0.06	0.21
Intercept1	-1.10	0.76	-2.05**	0.95	-3.48**	0.76	-2.82**	0.85	-1.65**	0.81	-1.13	0.72	-2.73**	0.59
Intercept2	-1.00	0.76	-1.87**	0.94	-3.36**	0.75	-2.38**	0.84	-1.41*	0.81	-0.82	0.72	-2.51**	0.57
Intercept3	-0.43	0.75	-1.51	0.93	-2.81**	0.73	-1.99**	0.83	-0.93	0.80	-0.64	0.72	-2.35**	0.56
Intercept4	0.00	0.74	-0.94	0.92	-2.39**	0.73	-1.61*	0.82	-0.81	0.80	-0.43	0.71	-2.17**	0.55
Intercept5	0.39	0.74	-0.66	0.92	-2.22**	0.72	-1.36*	0.82	-0.43	0.80	-0.05	0.71	-1.75**	0.54
Intercept6	1.01	0.75	0.11	0.91	-1.66**	0.72	-0.72	0.81	-0.04	0.80	0.28	0.71	-1.40**	0.54
Intercept7	1.63**	0.75	0.67	0.91	-0.94	0.71	0.05	0.81	0.44	0.80	0.81	0.72	-1.10**	0.54
Intercept8	2.66**	0.76	1.59	0.92	-0.03	0.71	1.14	0.82	1.09	0.80	1.54**	0.72	-0.60	0.54
Intercept9	4.04**	0.80	3.13**	0.94	1.10	0.71	2.65**	0.84	2.20**	0.80	2.60**	0.74	0.15	0.56
Intercept10	4.87**	0.83	4.11**	0.95	2.04**	0.72	3.64**	0.87	2.98**	0.81	3.46**	0.75	0.84	0.58
ρ	0.18	0.26	-0.12	0.26	0.01	0.23	-0.07	0.26	0.01	0.24	0.02	0.25	-0.42*	0.23
σ_m	2.10**	0.44	2.11**	0.39	2.01**	0.36	2.14**	0.41	2.14**	0.40	2.04**	0.38	1.95**	0.35
σ_θ	1.39**	0.24	1.68**	0.25	1.24**	0.16	1.41**	0.23	1.39**	0.17	1.13**	0.14	0.55**	0.20
$\rho_{\theta m}$	0.47	0.32	-0.41**	0.19	-0.17	0.28	-0.41*	0.23	0.19	0.32	0.03	0.30	-0.15	0.83
Nobs =	690		691		691		691		679		679		679	
Likelihood Value	-842.5		-782.9		-809.8		-783.9		-886.5		-876.1		-802.1	

Table L2: Regressions for fluency ('speak')

Results from the simultaneous equations model with random effects

Variable:	Satisfaction wage		Satisfaction type of work		Satisfaction worktime		Satisfaction career		Fit education and work		Fit abilities work		Job performance	
	Coef.	Std.	Coef.	Std.	Coef.	Std.	Coef.	Std.	Coef.	Std.	Coef.	Std.	Coef.	Std.
