

Turkish migrants and native Germans compared: The effect of inter-ethnic and intra-ethnic friendships on the transition from unemployment to work

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Abstract. This article analyses whether having inter-ethnic and intra-ethnic friendships can be associated with shorter unemployment duration, comparing Turkish migrants and native residents in Germany. This allows us to examine the degree to which the returns of bridging and bonding social capital are different for both groups. With data from the German Socio-Economic Panel we find that for native Germans intra-ethnic friendships shorten unemployment duration, whereas inter-ethnic friendships do not. For the Turkish migrants, inter-ethnic friendships reduce the unemployment duration, whereas intra-ethnic friendships do not. In other words, only friendships to German natives facilitate the transition to employment, but in particular for Turkish migrants. This effect is largest for migrants with a low education.

Key Words: Social capital, Turkish migrants, unemployment duration, transition to work, Germany, GSOEP

Introduction

The importance of social capital on the labour market has been widely discussed. Researchers have suggested that – both for migrant and native residents – social capital contributes to economic outcomes, such as social mobility and access to the labour market (Aguilera 2002; Drever and Hoffmeister 2008), wages (Aguilera 2003; Boxman, De Graaf, and Flap 1991)

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and occupational status (Lin 1999a; Franzen and Hangartner 2006). With regard to migrants, it has been argued that social capital is closely linked to their social embedding and integration in the host society (Haug 2007: 90). Also inclusion into the ethnic community can stimulate economic integration due to the resources made available through this network, such as employment in the ethnic economy. On the other hand, Haug (2007) stresses in her study on Germany the potential negative effects of ethnic social capital. When being embedded into ethnic networks, successful upward mobility may be impeded due to social obligations, pressure to conformity, or “downward levelling norms” (Portes 1998). Such mobility traps can consequently lead to ethnic segmentation or “downward assimilation” (Portes 1995). In other words, lack of contact to the host society may hamper integration (Haug 2007: 100). For these reasons, Haug (2007: 100) insists to distinguish between host-country and home-country specific social capital.

In addition, there may be differences between migrants and native residents in their *use* of social networks. Migrants make more often use of social contacts to find employment in the presence of discrimination (Drever and Hoffmeister 2008; Mouw 2002). If discrimination limits opportunities, the costs of the job search process increase for minorities. To reduce the search costs, migrants may therefore rely more heavily on their social contacts than natives do. Moreover, there may be a composition effect: migrants are on average less educated than natives. Since people with more educational credentials are more proficient to find a job through formal methods (Marsden and Hurlbert 1988; Drever and Hoffmeister 2008), migrants are likely to make more use of their social network than natives.

Few studies analyse the impact of different types of social capital simultaneously for migrants and native residents (see for example Kalter 2006, Mouw 2002), especially in Germany. Despite the large body of literature on social capital on the labour market and these arguments calling for a differentiation by ethnic groups, only few studies compare the effect of ‘bridging’ and ‘bonding’ social capital across ethnic groups (Aguilera 2002; Battu, Seaman, and Zenou 2005; Kalter 2006, Kanas et al. 2009). In view of the disadvantages of

Turkish migrants on the labour market in Germany (compare Kogan 2004, 2007; Uhlendorff and Zimmerman 2006; Hartung and Neels 2009), this paper contributes to the existing body of literature on social capital and labour market outcomes in two ways: first, by simultaneously analysing the effect of having inter-ethnic and intra-ethnic friendships for Turkish migrants and native Germans, and second, by making use of an event history design that allows us to better deal with the problem of reversed causality than most previous studies do. Our research question is formulated as follows: ‘Comparing first generation Turkish migrants and native Germans, what are the differential effects of inter- and intra-ethnic friendships on the transition from unemployment to employment in Germany?’

Theory and hypotheses

Social capital and the labour market

The positive impact of social capital, defined as “investment and use of embedded resources in social relations for expected returns” (Lin 1999b: 30), relies on the assumption that people well equipped with social resources – the resources one can call upon through others in one’s social network – succeed better in attaining their goals. More generally speaking, friendships can be supportive in different dimensions: emotional support, instrumental (practical) support, information, sociality, and feedback (compare Petermann 2002; Hollstein 2001). Family and friends cover several of these dimensions and can therefore be considered as multiplex while relatives, colleagues, and acquaintances are rather uniplex in the sense of functional differentiation – their support is relatively limited to one/some of these dimensions (compare Petermann 2002; Hollstein 2001, Plickert, Côté and Wellman 2007). In other words, friends compared to acquaintances are sources of support for labour market outcomes in more than one regard. From a utilitarian perspective, people will ‘invest’ in relations with others because of the expected future value of the resources made available by these relations (Flap and Völker 2004). From this perspective, a social network is, considered as a capital, which can produce returns on these investments.

