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**Working Paper**

## Perceptions of discrimination: What do they measure and why do they matter?

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# Perceptions of discrimination: What do they measure and why do they matter?

Claudia Diehl and Elisabeth Liebau

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# **PERCEPTIONS OF DISCRIMINATION: WHAT DO THEY MEASURE AND WHY DO THEY MATTER?**

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## **Abstract**

This study addresses the difficulty in linking ethnic discrimination and integration outcomes of immigrants in empirical research. Many of the existing studies look at the relationship between perceived discrimination and integration, but most are based on cross-sectional data. We argue that perceived discrimination should not be taken as an accurate indicator of actual experiences of discrimination, but rather as a partly subjective interpretation of often ambiguous situations. Reported perceptions may thus not only affect but also reflect integration outcomes. This analysis is one of the few that is based on longitudinal survey data (from the German Socio-Economic Panel) and looks into both the determinants and the consequences of perceived discrimination. Results suggest that PD does in fact reflect both exposure to discrimination and attributional processes. Perceived discrimination is generally and substantially lower in more integrated individuals. More detailed analyses reveal that this link is correlational in nature and to some extent group specific. For groups facing salient ethnic boundaries, integration does not come along with less perceived discrimination. In line with previous studies, our results show further that minorities' structural integration into the labor market is unrelated to perceived discrimination but reflects, above all, individual resources, including language skills and social ties to majority members. There is some evidence that perceived discrimination reduces levels of identification with the receiving society.

## 1. Introduction

The role salient ethnic boundaries play in explaining group-specific integration outcomes is a highly contested issue in migration research (Portes and Rumbaut 2001; Waldinger and Catron 2016; Wimmer and Soehl 2014). There is certainly ample empirical evidence of experiences of ethnic prejudice and discrimination, particularly in survey data and audit studies (Pager 2007; Strabac and Listhaug 2008). Yet assessing the impact of discrimination on integration is difficult. Prejudice has to affect behavior in order to affect integration, and the impact of individual incidents of discrimination—as observable in audit studies—on integration outcomes is unclear, especially since minorities may make up for discrimination by trying harder. Researchers interested in explaining integration outcomes therefore often use survey or other microdata to study discrimination indirectly by analyzing “ethnic residuals” or “ethnic penalties” on various outcomes (Connor and Koenig 2013, Luthra 2013). These studies analyze, for instance, the different labor market outcomes of individuals with different ethnic backgrounds. Interpreting ethnic residuals that remain after controlling for educational credentials as evidence for discrimination is tricky, however, mainly because of the difficulty of excluding alternative explanations such as unobserved differences between minority and majority individuals in terms of human, cultural, and social capital (Heckman 1998: 103; Kalter 2006, Koopmans 2016, Lancee 2016). Failing to do so might lead to an overestimation of discrimination. Similarly, not finding any residuals might be falsely interpreted as the absence of discrimination: After all, this could also reflect extra effort by victims of discrimination or prior discrimination that hampered the acquisition of e.g. educational degrees.

Both strands of research—studies describing and explaining prejudice and discrimination as a dependent variable, and studies interested in integration outcomes and in the role of discrimination as an explanatory factor—have remained relatively separate in the literature to date. An increasingly common method of linking discrimination and integration more closely is to analyze the impact of perceived discrimination on integration outcomes. This is usually done by incorporating migrants’ perceptions of discrimination into statistical models and analyzing how these are related to negative

integration outcomes (see next section for a review and critique). This has become possible through datasets that—unlike census data—are tailored to immigrants and their descendants and that often include questions about experiences of discrimination. The focus of such data collection efforts can be described, according to Quillian’s definition, as “the difference between the treatment that a target group actually receives and the treatment they would receive if they were not members of the target group but were otherwise the same” (2006: 302, see also National Research Council 2004: 56pp, Pager 2007). Some surveys also include questions on “group discrimination,” that is, perceptions that the ethnic or cultural group to which an individual belongs rather than the individual personally is being treated unfairly (tenTeije et al. 2013: 280).

In those studies, PD are incorporated into statistical models as a proxy for experiences of discrimination that are thought to hamper integration, often without further elaboration as to what is actually being captured. Research examining the concept itself is still rare (Flippen and Parrado 2015; Maxwell 2015; Schaeffer 2016), and to our knowledge, there is only one study on this topic to date that is based on longitudinal data (Flores 2015). Studying PD has raised interesting empirical questions, such as why those who are better integrated often feel more rather than less discriminated against (tenTeije et al. 2013) and how this varies between groups (Flores 2015).

In this article, we will take a closer look at the concept of perceived discrimination (PD). We want to show that the theoretical and empirical relationship between PD on the one hand and integration outcomes on the other is more complex than many studies suggest. We argue that it is important to understand what these perceptions actually capture, how they change as integration processes unfold, and how they affect integration outcomes across different domains and groups. We test our arguments by exploring the effects of different integration outcomes on PD and vice versa based on panel data from Germany.