Female	0.01	0.37	0.03	0.37	0.06	0.39	-0.03	0.38	-0.20	0.38	-0.13	0.36	-0.07	0.35
Turkey	1.44*	0.85	1.66*	0.88	1.65*	0.86	1.73*	0.97	1.58*	0.89	1.68*	0.87	1.57*	0.84
Moroccan	0.59	0.87	0.72	1.09	0.97	1.12	0.68	1.10	0.52	0.98	0.66	1.00	0.42	0.91
Dutch Antilles	2.89**	1.02	2.38**	0.94	2.40**	0.91	2.21**	0.90	2.46**	0.95	2.48**	0.93	2.55**	0.94
Suriname	3.45**	1.10	3.41**	1.02	3.27**	1.02	3.32**	1.05	3.25**	1.01	3.54**	1.06	3.53**	1.09
Indonesia	0.36	1.11	0.66	1.15	0.35	1.09	0.52	1.18	0.39	1.11	0.74	1.10	0.84	1.10
German/Scand.	2.91**	1.39	2.08*	1.11	2.05*	1.10	1.55	1.12	2.25*	1.30	2.11*	1.07	2.03*	1.04
English	1.70	1.25	0.92	0.93	0.91	0.94	0.92	0.97	1.13	1.20	1.25	1.00	0.93	0.89
Latin	1.97**	0.80	1.91**	0.79	1.92**	0.80	2.07**	0.84	2.03**	0.84	1.93**	0.78	1.86**	0.80
Africa	1.71*	1.01	1.89*	1.00	1.67	1.02	1.92*	1.04	1.50	0.94	1.64*	0.99	1.58*	0.96
Eastern Europe	1.48	0.97	1.78*	0.94	1.53*	0.92	1.68*	0.97	1.72*	0.99	1.76*	0.91	1.61	0.91
Linguistic Distance	-2.39	4.25	3.13	3.03	2.21	3.44	3.85	3.76	0.72	4.33	1.69	3.27	3.11	3.02
Linguistic Distance squared	1.95	4.40	-3.35	3.13	-2.71	3.51	-3.89	3.78	-1.02	4.41	-1.79	3.42	-3.28	3.05
Grew up speaking Dutch	0.88	0.56	1.13**	0.53	1.07**	0.52	1.46**	0.53	1.36**	0.57	1.19**	0.55	0.91	0.71
Age/10	0.56**	0.23	0.68**	0.25	0.62**	0.24	0.71 **	0.28	0.63**	0.24	0.63**	0.24	0.59**	0.25
Prim. Education	-1.28*	0.67	-1.16*	0.63	-1.28**	0.63	-1.34*	0.71	-1.13	0.66	-1.17*	0.63	-1.04*	0.62
Lower voc./prof.	-1.41**	0.62	-1.25**	0.58	-1.24**	0.62	-1.31*	0.71	-1.21**	0.60	-1.14*	0.57	-1.00*	0.55
Higher sec./middle voc.	-0.35	0.49	-0.26	0.50	-0.29	0.48	-0.30	0.51	-0.17	0.48	-0.25	0.47	-0.22	0.46
Couple	0.33	0.42	0.31	0.42	0.46	0.42	0.25	0.42	0.30	0.41	0.35	0.40	0.49	0.39
# Children	-1.27	1.89	-0.89	1.89	-1.75	1.83	-1.38	1.92	-0.72	1.92	-0.38	1.89	-0.79	1.83
Age at migration/10	-1.23**	0.29	-1.28**	0.29	-1.20***	0.29	-1.32	0.31	-1.25**	0.27	-1.22	0.27	-1.22**	0.32
wschat3	-0.04	0.39	0.01	0.40	-0.06	0.41	0.01	0.41	-0.11	0.43	-0.03	0.42	0.03	0.39
wschat4	0.85*	0.46	0.95**	0.47	0.75	0.48	0.68	0.47	0.69	0.48	0.83*	0.46	0.71	0.48
wschat5	1.05**	0.60	1.03*	0.60	0.85	0.62	1.02*	0.61	1.08	0.65	1.22**	0.63	1.51**	0.59
begrsnel4	0.21	0.37	0.46	0.35	0.42	0.37	0.44	0.34	0.41	0.38	0.50	0.36	0.45	0.34
begrsnel5	0.59	0.48	0.54	0.49	0.67	0.50	0.67	0.50	0.71	0.49	0.74	0.49	0.72	0.48
nethhome	1.08**	0.36	1.12**	0.35	1.13**	0.35	1.10**	0.36	1.08**	0.37	1.11**	0.37	1.08**	0.34
Intercept	-1.97**	1.37	-3.15**	1.35	-2.67*	1.42	-3.24**	1.42	-2.76**	1.45	-3.25**	1.36	-3.03**	1.33

Table M: Sample statistics professional level

	Both genders		Male		Female	
	Native	Migrant	Native	Migrant	Native	Migrant
Number of observations (NT):	13,538	920	6,383	418	7,155	502
Professional level:						
Higher academic or independent profession	6.8	8.0	9.4	9.3	4.5	7.0
Higher supervisory profession	8.3	5.8	12.8	9.1	4.2	3.0
Intermediate academic or independent profession	25.4	21.4	17.0	14.4	32.9	27.3
Intermediate supervisory or commercial profession	14.0	8.8	18.4	9.8	10.1	8.0
Other mental work	24.9	24.4	15.1	15.6	33.7	31.7
skilled and supervisory manual work	7.0	6.5	13.1	13.4	1.6	0.8
Semi-skilled manual work	6.8	9.8	9.8	17.0	4.1	3.8
Unskilled and trained manual work	5.2	12.8	2.2	7.7	7.8	17.1
Agrarian profession	1.7	2.5	2.3	3.8	1.2	1.4
Total bottom 3 categories:	13.7	25.1	14.3	28.5	13.1	22.3
Further explanation levels:						

Professional level	e.g.