Studies on the impact of friendships on labour market outcomes often refer to hypothesis of the strength of weak ties (Granovetter 1973), according to which weak ties such as remote friends and acquaintances are profitable, rather than strong ties, such as family members and close friends. According to Burt (2001), however, it is not necessarily weak ties that are profitable. He argues that in order to access valuable information it is essential to ‘span structural holes’, either through strong or weak ties. Friendships in general are found to coincide with labour market success (both for migrants and natives), such as higher wages and occupational status (De Graaf and Flap 1988; Lin 1999a, Lancee 2009) and job search (Patacchini and Zenou 2008; Granovetter 1995; Flap and Boxman 2001; Aguilera 2002; Drever and Hoffmeister 2008; Battu, Seaman and Zenou 2005). As a general hypothesis, we therefore expect *all* friendships to be helpful when finding a job, irrespectively of them being intra- or inter-ethnic. However, below we argue why the effect size is expected to be different for migrants and native residents.

Bridging and bonding social capital

Looking at native Germans and Turkish migrants, Kalter (2006) analyses the effect of contacts with native Germans on the likelihood to be employed (like the present study, also drawing on the GSOEP data). He finds a positive effect of having contacts with Germans. We also anticipate a positive effect of friendships with native Germans, both for the Turkish minority and for ‘native’ Germans, but we do not expect this effect to be the same for migrants. The argument stems from more recent discussions on social capital, which distinguish between ‘bonding’ and ‘bridging’ ties (Gitell and Vidal 1998; Putnam 2000; Woolcock and Narayan 2000; Leonard and Onyx 2003; Schuller 2007). Loosely defined, bonding refers to within-group connections, while bridging social capital refers to between-group connections. This division may refer to different dimensions such as ethnic group, or social class. We define bridging ties as relations that cut across the ethnic divide and bonding

ties as those within the same ethnic group, operationalising these as intra-ethnic and intra-ethnic friendships respectively.

Especially social capital of the bridging type is often thought to be useful to make headway on the labour market (Lancee 2009; Sanders, Nee, and Sernau 2002; Granovetter 1995) as it spans – by definition – gaps across socio-economic variables such as class, ethnicity and age (Portes 1998; Narayan 1999). These gaps in networks, called structural holes, can disrupt the flow of information between people (Burt 2001). Ties bridging such structural holes are thought to be more effective than non-bridging ties, since unique information and opportunities come into reach (Putnam 2000: 22). Bonding ties, on the other hand, connect to a network where the same information is being circulated and therefore do not necessarily provide job market information of additional value (see for example Nannestad et al. 2008).

However, this does not imply that bridging is simply ‘effective’ and bonding is not. Social capital being a *capital* – in the sense that it yields positive returns – is based on the assumption that social relations connect people with valuable resources. The often cited statement that bonding social capital is to ‘get by’ while bridging social capital is to ‘get ahead’ (Narayan 1999; Putnam 2000) is predominantly argued from the perspective of a *resource-poor* group. When taking the perspective of the *resource-rich* group, one would expect bonding ties to be beneficial, but bridging ties not. The question is hence to what extent ties are accessing a network that contains resources useful on the labour market.

It is too simplistic to differentiate between resource-poor and resource-rich based on ethnicity as such. There is for example ample evidence that for migrants social capital of the bonding type yields positive returns, since intra-ethnic ties provide access to an ‘ethnic’ economy (see for example Waldinger 1994; Elliott 2001; Sanders Nee and Sernau 2002). The distinction between resource-rich and resource-poor is based on the (access to) host country and labour market specific resources that natives have and that migrants have by definition less of. Migrants building connections to the native population hence gain access to host-

country specific resources. It is well established in the literature that for successful integration in the labour market of the host society, migrants need host-country specific skills, such as education and language proficiency (Chiswick and Miller 2002; Kanas and Van Tubergen 2009; Friedberg 2000; Duleep and Regets 1999; Zeng and Xie 2004; Borjas 1994). This argument is at the core of bridging social capital: by building inter-ethnic contacts migrants realise access to resources that they have typically little of themselves depending on their length of stay in the host country, and that are much demanded on the labour market.