## 2. Linking Perceived Discrimination and Integration: Existing Findings

In analyzing the impact of perceived discrimination (PD) on integration outcomes, recent sociological studies of immigrant integration follow in the tradition of (social-)psychological research, which has long focused on the impacts of psychological and health outcomes, such as well-being or self-esteem (te Lindert et al. 2008). Sociological studies look at whether minority members who feel discriminated against identify more strongly with their country of origin or less strongly with their host country (deVroome et al. 2014, Diehl et al. 2016, Jasinskaja-Lahti et al. 2009, Martinovic and Verkuyten 2012, Skrobanek 2009, Verkuyten and Yildiz 2007), are more likely to plan to return to their country of origin (San Pierre et al. 2015), are more religious and slower to acculturate (Fleischmann and Phalet 2012, Maliepaard and Alba 2016), are more involved in transnational activities (Snel et al. 2016), are more politically involved (Fischer-Neumann 2014, Fleischmann et al. 2011), have less trust in mainstream institutions (Röder and Mühlau 2012), have fewer native friends (Schacht et al. 2014), or show higher levels of criminal behavior (Burt et al. 2012). Studies rarely focus on the link between PD and integration in the educational system (Berkel et al. 2010) or the labor market (Koopmans 2016), partly because these aspects of integration can be investigated more reliably using census rather than other survey data, and the former does not include measures of perceived discrimination.

Some studies claim to find support for a negative relationship between perceived discrimination and integration, while others do not, even in spheres where it is commonly assumed that this nexus exists, according, for example, to the concept of “reactive” ethnicity or religiosity (for a discussion, see Voas and Fleischman 2012, 537). Almost all of these studies raise issues of causality (ibid.) because they are based on cross-sectional data but nevertheless assume implicitly that the causal link runs from PD to integration. Very few studies have studied PD as a dependent variable and have asked what factors trigger it. Flippen and Parado (2015) look at the link between integration and PD among Latino men and women in the US. Schaeffer analyses how status aspirations and educational success interact in shaping PD (2016). While these studies are based on cross-sectional data, Flores

analyses longitudinal data from Spain and studies how acculturation affects PD in different groups (2015, see below). Maxwell uses a different methodological approach altogether: Based on a factorial survey he analyses how respondents perceive descriptions of ethnic inequality in different institutional fields “through the lens of discrimination” (Maxwell 2015, 343).

### 3. Linking integration and PD: Theoretical Mechanisms

Taking these findings as a starting point, it seems necessary to take a broader look at: (a) what the term PD actually covers and how this is related to integration, and (b) how PD affects integration in different domains.

#### *(a) PD reflects integration, personality traits, and ethnic boundaries*

Theoretical reasoning as well as empirical evidence suggest that PD is not only a proxy for actual experiences of discrimination but also a subjective evaluation of often ambiguous situations. It reflects two underlying processes: actual exposure to discrimination and attributional processes (Major and O’Brien 2005, 404). Both are affected by minority members’ levels of integration and also by group-level factors such as the salience of ethnic boundaries and personality traits such as a person’s locus of control.

Integration may affect PD just as PD may affect integration, even though this link is by no means straightforward. Mastery of the majority language, for example, should be accompanied by declining exposure to discrimination because it renders an individual’s ethnic background less obvious and thus less salient. Furthermore, survey data suggest that for many majority members, language skills are one of the most important criteria for belonging and should thus be accompanied by greater acceptance and less discrimination (Pew Research Center 2016, 15).

Other dimensions of integration are related to PD in a more ambiguous way. On the one hand, minority members’ “structural” integration into the status systems of the host society, such as the labor market and educational system, influences the need to attribute these failures in a way that is



non-threatening for their self-esteem (Branscombe et al. 1999, 136). “When members of stigmatized groups encounter negative outcomes, one way they may cope with the threat to their self-esteem is by blaming the outcome on discrimination rather than on themselves” (Major and O’Brian 2005, 404, see also Crocker and Major 1989). This suggests that attributing a negative event or situation to discrimination is to some extent a coping strategy that becomes less important and frequent as integration proceeds. In addition, better educated individuals usually have more contact with better educated natives (due to homophilia) who are less prejudiced overall (Hello et al. 2002). As a consequence, exposure to discrimination should decrease.

On the other hand, proponents of the “integration paradox” (tenTeije et al. 2013, Verkuyten 2016) assume that integration increases rather than reduces PD (for a concise summary of this relationship see also Schaeffer 2016, 4pp.). This is because they focus mainly on aspirational levels and sensitivities and claim that more highly educated individuals demand equal treatment more emphatically and feel more deprived if this is denied to them. At the same time, they are more adept at detecting discrimination (Saint Pierre et al. 2015, 1842). Schaeffer qualifies the findings from this literature. His study on European Muslims reveals that it is a combination of low educational success paired with high parental status aspirations that accompanies high levels of PD in the school context (2016).