Higher academic or independent profession	architetect, physician, scholar, academic instructor, engineer
Higher supervisory profession	manager, director, owner of large company, supervisory civil servant
Intermediate academic or independent profession	teacher, artist, nurse, social worker, policy assistant
Intermediate supervisory or commercial profession	head representative, department manager, shopkeeper
Other mental work	administrative assistant, accountant, sales assistant, family carer
skilled and supervisory manual worl	car mechanic, foreman, electrician
Semi-skilled manual work	driver, factory worker
Unskilled and trained manual work	cleaner, packer
Agrarian profession	farm worker, independent agriculturalist

Table N: Regressions for satisfaction of migrants with job characteristics and fit between education/skills and jobs, including fluency ('speak'),
Results with professional levels among the explanatory variables

Variable:	Satisfaction wage		Satisfaction type of work		Satisfaction worktime		Satisfaction career		Fit education and work		Fit abilities work		Job performance	
	Coef.	Std.	Coef.	Std.	Coef.	Std.	Coef.	Std.	Coef.	Std.	Coef.	Std.	Coef.	Std.
Turkey	0.20	0.22	-0.11	0.20	-0.04	0.21	-0.16	0.22	0.13	0.21	0.03	0.19	0.11	0.19
Moroccan	0.18	0.25	0.19	0.26	-0.13	0.29	-0.11	0.26	0.04	0.28	0.28	0.24	0.31	0.27
Dutch Antilles	0.27	0.24	0.40*	0.21	-0.22	0.24	0.15	0.23	0.22	0.21	0.31	0.21	0.05	0.18
Suriname	0.20	0.24	0.41*	0.21	0.15	0.22	0.31	0.22	0.59**	0.20	0.46**	0.18	0.44**	0.17
Indonesia	0.07	0.29	0.01	0.23	-0.06	0.25	-0.22	0.26	0.27	0.23	0.22	0.24	-0.15	0.24
German/Scand.	0.18	0.22	0.24	0.20	0.03	0.20	-0.01	0.24	0.73**	0.24	0.41*	0.22	0.61**	0.19
English	0.05	0.24	0.17	0.19	-0.39*	0.21	-0.15	0.20	0.38**	0.19	0.30*	0.16	0.02	0.20
Latin	0.18	0.24	0.25	0.21	0.01	0.20	0.01	0.24	0.23	0.25	0.23	0.23	0.14	0.22
Africa	-0.04	0.30	0.13	0.26	-0.42	0.33	0.07	0.25	-0.08	0.34	0.21	0.30	0.14	0.25
Eastern Europe	0.41	0.24	0.46*	0.26	0.09	0.23	0.40	0.26	0.37	0.27	0.52**	0.23	0.29	0.19
Prim. Education	0.05	0.28	0.69**	0.25	0.07	0.25	0.39	0.29	0.19	0.31	0.56**	0.28	-0.23	0.24
Lower voc./prof.	0.35*	0.21	0.24	0.18	0.11	0.16	0.24	0.17	-0.12	0.19	0.28*	0.17	-0.01	0.16
Higher sec./middle voc.	0.26*	0.15	0.16	0.14	-0.03	0.13	0.09	0.14	0.24*	0.13	0.24**	0.13	-0.15	0.12
Age at migration/10	-0.09	0.06	-0.03	0.05	-0.08	0.05	-0.09*	0.05	-0.06	0.05	-0.05	0.05	-0.04	0.05