Haug (2003) points out that it is in particular host-country specific social capital that is beneficial for labour market outcomes: “Since [...] in Germany most employers are Germans, it is useful for immigrants to have contacts to Germans”. Kazemjour (2006: 6) explains why: “The ethnic diversity of social networks is particularly important in the case of immigrants. A less diverse social network would mean a lower frequency of contacts with the larger society and, potentially, a slower process of language acquisition and cultural adaptation, not to mention the presence of fewer job choices. In some extreme cases, immigrants with ethnically homogeneous networks have to rely on their ethnic enclaves as the only source of employment.” In this paper, resource-rich does therefore not refer to one’s social class or occupational prestige, but it implies possessing host country-specific resources, such as providing help with applications and job search, pointing at vacancies, dealing with employment agencies, translating cover letters, knowing (or being) employers. In this sense, German natives are the resource-rich group, when being compared to the Turkish first generation¹. It is hence expected that bridging social capital is more effective for Turkish migrants than for ‘native Germans’, as for Turkish migrants it represents (potential) access to information and structures important with regard to the host country’s labour market (compare Haug 2007). For native Germans on the other hand, inter-ethnic friendships have a diversifying effect, but represent a link to a resource-poor(er) group. Therefore, inter-ethnic friendships are expected to be less beneficial for native Germans. This is formulated in Hypothesis 1a: “The positive effect of inter-ethnic friendships on finding employment is

larger for Turkish migrants than it is for native Germans.” By the same token, we expect the opposite with respect to *intra*-ethnic friendships: intra-ethnic friendships are more favourable for native Germans than for migrants. The argument is that, for Germans, intra-ethnic friendships tap into a resource-rich environment, whereas for migrants it does not. This is formulated in Hypothesis 1b: “The positive effect of having intra-ethnic friendships on finding employment is larger for native Germans than it is for Turkish migrants.”

Social and human capital

Contrary to Kalter’s study (2006) mentioned earlier, we expect the returns of social capital to differ across educational levels. The effect of having access to a resource-rich network is likely to be largest for people that possess the least resources themselves. People with fewer educational credentials are - on average - less proficient to find a job through formal methods (Marsden and Hurlbert, 1988; Elliott 2001). Drever and Hofmeister (2008) indeed find that lower educated migrants in Germany make more use of their personal network to find a job (also in the US, see Elliott 2001, Stainback 2008). If the lower educated are less proficient in finding a job through formal channels, the effect of social capital is likely to be larger for them than for the higher educated, who have more alternatives available. Along that line of reasoning, social capital that is connecting to a resource-rich environment is more valuable for people who possess relatively few resources themselves. In other words, for people with a low education, having friendships with native Germans is more beneficial than for those with more educational credentials. This is formulated in Hypothesis 2a: “The positive effect of having friendships with German natives on finding employment is larger for those with a low education, when being compared to those with a high education”.

However, this reasoning particularly applies to first generation migrants, rather than to native residents. Especially for the first generation, that generally possesses little host country specific knowledge, language proficiency and education, connecting to a resource-rich network is crucial (Aguilera and Massey 2003; Drever and Hoffmeister 2008). This is

formulated in Hypotheses 2b: “The mechanism of H2a is stronger for Turkish migrants than for German natives.”

Methodology

Method of estimation

Many studies that analyse the returns of social capital suffer from an endogeneity problem since the direction of the association between labour market outcomes and social capital is not clear (compare Mouw 2002; Offe and Fuchs 2004). Both theoretical arguments are plausible: on the one hand, social capital may contribute to economic success, but economic participation may on the other hand also enhance social capital. Panel studies can isolate the effects. Therefore, an event history design is applied in this paper. An event history is a longitudinal record of changes in variables and their timing (Blossfeld, Golsch, and Rohwer 2007). The data was set up as such that the predictors always preceded the timing of the event. In this way, the temporal order of cause and effect is unambiguous (Singer and Willett 2003). Event history analysis can moreover also exploit censored data in a more efficient way than other panel techniques (Allison 1984: 11).

The hazard and survival function are key means to investigate the transitions from one state to another (event). The continuous-time hazard $\lambda(t)$ is a time-specific failure rate measuring the “conditional probability of event occurrence *per unit of time*” (Singer and Willett 2003: 474):

$$\lambda(t) = \lim_{\Delta t \rightarrow 0^+} \frac{pr(t \leq T < t + \Delta t \mid t \leq T)}{\Delta t} \quad (1)$$

with T denoting the failure time measured here in months (Cox 1972: 187). The equation indicates that the event – the transition from unemployment to work – occurs at T in the interval t to t+Δt, given that it has not occurred before. The rate is measured in Δt units. The

continuous-time survivor function $F(t)$ refers to the probability of surviving at least until time t (Singer and Willett 2003: 472; Cox 1972:187):

$$F(t) = pr(T \geq t) \quad (2)$$

The event time T of the event exceeds thus time t .