According to contact theory, social integration leads to more positive attitudes about the outgroup, in this case the majority, and thus to reduced perceptions of this group being discriminated against (Saint Pierre et al. 2015, 1852). However – and in line with the “integration paradox” – more frequent interactions with natives may put majority members at a greater risk of being discriminated against because it increases exposure (Saint Pierre et al. 2015, 1842). Likewise, increased contact is accompanied by increased competition between the two groups, which in turn evokes more negative responses from majority members (Flippen and Parrado 2015).

Minority members’ identification with the host country is less visible than a person’s social status, social ties, or language skills. It should thus primarily affect attributional processes behind PD.

Accordingly, identification with the majority should lead to a decrease in PD because it attenuates the distinction between in- and outgroup and thus leads to more positive attitudes about the latter (Pinney et al. 1998, 940pp). However, those who identify with the majority should be particularly sensitive to and disturbed by unequal treatment.

To complicate matters further, the link between integration and PD seems to differ across ethnic groups, depending on the nature of the ethnic/racial boundaries they face. Flores (2015) presents empirical evidence supporting his argument that the effect of acculturation on PD depends on a migrant group's distinctiveness: "generally speaking, as acculturation increases, immigrants will report less cultural discrimination. Nevertheless, as immigrants acculturate, those who are visibly distinct will increasingly report racial discrimination" (263).

Theoretically, the relationship between integration, PD and the salience of group boundaries is again complex. In terms of exposure, integration might come along with declining levels of discrimination for groups facing less salient, or "blurred" (Alba 2005) ethnic boundaries (e.g. Western Europeans) but remain high for truly unpopular groups facing "bright" ethnic boundaries – no matter how similar they become to the majority (for field experimental evidence on labor market discrimination against blacks in the US, see Bertrand and Mullainathan 2004). However, it is also possible that integration leads to declining levels of discrimination for groups facing "bright" ethnic boundaries but does not make a difference for those who experience little discrimination to begin with. The former groups may include migrants from Africa but also those that are in a "middle category" (Flores 2015, 263) in terms of their phenotypical distinctiveness like many Muslims.

At the same time, members of groups facing salient ethnic boundaries who speak the language, have ties to majority members and are well educated may be particularly sensitive to discrimination because there are no other explanations left for experiencing disadvantage. Furthermore, they may more readily attribute certain ambiguous situations to discriminatory behavior. We have argued above that PD is also a cognitive scheme that helps people come to grips with an unpleasant encounter or a negative experience such as a rejected job application. This scheme should be more

available to groups that have “good reasons” to assume that unpleasant experiences are a manifestation of widespread ethnic or racial discrimination. As a consequence, members of “nonstigmatized and stigmatized groups in particular react very differently to the same local situation, in part because they differ in the collective representations they bring to the situation” (Major and O’Brien 2005, 400). In other words, members of groups facing salient ethnic boundaries should be more likely to attribute negative feedback to discrimination (Branscome et al. 1999, 136, Phinney et al. 1998, 938).

Independent of integration processes and ethnic boundaries, some individuals seem to be more prone to attribute unpleasant encounters or experiences to discrimination than others. According to a number of (social-) psychological studies (Sutin et al. 2016, for an older review, see Phinney et al. 1998), personality traits such as locus of control or the big five (e.g., agreeableness and extraversion) affect PD. While these factors have received far more interest in (social) psychology than in sociology, it seems important to take them into account when trying to explain interindividual variation in PD. After all, it would lend strong support to the argument that PD reflects attributional processes to some extent if relatively stable psychological characteristics were systematically related to it.

The argument that minority members’ integration affects both exposure to and attribution of discrimination and that integration may thus affect PD just as PD affects integration has several implications for empirical analyses of this issue. To be sure, it is impossible to disentangle the effects of integration on exposure and attribution based on survey data—effects that may well go in opposite directions. Doing so would require keeping exposure to discrimination constant, e.g., in field or survey experiments such as the one conducted by Maxwell (2014). It is nevertheless important to explore this relationship using longitudinal data that reveals what happens to PD as integration proceeds. This analysis should be done separately for immigrant groups facing different sorts of ethnic boundaries and should also control for personality traits.