Age/10	0.10	0.07	0.12**	0.06	0.04	0.06	0.16**	0.06	0.12**	0.06	0.14	0.06	0.07	0.05
Female	-0.31**	0.12	-0.15	0.12	-0.18	0.11	-0.12	0.12	-0.22*	0.12	-0.34**	0.11	-0.20**	0.10
# Children	0.09	0.59	0.80	0.57	0.95*	0.56	0.54	0.56	1.89**	0.51	0.60	0.54	-0.43	0.51
Couple	0.02	0.13	-0.07	0.13	-0.18	0.13	-0.01	0.12	-0.27**	0.12	-0.08	0.12	0.02	0.11
Higher academic	1.22**	0.25	1.24**	0.21	0.34	0.26	1.11**	0.24	1.31**	0.26	1.24**	0.25	-0.46**	0.22
Higher supervisory	1.02**	0.30	1.38**	0.25	0.41	0.25	1.20**	0.27	0.89**	0.27	1.01**	0.26	0.10	0.23
Intermediate academic	0.81**	0.20	1.28**	0.20	0.63**	0.18	1.01**	0.21	1.25**	0.19	1.30**	0.19	0.16	0.18
Intermediate supervisory	0.44**	0.22	0.84**	0.21	0.48**	0.20	0.78**	0.23	0.67**	0.21	0.84**	0.22	-0.03	0.20
Other mental work	0.40**	0.18	0.92**	0.20	0.49**	0.18	0.70**	0.19	0.75**	0.19	0.87**	0.18	-0.17	0.16
Skilled manual work	0.29	0.30	0.59**	0.25	0.28	0.21	0.66**	0.26	0.81**	0.23	0.43**	0.19	-0.61**	0.21
Intercept1	-0.86**	0.35	-0.63**	0.31	-2.30**	0.39	-0.96**	0.34	0.04	0.34	-0.30	0.32	-2.61**	0.32
Intercept2	-0.76**	0.35	-0.53	0.31	-2.17**	0.37	-0.73**	0.34	0.24	0.35	-0.11	0.32	-2.05**	0.30
Intercept3	-0.42	0.34	-0.35	0.32	-1.67**	0.35	-0.48	0.34	0.51	0.35	0.02	0.32	-1.89**	0.30
Intercept4	-0.11	0.34	-0.09	0.32	-1.46**	0.34	-0.26	0.34	0.61	0.35	0.21	0.33	-1.67**	0.31
Intercept5	0.13	0.34	0.08	0.32	-1.27**	0.34	-0.03	0.34	0.86**	0.35	0.46	0.32	-1.41**	0.31
Intercept6	0.55	0.34	0.54	0.31	-0.80**	0.33	0.42	0.33	1.09**	0.36	0.72**	0.32	-1.14**	0.31
Intercept7	0.94**	0.34	0.92**	0.31	-0.39	0.33	0.91**	0.33	1.44**	0.36	1.08**	0.33	-0.88**	0.30
Intercept8	1.53**	0.34	1.52**	0.31	0.20	0.33	1.59**	0.33	1.92**	0.36	1.62**	0.33	-0.44	0.31
Intercept9	2.34**	0.35	2.36**	0.32	0.98**	0.33	2.45**	0.34	2.57**	0.37	2.43**	0.34	0.14	0.30
Intercept10	3.02**	0.36	3.04**	0.33	1.56**	0.34	3.09**	0.35	3.03**	0.38	3.11**	0.35	0.76**	0.30
Nobs =	681		688		687		687		699		699		699	
Likelihood Value	-1414.4		-1282.9		-1303.3		-1303.3		-1482.1		-1386.3		-1274.4	

Table O: Regressions for satisfaction of migrants with job characteristics and fit between education/skills and jobs, including fluency ('speak'), Results with professional levels among the explanatory variables, males only

Variable:	Satisfaction wage		Satisfaction type of work		Satisfaction worktime		Satisfaction career		Fit education and work		Fit abilities work		Job performance	
	Coef.	Std.	Coef.	Std.	Coef.	Std.	Coef.	Std.	Coef.	Std.	Coef.	Std.	Coef.	Std.