Not making assumptions regarding the shape of the hazard function, Cox proportional hazards models are used to estimate the impact of the covariates. Cox regressions can generally be formulated as:

$$h(t_{ij}) = h_0(t_j) e^{\beta_1 X_{1ij} + \beta_2 X_{2ij} + \dots + \beta_k X_{kij}} \quad (3)$$

with $\log h_0(t_j)$ as the unspecified general baseline log cumulative hazard function and with $e^{\beta_1 X_{1ij} + \beta_2 X_{2ij} + \dots + \beta_k X_{kij}}$ as the covariate effects.

As the sample contains multiple records per person, which are not expected to be independent, we allow standard errors to be intragroup-correlated (clustering). In that way, independence across (but not necessarily within) groups is assumed. All variables included in the analysis are treated time-constant. The estimates are obtained by the Breslow method handling tied events as if the order of the events is not known. Finally, the proportionality assumption has been relaxed by including interactions with time when significant.

Data and construction of the sample

The analysis in this paper draws on the German Socio-Economic Panel (GSOEP), a yearly panel survey that over-samples migrant households and therefore contains a relatively large number of respondents with migration background (Wagner, Burkhauser, and Behringer 1993; Haiskens-Denew and Frick 2005). Furthermore, it provides a detailed monthly activity calendar from which can be seen if a person is in education, works, or is unemployed. Due to the availability of information on friendships, the observation period for this study is limited to 1996-2007. With regard to the sample construction, first all unemployment periods from

the monthly activity calendar were selected. In other words, only the working age population that was also active on the labour market is included into the sample. Secondly, direct transitions to work were defined as realizing part-time or full-time employment at the end of the unemployment spell (up to three months after) and which lasts at least three months. Taking only the native Germans and the Turkish migrants, male and female, and excluding left-censored spells, we retrieved a person period file (N= 7,803) with multiple unemployment spells per person (N= 5,047), of which only 37.6 percent end in a transition to work, while 16.5 percent are right-censored. Persons exiting the labour market were treated as censored in the analysis yielding thus event-specific hazard models (compare Singer and Willett 2003).

It is important to note that the monthly calendar information was matched with other variables measured on a yearly basis. As most of the information besides the labour market status record is collected in yearly intervals, a limitation of the study is that it is not entirely possible to assign the individual information to the exact monthly timing of the beginning of the spell.

Operationalisation

There is no consent in the literature how *ethnic groups* are to be defined. Depending on the definition, it may include notions of a shared culture in addition to common ancestry. Despite the theoretical complexity of the phenomenon (see Sollors 1996 for a more detailed discussion), ethnic group membership is a concept that is difficult to measure adequately. In particular quantitative data has severe limitations in this regard. Since the options to operationalise ethnic group membership in the GSOEP are limited or entail a heavy selection when using more recently added indicators, the ethnic groups are identified via nationality and place of birth. Persons born in Germany and with German nationality are defined as native Germans. Turkish migrants are born in Turkey, and have either a Turkish or a German nationality, hence including the naturalized first generation in the sample (see Table 1 for the

descriptive statistics). Persons born in Germany and a Turkish nationality were seen as second generation and thus excluded from the sample.

<INSERT TABLE 1 ABOUT HERE>

Regarding *inter- and intra-ethnic friendships*, a module on social networks is included in the waves 1996, 2001 and 2006 of the GSOEP. In these years, respondents are asked to mention up to three persons outside of their household that are important to them. The introduction phrase reads: ‘Now some questions about your friends and acquaintances: Please think of three friends or relatives or other people whom you go out with or meet often. Please do not include relatives or other people who live in the same household as you.’ In the questionnaire, the mentioned persons are subsequently classified by the type of relationship (related or not related) and nationality (German or other). For those ties classified as ‘other’, it was asked whether the respondent comes from the same country as the person mentioned.

Focusing on friendships, we use only non-related ties and subsequently recode them on the basis of the nationality specified. For a Turkish person, inter-ethnic friendships are friendships to German nationals. Inter-ethnic friendships for a German refer to the number of friends that have another nationality than German. Intra-ethnic ties are coded inversely: for native Germans, these are friendships with German nationals; for Turkish migrants these are friendships with people not having the German nationality.³ The friendships are matched to the unemployment spells in such a way that the time of measurement is closest to the beginning of the spell, but not before unemployment has started.⁴

The GSOEP survey does not allow for a much more refined revision of the ethnic differences in social capital. Therefore, we do not analyse the *network* of ethnic minorities compared to natives, but rather the differences in background characteristics between persons with and without inter- and intra-ethnic friendships. Furthermore, since the measurement is

limited to ethnic differences in social capital, it is not possible to measure the actual resources available in ego's network. This implies that spanning structural holes can only be observed with respect to the ethnic divide, and not when it concerns socio-economic differences. Therefore, we assume that social connections with native Germans as such imply having access to valuable resources. This is clearly a limitation; data on the socio-economic status of the friends would be desirable in order to describe the social composition of the networks. In that way, one could examine which socio-economic characteristics are bridged in addition to ethnicity.