*(b) Perceived discrimination (PD) does not affect all dimensions of integration equally*

The argument that PD reflects both exposure to discrimination and attributional processes implies that PD is not always and necessarily “correct”. This needs to be taken into account when discussing the impact of PD on integration. To be sure, even “incorrectly” perceived discrimination can affect integration outcomes but there are important differences between various dimensions of integration. From a micro-level perspective, integration is the result of individual motivations and resources and societal opportunities (Esser 2009). Some dimensions, such as identification with the majority, reflect motivations more than resources and opportunities, and others, such as structural integration, reflect resources and opportunities more than motivations. After all, migrants can identify with the receiving country if they want to do so, even without majority members liking this, and it does not require any special resources or skills. Minority members’ motivation to do so, however, may be seriously hampered by PD. If majority members are perceived as racist and discriminatory, minority members may be unwilling to identify or form friendships with them. Ultimately, this could lead to an active refusal to identify with the majority. The juvenile counter cultures rejecting attitudes of the white majority that have been described among the black urban underclass in the US are an example for this (Zhou 1999, 204). A similar idea is captured in the widely used concepts of reactive identity (Portes and Rumbaut 2001, 148) or national (dis)identification (Verkuyten and Yildiz 2007, 1460). The empirical link between PD and motivation-based dimensions of integration, most importantly identification with the majority, should thus be rather strong, according to the famous dictum of William Isaac and Dorothy Swaine Thomas that “if men perceive situations as real they are real in their consequences” (Merton 1995, 380).

Migrants’ labor market integration, in turn, mainly reflects resources (such as educational credentials and language skills) and opportunities (such as available job openings). Motivations are important as well but they can be assumed to be high in most cases: Who would not want to have a better-paying or higher-status job? Efforts to find a good job or position may certainly be diminished if individuals feel they will not lead anywhere. But in the end, levels of motivation are only one possible aspect

that could influence access to cherished goods such as jobs, income and housing along with many others – probably more relevant ones.

While discrimination has been shown to limit migrants' possibilities to acquire the resources necessary for reaching parity with natives as well as their chances of earning the appropriate returns to these resources, this process often goes unnoticed by the individual victims of discrimination. The more subtle discrimination is, the more difficult it is to detect. Doing so often requires comparing group-specific treatments, for example, callback *rates* in audit studies. In isolated situations, it is often left to the minority member to link a specific treatment he or she received to his or her ethnic or racial background. Since discrimination is difficult to detect for those affected by it, discriminatory incidents may often go unnoticed whereas other unpleasant experiences may be falsely attributed to discrimination. The empirically observable relationship between PD and variables capturing negative integration outcomes, e.g., not having an adequate job, should, in turn, thus be rather loose.

The most important empirical implication of these arguments is that using PD as an independent variable in analyses of integration only makes sense for those dimensions of the integration process that are driven primarily by individual motivations, e.g., identification with the receiving country. PD should lead to reduced levels of integration only in those spheres. In the following sections, we will look into the relationship between integration and PD and between PD and different integration outcomes empirically.

#### 4. Data and analyses

We use longitudinal data to explore the relationship between PD and different integration outcomes – and vice versa. The German Socio-Economic Panel Study (SOEP, [www.diw.de/de/soep](http://www.diw.de/de/soep)) has been used in numerous studies of immigrant integration for a number of reasons. Labor migrants were oversampled when the original sample was taken in 1984 and several refresher samples have been added over the years to account for the increasing diversification of the immigrant population (most

importantly in 1994, 2013 and 2015, for an overview, see Liebau and Tucci 2015, Brücker et al. 2014). Case numbers are thus large enough in the SOEP to conduct specific analyses at least for large ethnic groups. SOEP data also provide longitudinal information since the same households are encouraged to stay in the panel as long as possible – including individuals who join these households as, for example, children, spouses, and immigrants (Wagner et al. 2007). Furthermore, the SOEP questionnaire includes a broad set of migrant-specific and integration-related variables in addition to questions asked to all respondents. From 1996 on, minority members have been asked about experiences of discrimination in each SOEP wave up to 2011 and bi-annually afterwards.

In our analyses, we use all available survey waves from 1996 on<sup>i</sup>. We start out by presenting some descriptive findings on the strength of PD (*experienced disadvantages in the last two years due to ethnic background: often or seldom versus never*)<sup>ii</sup> over time and across ethnic groups and assess how stable they are on the individual level. The latter will reveal whether or not PD reflects more or less stable attitudes, potentially linked to psychological factors, rather than factual incidents of discrimination. We continue by analyzing how migrants' personality and level of integration affect PD and test whether this link is group-specific. In line with our theoretical arguments, we include indicators for different domains of integration in our models separately, i.e., integration into the status systems of the host society (*holding a job that is adequate to a respondents' educational endowments*), social integration (*personal contact with Germans*), identification with the host society (*feeling German*) and speaking the majority language (*self-assessed German language skills*). If possible, we try to capture all dimensions of integration by taking into account both integration into the receiving society and the ethnic group (e.g., having minority friends, identifying with the country of origin, speaking its language).