Turkey	0.21	0.32	-0.03	0.28	-0.10	0.30	-0.06	0.31	-0.02	0.32	-0.48**	0.23	-0.14	0.23
Moroccan	0.20	0.36	0.16	0.37	-0.33	0.48	0.02	0.39	-0.40	0.36	0.06	0.30	0.24	0.31
Dutch Antilles	0.25	0.34	0.12	0.33	-0.56	0.37	0.12	0.34	0.37	0.32	0.06	0.39	-0.28	0.26
Suriname	0.16	0.34	0.31	0.30	0.05	0.30	0.20	0.31	0.62**	0.29	0.25	0.25	0.23	0.24
Indonesia	0.15	0.38	0.03	0.28	-0.01	0.32	-0.16	0.33	0.58**	0.29	0.32	0.29	-0.26	0.34
German/Scand.	-0.13	0.30	0.31	0.32	0.39	0.32	-0.04	0.32	1.17**	0.26	0.13	0.24	0.58*	0.30
English	0.24	0.29	0.19	0.27	-0.15	0.26	-0.04	0.28	0.63**	0.27	0.24	0.21	-0.04	0.27
Latin	0.31	0.32	0.42	0.28	0.16	0.27	0.10	0.33	0.27	0.35	0.11	0.30	0.13	0.29
Africa	0.24	0.37	-0.23	0.37	-0.53	0.32	0.07	0.39	-0.98**	0.34	-0.63	0.48	-0.15	0.33
Eastern Europe	0.40	0.45	0.51	0.44	0.23	0.30	0.38	0.46	0.42	0.42	0.61**	0.30	0.13	0.26
Prim. Education	-0.06	0.43	0.61*	0.32	0.04	0.30	0.37	0.41	0.41	0.41	0.82**	0.37	-0.19	0.30
Lower voc./prof.	0.18	0.33	0.31	0.28	-0.01	0.25	0.40	0.29	-0.27	0.24	0.61**	0.23	0.09	0.23
Higher sec./middle voc.	0.35	0.27	0.15	0.23	-0.02	0.21	0.17	0.25	0.33	0.21	0.34*	0.19	0.01	0.18
Age at migration/10	-0.13	0.08	-0.12*	0.07	-0.13*	0.07	-0.17**	0.07	-0.11*	0.06	-0.13**	0.06	-0.05	0.07
Age/10	0.13	0.10	0.11	0.08	0.18**	0.09	0.21**	0.09	0.12	0.09	0.06	0.09	0.03	0.08
# Children	0.53	0.83	0.98	0.88	1.51	0.93	0.90	0.85	2.31**	0.82	1.00	0.75	-0.19	0.75
Couple	-0.16	0.20	-0.12	0.21	-0.42*	0.22	0.01	0.20	-0.18	0.19	0.06	0.19	-0.06	0.19
Higher academic	1.24**	0.33	1.25**	0.29	0.13	0.35	1.39**	0.32	1.16**	0.32	1.16**	0.29	-0.29	0.34
Higher supervisory	0.83**	0.34	1.33**	0.29	0.15	0.30	1.31**	0.34	0.73**	0.35	0.90**	0.31	-0.01	0.29
Intermediate academic	0.74**	0.33	0.95**	0.32	0.43	0.31	1.02**	0.34	0.93**	0.30	0.94**	0.28	0.24	0.28
Intermediate supervisory	0.55*	0.33	0.81**	0.30	0.34	0.32	0.94**	0.34	0.50*	0.28	0.87**	0.27	-0.03	0.27
Other mental work	0.37	0.27	1.18**	0.25	0.60**	0.26	0.97**	0.25	0.61**	0.27	0.88**	0.25	-0.20	0.23
Skilled manual work	0.27	0.33	0.49*	0.28	0.19	0.25	0.73**	0.29	0.71**	0.27	0.18	0.22	-0.67**	0.25
Intercept1	-0.94*	0.49	-1.07**	0.43			-0.82*	0.46	-0.29	0.51	-0.87*	0.45	-2.97**	0.51
Intercept2	-0.86	0.49	-1.00**	0.43	-2.32**	0.60	-0.60	0.46	0.03	0.52	-0.72	0.46	-2.22**	0.44