Important to note is finally that this study considers friendships as ties in one's larger network. It is, however, the question if these are weak ties in Granovetter's (1973) sense. Moreover, in previous literature there is consensus that the ties mentioned in name generator items (like the ones used in this study) are biased towards strong ties (see for example Van der Gaag and Snijders 2004). The ties mentioned in the survey are therefore likely to be close rather than remote friendships. Since in the GSOEP survey it is only possible distinguish between family relations and friendships, we concentrate on friendships as the least strong ties measured.

As a first *control variable* educational attainment was introduced. Operationalised according to the ISCED scheme it is grouped in the following categories: (1) Inadequately, (2) General Elementary, (3) Middle Vocational, (4) Vocational plus *Abitur* (A levels), (5) Higher Vocational Education, and (6) Higher Education (UNESCO, 1997). For the analysis, (1) and (2), as well as (4) and (5) were collapsed into one category respectively. In addition, we control for the years of fulltime working experience (also squared), age (also squared) and gender. For the Turkish migrants, we furthermore control for German language proficiency⁵ and the duration of stay in Germany in years⁶. We include the latter two control variables to test their spuriousness with inter-ethnic friendships: it could be that those having inter-ethnic friendships also speak German well, or that those who are longer in Germany are also the

ones that have inter-ethnic friendships. Last, we include a dummy to control for regional differences (former East vs. Western Germany) and dummies for each survey year to control for a time trend.

Results

Table 2 displays the average number of inter-ethnic and intra-ethnic friendships for native Germans and first-generation Turkish migrants, split by educational level.⁷ With respect to our dependent variable, only 37 percent of the unemployment spells end with a transition to employment in the observed time span. Figure 1 visualises the survival curve for this transition for native Germans and Turkish migrants. Turkish migrants make a significantly slower transition to employment than Germans do.⁸ Naturally, these survival curves are a univariate picture of the transition from unemployment to employment. To account for other individual characteristics as well, we include relevant covariates and estimate multivariate models in the following section.

<INSERT TABLE 2 ABOUT HERE>

<INSERT FIGURE 1 ABOUT HERE>

Table 3 presents Cox regressions predicting the duration of the transition from unemployment to employment for Turkish migrants and native Germans separately. Models 1 and 2 include inter-ethnic and intra-ethnic friendships, plus all controls. When looking at native Germans only (Model 1), the results with regard to social capital indicate that having friends from a different ethnic background does not make a difference for the transition from unemployment to work. On the other hand, each friend within the same ethnic group accelerates the process of finding a job by almost 4 percent. Model 2, including only the Turkish first generation,

suggests that Turkish migrants profit from inter-ethnic friendships. For them, each native German friend accelerates the process of finding a job by 46 percent.

Contrary to native Germans, having intra-ethnic friendships does not affect the process of finding a job for Turkish migrants. There is hence no advantage of co-ethnic friendships, for example with respect to the ethnic economy. This could be explained by Smith's (2003) findings. Smith concludes that due to lacking trust and thus collective efficacy, the resources and support mobilised through the ethnic network differ across ethnic communities. Poor black in the US were found to lag behind other ethnic communities in these terms (Smith 2003). It might be that such processes also apply to the Turkish community.

These findings only partly confirm our first hypothesis that despite a varying effect size *all* friendships reduce unemployment duration. Whereas intra-ethnic friendships are beneficial for native Germans, they are not for Turkish migrants. Similarly, inter-ethnic friendships are beneficial for Turkish migrants but not for native Germans. From Models 1 and 2 we can conclude that it is having friendships with native Germans that accelerate the process of finding a job, rather than inter- or intra-ethnic friendships as such.

In Model 3 analysing both ethnic groups jointly, we therefore combine the inter-ethnic friendships for the Turkish migrants and the intra-ethnic friendships for the native Germans in one variable: the number of (native) German friends. As can be seen from Model 3, having German friends shortens the transition to employment for both native Germans and Turkish migrants; however, this effect is much stronger for Turkish migrants. This result supports the resource-argument and thus also Haug's (2007) thesis on host-country related social capital: apparently it is friendships with Germans that are effective in smoothing the transition to employment. This holds both for native Germans and for Turkish migrants. However, friendships that are bridging across the ethnic divide and into a resource-rich environment prove to be even more effective.