We differentiate between minority members from different ethnic groups (i.e. *Turks, non-Turkish labor migrants, Eastern European migrants*)<sup>iii</sup>. Turks and other labor migrants were recruited as low-skilled and temporary workers ("labor migrants") mostly during the 1960s. After the recruitment – stop in 1973, many went back, but substantial shares stayed and brought their families to the

country. Family and marriage migration from Turkey remained an important source of ethnic replenishment of the Turkish population in Germany up to the 1990s. The origin countries of the “other” labor migrants, most importantly Spain, Italy and Greece, soon became immigration countries themselves. These groups’ integration has progressed faster than that of Turks, even though Italian children still face substantial challenges in the educational system (Müller and Kogan 2010, 257pp). Turks are not only a larger and more institutionally complete group; as Muslims, they also experience a substantial and lasting social distance from natives and feel discriminated against more often than other groups according to survey data (Tucci 2013). In other words, they face salient and “bright” ethnic boundaries, while this is much less the case for non-Turkish labor migrants and Eastern Europeans. In order to take into account that ethnic boundaries in Germany have a strong religious connotation, we also look into the role of individual religiosity (*attends religious services at least once a week versus less often or never*).

Given prior findings on the influence of psychological factors on PD, we include these in the models as well, even though they have only been measured a few times – with a few exceptions – and only in recent SOEP waves, since they are considered to be invariant over time. We also control for demographic characteristics such as age and sex.

*In a second step*, we analyze whether or not experiences of discrimination affect respondents’ integration. In doing so, we differentiate between those dimensions of integration that primarily reflect motivations (identification with the host country, e.g., *feeling German*) and those that reflect, above all, resources and opportunities (labor market integration, i.e., *adequate employment*<sup>iv</sup>). Inadequate employment is often taken as indirect evidence of discrimination. Accordingly, it is a “conservative” test of the assumption that discrimination hampers migrants’ structural integration. If our expectation that there is no link between PD and structural integration is supported by the results, it seems unlikely that other indicators of migrants’ structural integration such as income reflect PD.

Methodologically we use hybrid models for logistic panel regression, “an approach that combines some of the virtues of fixed effects and random effects models” (Allison 2009, 23). This method enables us to analyze differences between subgroups (e.g., Turks and other labor migrants) in addition to the effects of time-varying variables (most importantly ongoing integration processes). In detail, random effects models are estimated on transformed data. Both deviations from person-specific means (within-person component) and person-specific means (between-person component) are calculated for time-varying independent variables (for a calculation example in Stata, see: Giesselmann and Windzio 2012, 161). Accordingly, two coefficients are recorded for time-varying variables (“M” refers to person-specific means, “D” refers to deviation from those means) in the tables with the regression results. “D” coefficients are functionally equivalent to fixed effects coefficients and can hence be interpreted as being closer to “causal” effects than M coefficients, which can be taken as predispositions. All time-variant independent variables (except for PD, which is already lagged since it refers explicitly to discrimination in the last two years), were lagged for one year in order to model that previous integration currently influences PD and vice versa.

The analyzed population is limited to individuals who have been employed at least once during the observed period because we do not have any information on adequate employment for other respondents and want to keep the examined population comparable across the regression models. Our sample includes first- and second-generation immigrants because we assume the theoretical mechanisms to be similar for both groups.

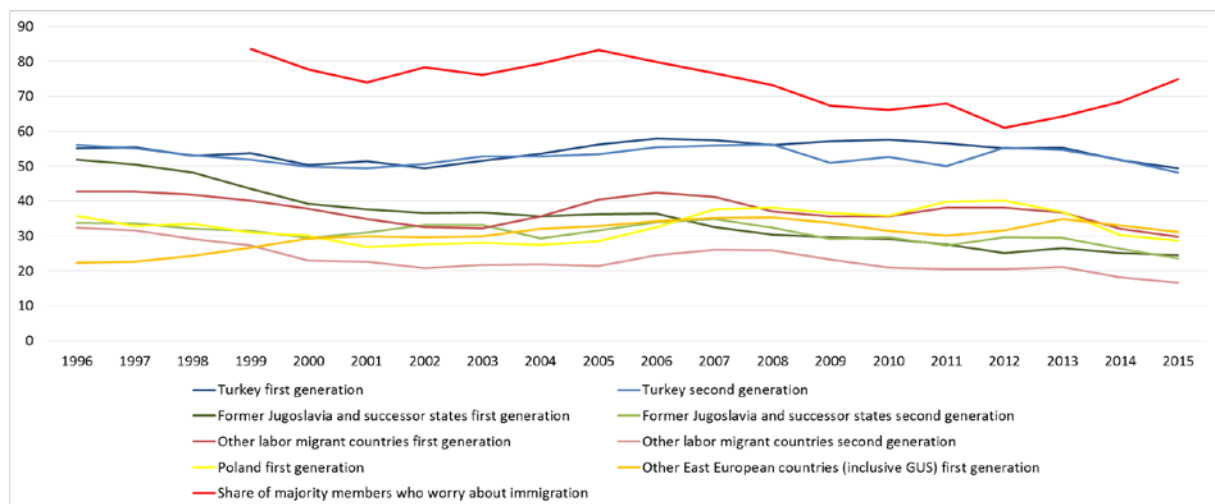
If relevant information is missing for a certain survey year, we have replaced it with information available from the most recent year. We use dummy variables for most variables and control for refusals through missing dummies. Table A1 gives an overview about the distribution of variables by group.