Intercept3	-0.52	0.49	-0.79*	0.43	-1.53**	0.48	-0.29	0.46	0.28	0.53	-0.56	0.44	-2.02**	0.44
Intercept4	-0.16	0.47	-0.49	0.43	-1.39**	0.48	-0.10	0.45	0.44	0.53	-0.29	0.45	-1.77**	0.46
Intercept5	0.11	0.48	-0.27	0.42	-1.06**	0.47	0.22	0.46	0.71	0.53	-0.06	0.45	-1.55**	0.46
Intercept6	0.61	0.48	0.27	0.42	-0.47	0.46	0.74	0.47	0.95*	0.53	0.25	0.45	-1.34**	0.47
Intercept7	0.98**	0.47	0.69	0.42	-0.08	0.46	1.26**	0.47	1.39**	0.53	0.58	0.45	-1.09**	0.46
Intercept8	1.51**	0.47	1.33**	0.42	0.52	0.47	1.92**	0.47	1.97**	0.54	1.16**	0.45	-0.63	0.46
Intercept9	2.22**	0.48	2.07**	0.42	1.36**	0.47	2.71**	0.48	2.69**	0.54	2.04**	0.45	-0.13	0.45
Intercept10	2.92**	0.48	2.82**	0.43	1.91**	0.49	3.38**	0.49	3.15**	0.56	2.75**	0.48	0.50	0.45
Nobs =	342		348		346		348		351		351		351	
Likelihood Value	-706.6		-643.9		-631.4		-656.6		-718.6		-671.0		-636.5	

Table P: Regressions for satisfaction of migrants with job characteristics and fit between education/skills and jobs, including fluency ('speak'), Results with professional levels among the explanatory variables, females only

Variable:	Satisfaction wage Coef.	Std.	Satisfaction type of work Coef.	Std.	Satisfaction worktime Coef.	Std.	Satisfaction career Coef.	Std.	Fit education and work Coef.	Std.	Fit abilities work Coef.	Std.	Job performance Coef.	Std.
Turkey	0.21	0.32	-0.42	0.33	0.05	0.28	-0.45	0.33	0.35	0.30	0.46	0.33	0.45	0.31
Moroccan	0.27	0.35	0.25	0.43	0.05	0.43	-0.17	0.36	0.50	0.43	0.57	0.40	0.54	0.48
Dutch Antilles	0.25	0.36	0.59**	0.27	-0.01	0.29	0.14	0.34	0.14	0.31	0.59**	0.27	0.45*	0.24
Suriname	0.10	0.33	0.41	0.29	0.15	0.31	0.40	0.28	0.71**	0.30	0.70**	0.28	0.66**	0.23
Indonesia	-0.16	0.44	-0.22	0.33	-0.28	0.39	-0.32	0.37	-0.06	0.41	0.09	0.37	-0.01	0.30
German/Scand.	0.25	0.30	0.04	0.28	-0.26	0.26	-0.08	0.33	0.51	0.34	0.51	0.32	0.69**	0.26
English	-0.36	0.37	0.09	0.29	-0.66**	0.31	-0.43	0.30	0.27	0.27	0.39	0.25	-0.04	0.25
Latin	-0.04	0.33	-0.07	0.32	-0.21	0.27	-0.12	0.34	0.21	0.32	0.27	0.33	0.14	0.33
Africa	-0.36	0.48	0.46	0.41	-0.28	0.52	0.25	0.40	0.87*	0.52	1.06**	0.37	0.47	0.41
Eastern Europe	0.28	0.29	0.27	0.34	-0.12	0.32	0.33	0.32	0.31	0.38	0.49	0.35	0.45	0.28