With respect to the controls (gender, age, level of education, language skills, labour market experience), the findings are in line with the literature (see for example Kogan 2004; Hartung and Neels 2009). Previous research indicates that (immigrant) men and women differ in the use of their social network (see for example Moore 1990; Livingston 2006). Therefore, we conducted a robustness check and included an interaction term between inter-/intra-ethnic friendships and sex for both native German and Turkish migrants, which, however, appeared not to be significant (output omitted).

To test the hypothesized interaction between having German friends and educational attainment, we again differentiate by ethnic group (Table 4). We dichotomized the variable education into 'high' education (higher vocational and higher education) and 'low' or no education (middle vocational, general elementary and inadequate education). To test whether the effect of having friendships with Germans is more effective for those with a low education, we include an interaction term in Model 4. The effect of having friendships with Germans is not different for high or low educated native Germans, herewith rejecting H2a. However, in line with Hypothesis 2b, lower educated migrants profit much more from friendships with Germans, when being compared to higher educated (Model 5). Finally, to test whether the effect of having friendships with Germans for Turkish migrants with a low education is also bigger when being compared to the native Germans, in Model 6 we remove the higher educated from the sample and analyse the two ethnic groups jointly. The results confirm what has been found earlier (Model 3): friendships with native Germans have an accelerating impact on finding a job both for low educated native Germans and Turkish migrants. However, the return of this form of social capital is much higher for the Turkish first generation, when being compared to native Germans. Low educated Turkish migrants hence profit most from having friendships with native Germans: more than native Germans themselves and more than higher educated migrants.

Conclusion

In this paper, we analysed the impact of inter-ethnic and intra-ethnic friendships on the transition from unemployment to work for Turkish migrants and native Germans in Germany. We expected that friendships (either inter- or intra-ethnic) reduce the unemployment duration for both migrants and Germans and, more specifically, that inter-ethnic and intra-ethnic friendships do not have the same meaning for Turkish migrants and native Germans. We expected intra-ethnic friendships to be more effective for native Germans than for migrants, since having German friends implies accessing host-country specific resources and information. For Turkish migrants, intra-ethnic contacts imply accessing a relatively resource-poor environment (Hypothesis 1b). Conversely, we expected inter-ethnic friendships to be more effective for migrants than for native Germans (Hypothesis 1a).

The results partly confirmed our expectations. For the Turkish first generation, inter-ethnic friendships have a positive impact on the transition to employment, for the native Germans, intra-ethnic friendships do so. Rather than friendships *per se*, it is having friendships with native Germans that reduces the unemployment duration. Hence, intra-ethnic friendships are more effective for Germans; inter-ethnic friendships are more effective for Turkish migrants. Finally, friendships with native Germans are most effective for low educated Turkish migrants: more than for the higher educated Turkish, and more than low educated native Germans. The role of social capital for the structural integration of migrants into the receiving society has not gained much attention. Yet, our findings suggest that the receiving-country specific resources made available through one's network do contribute to reducing the ethnic gap on the labour market.

The results of this study must be seen in light of a few limitations. The higher impact of having German friends for the Turkish minority may also be explained alternatively. It could well be that 'knowing Germans' in the case of Turkish migrants captures besides the impact of social capital to some extent also unobserved characteristics related to other dimensions of (social or psychological) integration (compare Mouw 2003). In other words, it is not (only)

social capital as such that has a positive effect on the transition to work, but (possibly also) other dimensions of integration into the host society measured indicated by ‘having German friends’. However, due to data limitations these dimensions cannot be disentangled here.

In addition, the effects could be overestimated for migrants if they make more often use of their social ties to find employment (Drever and Hoffmeister 2008). Mouw (2002) for instance argues that the costs of the job search increase for minorities in the presence of discrimination. To reduce search costs, migrants may therefore rely more heavily on their social networks than natives do. Unfortunately, we were not able to include information on whether the (inter-ethnic) ties were actually used for the job search. Furthermore, one could interpret the differences between migrants and natives as a composition effect since migrants are on average less educated than natives and since the lower educated make more often use of their social networks to find employment. Yet, also when only including the low educated (Model 6), the effect of social capital is larger for Turkish migrants than for native Germans indicating that the difference in the effect of social capital cannot only be due to the differences in educational attainment.

A third limitation relates to the limited number of friendships recorded in the data and the bias of this name generator measurement instrument towards strong ties. In this way, we included close friendships rather than acquaintances and were not able to estimate global effect of weak ties in Granovetter’s (1973) sense. Future research could remedy this situation by investigating the entire network of a person. Better measurement of weaker ties is necessary to analyse to what extent results differ when taking into account the weakest ties in people’s networks.