## 5. Findings

Figure 1 displays the percentages of immigrants from different groups who have experienced disadvantages more often than “never” over the last two years.

Figure 1: Experiences of discrimination of minority members and share of majority members who worry about immigration over time.



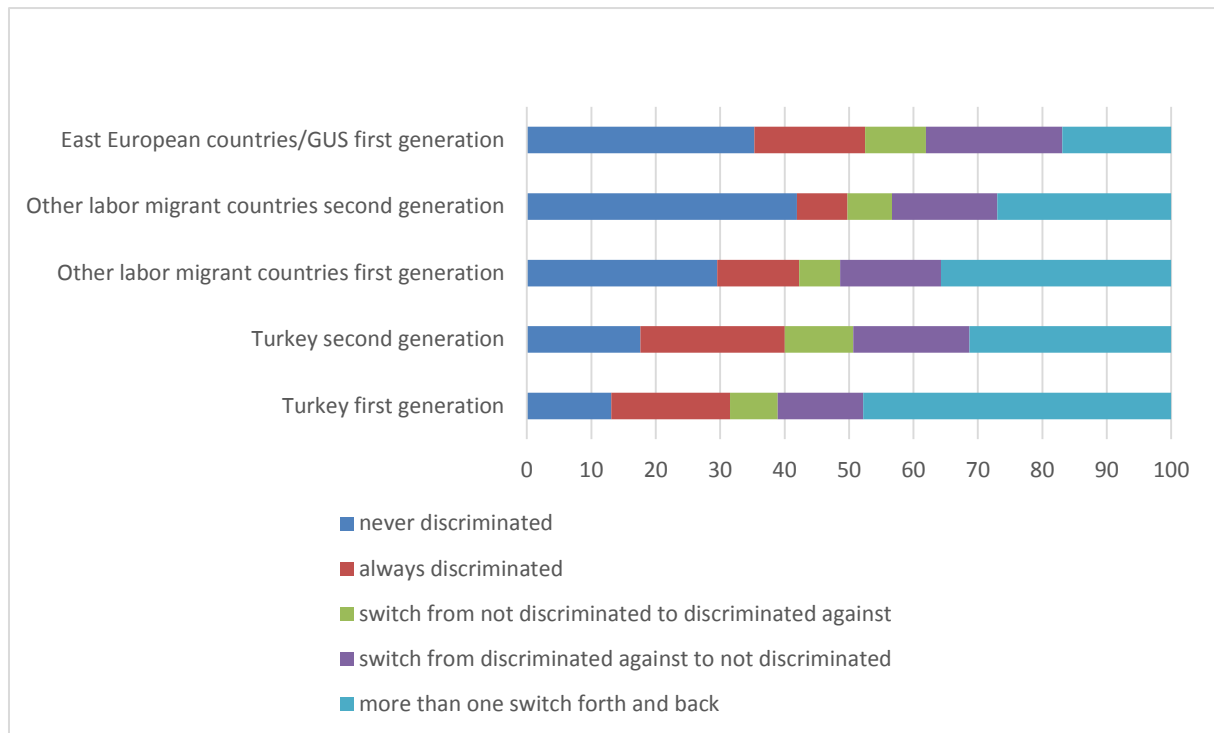
Notes: weighted results (cross weights).

About a third of first-generation migrants from Yugoslavia and of the children of “other” labor migrants, most importantly from Italy, Greece and Spain but about two-thirds of first- and second-generation migrants from Turkey have felt disadvantaged because of their ethnic background at least on occasion during the last two years. While PD declines over time for most groups, it remains stable for Turks and for first-generation Eastern Europeans, not only over time but also across generations. The latter group includes many ethnic Germans who returned from Russia to Germany with high aspirations to live as “Germans among Germans” but are nevertheless often perceived and treated as “Russians” by native Germans.

In order to assess the stability of PD over time on an individual basis, we temporarily exclude all those from the analyses who participated in the SOEP for less than three years. Between 12% (first-generation Turks) and 41% (second-generation other labor migrants) have never experienced any discrimination and between 22% (second-generation Turks) and 7% (second-generation other labor

migrants) report experiences of discrimination in every survey wave in which they were asked about it (see figure 2).

Figure 2: Share of migrants who have never or always felt discriminated against or have switched between reporting or not reporting discrimination.



Notes: Only respondents who have answered the question on perceived discrimination at least three times.