Prim. Education	0.21	0.37	0.86**	0.41	0.13	0.47	0.68*	0.39	-0.06	0.41	0.33	0.34	-0.29	0.35
Lower voc./prof.	0.49*	0.28	0.12	0.22	0.10	0.22	0.17	0.23	0.12	0.28	0.20	0.25	-0.12	0.22
Higher sec./middle voc.	0.14	0.18	0.07	0.17	-0.18	0.17	0.05	0.18	0.21	0.18	0.23	0.18	-0.27*	0.16
Age at migration/10	-0.02	0.09	0.05	0.08	-0.02	0.08	0.00	0.08	0.04	0.09	0.04	0.09	-0.03	0.07
Age/10	0.10	0.10	0.14	0.08	-0.04	0.08	0.11	0.09	0.09	0.09	0.17*	0.09	0.12	0.07
# Children	-0.25	0.90	-0.04	0.90	-0.02	0.83	-0.13	0.88	0.85	0.86	-0.57	0.86	-1.00	0.81
Couple	0.06	0.18	0.01	0.17	0.00	0.17	-0.07	0.15	-0.34**	0.16	-0.11	0.16	0.12	0.15
Higher academic	1.23**	0.43	1.08**	0.33	0.46	0.37	0.74**	0.39	1.26**	0.43	1.34**	0.40	-0.68**	0.34
Higher supervisory	1.75**	0.68	1.88**	0.55	1.32	0.80	1.17**	0.44	0.73	0.66	1.32**	0.59	0.81**	0.38
Intermediate academic	0.97**	0.28	1.44**	0.30	0.83**	0.24	1.02**	0.31	1.40**	0.29	1.52**	0.28	0.12	0.26
Intermediate supervisory	0.32	0.30	0.72**	0.30	0.55**	0.24	0.66**	0.31	0.73**	0.33	0.72**	0.36	-0.06	0.30
Other mental work	0.45*	0.26	0.73**	0.31	0.53**	0.25	0.53**	0.30	0.86**	0.29	0.90**	0.27	-0.21	0.24
Skilled manual work	1.23**	0.41	1.45**	0.36	0.71**	0.35	0.80**	0.37	1.12**	0.53	0.93*	0.48	-0.38	0.43
Intercept1	-0.46	0.48	-0.44	0.43	-2.20**	0.53	-1.10**	0.50	0.42	0.50	0.42	0.45	-2.07**	0.39
Intercept2	-0.34	0.48	-0.31	0.43	-2.02**	0.49	-0.86	0.52	0.55	0.51	0.63	0.46	-1.65**	0.40
Intercept3	0.00	0.48	-0.15	0.44	-1.64**	0.50	-0.66	0.52	0.86*	0.51	0.76	0.47	-1.53**	0.41
Intercept4	0.28	0.47	0.12	0.45	-1.38**	0.48	-0.41	0.51	0.94**	0.51	0.90*	0.47	-1.35**	0.41
Intercept5	0.50	0.48	0.25	0.45	-1.27**	0.47	-0.23	0.50	1.19**	0.51	1.18**	0.47	-1.03**	0.40
Intercept6	0.84*	0.47	0.66	0.45	-0.89	0.46	0.17	0.49	1.42**	0.52	1.42**	0.47	-0.69	0.40
Intercept7	1.27**	0.47	1.04**	0.45	-0.43	0.46	0.65	0.48	1.71**	0.52	1.85**	0.48	-0.42	0.39
Intercept8	1.97**	0.47	1.64**	0.47	0.19	0.45	1.36**	0.48	2.11**	0.52	2.38**	0.49	0.01	0.40
Intercept9	3.00**	0.49	2.63**	0.48	0.96**	0.44	2.34**	0.49	2.73**	0.53	3.17**	0.50	0.69	0.40
Intercept10	3.74**	0.52	3.28**	0.50	1.61**	0.45	2.96**	0.51	3.23**	0.54	3.85**	0.50	1.31**	0.40
Nobs =	339		340		341		339		348		348		348	
Likelihood Value	-686.0		-614.4		-647.7		-630.8		-732.0		-690.8		-625.5	