Nevertheless we are able to confirm that accessing resources available through contacts to the native population is an effective strategy to accelerate the transition from unemployment to employment, both for migrants and native residents. Friends can provide valuable information on job offers and/or support in the application process. As a result, persons with native German friends find a job more quickly than people who do not have such friends.

This holds for native Germans, but even more so for migrants. It is, however, important to note that data on the socio-economic status of the friends would be desirable in order to examine if – in addition to ethnicity – other socio-economic characteristics are bridged as well. On the basis of our analysis, which sustains the temporal order required for making causal statements, we conclude that, in order to make the transition from unemployment to work, friendships are most ‘profitable’ when accessing a resource-rich environment, in combination with diversifying one’s social network by building inter-ethnic contacts. Therefore, Turkish migrants with a low education profit most from having native German friends: more than native Germans, and more than higher educated Turkish migrants.

Notes

1) In this regard, it would be interesting to include the second generation, which was, however, not possible due to data limitations. First, case numbers for the second-generation were very low. Second, the social capital of the second-generation migrants could be much more diverse and would therefore require more specification.

2) The initial response rate of the GSOEP for native Germans was around 60% and about 70% for the Turkish migrants in the guest worker sample. Response rates for subsequent waves were considerably lower (Haiskens-Denew and Frick 2005: 160). Specific measures were taken to reduce attrition: dropouts were followed until there were two consecutive refusals of all household members.

3) This is the category 'other nationality'. With the follow-up question 'Do you come from the same country?', we checked whether these ties are indeed intra-ethnic. This appeared to be the case: in 97 percent of the cases that Turkish migrants indicate that their friend has another nationality than German, this friend is also of Turkish origin.

4) Due to the otherwise too few cases, friendships are treated as time-invariant. We use the friendship measure that is closest to the start of the unemployment spell, but not before has started, or after unemployment has ended. Analyses were also run with the measurement of friendships closest to the end of the unemployment spell (but before employment has started), but this yielded no substantially different results.

5) The measure of language proficiency consists of a scale containing three items, measured in 1997, 1999, 2001, 2003, 2005. The items included are 'Own opinion of spoken German', 'Own opinion of written German', 'Language usually spoken' (German, mostly that of country of origin, equally). Reliability analysis (Cronbach's alpha varies between waves from .83 until .86) as well as cumulative scaling with Mokken analysis (Loevinger's H varies from .74 to .79 between waves) show that these items represent a single construct. The native Germans did not receive the language items, and are therefore given the highest value on the scale.

6) In the combined model, we assigned the native Germans the value of the highest duration of stay (38 years).

7) Remind that the sample includes pooled multiple unemployment spells from several years and can therefore not be claimed as representative for the whole population at a particular point of time.

8) Naturally, these results do neither say something about the initial probability to *enter* unemployment nor about the transitions into different types of employment (for the latter, see Hartung and Neels 2009).

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Tables and figures

Table 1. Descriptive sample statistics by ethnic group

	Native German		1 st gen. Turkish	
	Mean	SD	Mean	SD
Inter-ethnic friendships	0.04	0.24	0.43	0.82
Intra-ethnic friendships	1.35	1.27	0.98	1.16
Age	36.96	12.59	34.39	11.16
Years full time work experience	11.92	11.67	9.34	9.66
German language proficiency	13	0	9.36	2.94
Duration of stay in Germany in years	38	0	20.13	9.47
	<i>Percentage</i>		<i>Percentage</i>	
Female	47		35	
Educational attainment				
Inadequately /General elementary	18		58	
Middle vocational	60		29	
Voc. Abitur/higher vocational	10		5	
Higher education	12		6	

Source: GSOEP 1996-2007

Table 2. Average number of inter- and intra-ethnic friendships, by level of education and ethnic group

	<i>Inter-ethnic friends</i>				<i>Intra-ethnic friends</i>			
	Native German		1 st gen. Turkish		Native German		1 st gen. Turkish	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Inadequately /General elementary	0.05	0.01	0.39	0.04	1.25	0.03	1.03	0.06
Middle vocational	0.03	0.00	0.48	0.06	1.35	0.02	0.89	0.09
Voc. Abitur/higher vocational	0.05	0.01	0.68	0.19	1.52	0.04	0.81	0.22
Higher education	0.04	0.01	0.37	0.14	1.44	0.04	1.14	0.21

Source: GSOEP 1996-2007

Table 3. Cox regressions predicting the effect of inter- and intra ethnic friendships on the transition to employment (hazard ratios).