The vast majority of respondents switched between reporting and not reporting experiences of discrimination. This speaks against the possibility that PD is a more or less stable attitude that reflects, above all, psychological factors such as locus of control rather than exposure to actual discrimination. The share of individuals who have never experienced any discrimination is smallest among first- and second-generation Turkish immigrants and largest among second-generation non-Turkish labor migrants.

Table 1: Hybrid Models on the relationship between discrimination and different dimensions of integration (D and M coefficients)

	Perceived discrimination		Identification with Germany		Adequate employment	
	D	M	D	M	D	M
Migrant group ( <i>ref. other labor migrants</i> )						
Turkey		2.58*** (0.28)		0.56** (0.12)		0.60 (0.16)
Eastern Europe		2.50*** (0.29)		51.59*** (10.71)		0.50** (0.13)
Perceived discrimination			0.93 (0.06)	0.11*** (0.03)	1.03 (0.10)	0.38* (0.14)
Good German language skills	1.06 (0.07)	0.76 (0.11)	1.35** (0.14)	35.01*** (10.79)	1.08 (0.15)	14.99*** (5.85)
Good home country lang. skills	0.95 (0.09)	1.52 (0.34)	0.68** (0.08)	0.03*** (0.01)	0.89 (0.16)	0.65 (0.40)
Share of German friends	0.85* (0.06)	0.64** (0.09)	1.38** (0.13)	10.07*** (2.79)	1.38* (0.20)	2.96** (1.06)
Identification with Germany	0.94 (0.06)	0.37*** (0.04)			1.06 (0.13)	1.17 (0.37)
Identification with home country	0.99 (0.05)	0.71** (0.09)	1.26** (0.08)	0.69 (0.17)	0.91 (0.09)	0.97 (0.32)
Religiosity (attendance at least once a week)	0.90 (0.07)	1.13 (0.16)	0.83 (0.10)	1.08 (0.29)	0.97 (0.15)	0.92 (0.31)
More than basic education	1.23 (0.14)	1.19 (0.12)	0.94 (0.14)	1.02 (0.18)	0.39*** (0.08)	1.05 (0.24)
Adequate employment	0.99 (0.08)	0.68* (0.11)	0.89 (0.09)	1.71 (0.53)		
Negative emotional experiences	1.06 (0.06)	1.52*** (0.13)	0.90 (0.06)	0.63* (0.11)	1.16 (0.12)	0.59* (0.13)
Externally oriented locus of control		1.24*** (0.05)		0.95 (0.06)		0.88 (0.07)
Big five: openness		0.99 (0.04)		0.88 (0.07)		1.37** (0.14)
Big five: conscientiousness		0.89* (0.04)		0.85 (0.08)		0.87 (0.11)
Big five: extraversion		0.91* (0.04)		1.20* (0.10)		1.11 (0.12)
Big five: agreeableness		0.91 (0.04)		1.02 (0.10)		0.80 (0.10)
Big five: neuroticism		1.07 (0.04)		0.98 (0.07)		1.07 (0.10)
Tendency to forgive		0.91* (0.03)		1.15* (0.06)		0.94 (0.07)
Believe most people try to treat other people fairly		0.73** (0.07)		0.77 (0.14)		1.17 (0.26)
Believe most people attempt to be helpful		0.96 (0.09)		1.31 (0.25)		1.21 (0.29)
Constant	0.96 (0.46)		1.78 (1.56)		13.387,73*** (15.252,20)	
N years of person	20.976		22.728		18.460	
N person	3,130		3,441		3,439	

Notes: \*p<=0.05, \*\*p<=0.01, \*\*\*p<=0.001, controlled for: east/west, urban/rural, age, married, sex.

*Who feels discriminated against and how does this relate to integration?*

Table 1 presents the results of hybrid regression models with PD as the dependent variable (column 1). Again, we find strong and significant differences between groups, with Turks *and* Eastern Europeans feeling *ceteris paribus* discriminated against much more often than non-Turkish labor migrants. The link between integration and PD is overall negative: those who have German friends, are adequately employed, identify with Germany (and, by tendency: speak German) feel less discriminated against overall than those who do not. Identification with the country of origin has a similar effect, though it is weaker than identification with Germany. However, while more contact with native Germans are followed by decreasing PD at a later point in time, this is not the case for other indicators of integration.

In accordance with previous studies, psychological factors affect PD as well. As expected, an external locus of control (and negative emotional experiences) are accompanied by more PD, smaller negative effects can be found for extraversion, conscientiousness, the tendency to forgive, and the belief that most people can be trusted. The former finding can be read as evidence that those who have the general feeling that their fate depends on external circumstances and not so much on themselves are more likely to interpret failure externally, in this case by referring to discrimination. This finding supports the argument that PD reflects attributional strategies at least partly. Apart from that, extraversion, a tendency to forgive, and the belief that others are fair are accompanied by lower levels of PD.