	M1: Native Germans	M2: 1st gen. Turkish	M3: All
Female	.577*** (.025)	.596~ (.166)	.577*** (.025)
Age	1.063** (.020)	1.022 (.110)	1.062** (.020)
Age squared	.998*** (.000)	.999 (.001)	.998*** (.000)
Years fulltime work experience	1.084*** (.010)	1.198*** (.058)	1.085*** (.010)
Years fulltime work experience squared	.999*** (.000)	.995*** (.002)	.999*** (.000)
Educational attainment			
Inadequately/ General elementary	.673*** (.045)	.851 (.201)	.685*** (.043)
Middle vocational	ref.	ref.	ref.
Vocational plus Abi/ Higher vocational	1.183** (.077)	1.234 (.629)	1.191** (.077)
Higher education	1.566*** (.090)	.650 (.638)	1.490*** (.105)
German language proficiency		1.098~ (.054)	1.057 (.044)
Duration of stay in Germany (years)		.962* (.015)	.966** (.011)
Inter-ethnic friendships	1.047 (.082)	1.460** (.168)	
Intra-ethnic friendships	1.036* (.017)	1.016 (.088)	
Native German			ref.
First generation Turkish			.483* (.143)
German friends			1.034* (.017)
German friends * First generation Turkish			1.259* (.135)
N of observ.	7503	313	7803
N of failures	2830	113	2938
Log-likelihood	-21826.345	-480.730	-22749.222
AIC	43714.690	1027.460	45568.444
BIC	43929.305	1151.085	45812.123

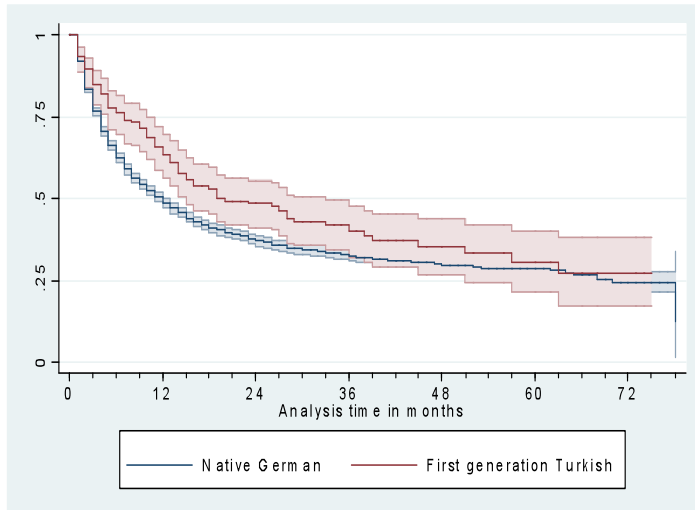
Note: ~ p<0.10 * p<0.05, ** p<0.01, *** p<0.001, Two-tailed tests, robust standard errors clustered by individual. Models include dummies for each survey year, a dummy for former East Germany, and interactions with time where model improving (survey year, higher education, female). Source: GSOEP 1996-2007

Table 4. Cox regressions predicting the effect of friendships with Germans for high and low educated on the transition to employment (hazard ratios).

	M4: Native Germans	M5: 1st gen. Turkish	M6: Low Education only
Female	.571*** (.025)	.558* (.157)	.569*** (.030)
Age	1.095*** (.020)	1.048 (.113)	1.072** (.023)
Age squared	.998*** (.000)	.999 (.001)	.998*** (.000)
Years fulltime working experience	1.078*** (.010)	1.199*** (.057)	1.091*** (.013)
Years fulltime working experience squared	.999*** (.000)	.994*** (.002)	.999*** (.000)
German language proficiency		1.118* (.059)	1.092~ (.049)
Duration of stay in Germany (years)		.959* (.016)	.971* (.012)
High education	Ref.	Ref.	
Low education	.644*** (.051)	.341** (.131)	
German friends	1.008 (.031)	.758 (.248)	1.046* (.020)
Low education*German friends	1.039 (.037)	2.185* (.744)	
Native German			Ref.
1st generation Turkish			.502* (.151)
German friends * 1st generation Turkish			1.406*** (.141)
N of observ.	7493	312	6080
N of failures	2827	112	2225
Log-likelihood	-21829.751	-476.122	-16671.655
AIC	43717.502	1012.244	33405.311
BIC	43918.232	1124.534	33613.406

Note: ~ p<0.10 * p<0.05, ** p<0.01, *** p<0.001, two-tailed tests, robust standard errors clustered on the individual. Models include dummies for each survey year, a dummy for former East Germany and interactions with time where model improving (survey year, higher education, female). Source: GSOEP 1996-2007

Figure 1. Kaplan-Meier survival estimates for the transition from unemployment to employment, by ethnic group.



Note: Estimates including 95% confidence interval. Source: GSOEP 1996-2007