Available empirical evidence and theoretical reasoning suggest that the link between integration and PD is to some extent group-specific. As a reminder, Flores argues that groups facing salient ethnic boundaries do not feel less discriminated against when they become more similar to majority members. In order to look into that, we calculated interaction effects between ethnic group and integration (see Table 2)<sup>v</sup>.

Table 2: Group specific impact of different integration indicators on perceived discrimination (interaction effects based on models from table 1)

Integration indicator	Perceived discrimination									
	Language skills		Identification		Education		Social integration		Religiosity	
	D	M	D	M	D	M	D	M	D	M
Migrant group ( <i>ref.</i> <i>other labor migrants</i> )										
Turkey		1.89** (0.44)		1.89** (0.44)		1.89** (0.44)		1.89** (0.44)		1.89** (0.44)
Eastern Europe		2.83*** (0.72)		2.83*** (0.72)		2.83*** (0.72)		2.83*** (0.72)		2.83*** (0.72)
Integration indicator (main effect)	1.11 (0.11)	0.63* (0.12)	0.83 (0.08)	0.29*** (0.06)	1.53* (0.29)	1.33 (0.22)	0.94 (0.11)	0.72 (0.14)	0.91 (0.13)	1.22 (0.34)
Integration * Turkey (interaction effect)	1.05 (0.15)	1.26 (0.37)	1.53** (0.24)	2.24* (0.73)	0.80 (0.23)	1.22 (0.32)	1.26 (0.24)	0.76 (0.26)	0.92 (0.18)	0.92 (0.37)
Main effect *	1.17	0.80	1.28*	0.66	1.23	1.63*	1.19	0.55*	0.84	1.13
interaction effect	(0.14)	(0.19)	(0.16)	(0.17)	(0.27)	(0.34)	(0.17)	(0.15)	(0.11)	(0.32)

Notes: \*p<=0.05, \*\*p<=0.01, \*\*\*p<=0.001.

A separate look at Turks – the group facing salient ethnic boundaries in Germany – lends some support to this argument (see Table 2). In line with the integration paradox, rising levels of education are followed by rising PD for *all* groups (positive D coefficient for main effect= 1.53\*, note that the positive effect of education was not statistically significant in the overall model presented in Table 1 and does thus not seem to be robust). However, only in the Turkish group do highly educated individuals feel on average more discriminated against than those with lower levels of education (M coefficient=1.63\*). In addition, while non-Turkish individuals who identify more strongly with Germany and speak German perceive less discrimination (main effect: M coefficient=.29\*\* and .63\* respectively), this is not the case for Turks (M coefficient=.66 and .80 respectively). In fact, rising levels of identification precede *increasing* PD (only) for Turks (D coefficient=1.28\*). Note, however, that rising level of contacts with Germans do not come along with more PD. Those Turks who have a lot of contact with natives feel overall less discriminated against (M coefficient=.55\*\*). This indicates that aspirations rather than exposure link integration to PD: Interacting a lot with majority members is clearly an indicator for exposure while identification with Germany is largely invisible and thus more likely to be an indicator for high aspirations for equal treatment. We do not find evidence that being religious affects PD for Turks; in fact, religiosity seems to be totally unrelated to PD for all groups under consideration here.

#### *Does perceived discrimination hamper integration?*

We now look into our assumption that PD affects only those dimensions of the integration process that reflect mostly minority members' motivation to integrate but not those that reflect mostly their resources and the opportunities available to them (see last four columns of Table 1). We do so by estimating hybrid models with the same variables as the ones used in the model on PD but use identification with Germany and adequate employment as dependent variables.

Results show that Turks identify less with Germany than other labor migrants, and Eastern Europeans (among them many ethnic German immigrants) do so much more. As we have already seen, there is a strong negative correlation between PD and identification with Germany but again no evidence

that high PD precede low national identification. Results clearly show that good and improving German language skills (and low and weakening skills in the language of their country of origin) and social ties to native Germans pave the way for higher identification with Germany (significant D and M coefficients, for similar findings on language skills, see Hochman and Davidov 2014, Walters et al. 2007).<sup>vi</sup> Identification with the country of origin has a positive effect (D coefficient) on identification with Germany. Education and religiosity are unrelated to it. Psychological factors are also unrelated or only weakly related (negative effect of negative emotional experiences, positive effects of extraversion and tendency to forgive) to identification as well.

In order to explore potential group-specific relationships we re-run our models including interaction effects (origin group\*PD). Results reveal (see Table 3) that PD affects identification with Germany differently for Turks than for the other groups under consideration here. As expected, non-Turkish individuals who perceive rising and high levels of discrimination show generally lower levels of identification with Germany (main effects: D coefficient .75\*\*, M coefficient =.02\*\*\*). These effects are non-significant or weaker for Turks (D coefficient=1.21, M coefficient=.11\*\*\*). Given Turks' comparatively low level of identification with Germany (see Table A1), this suggests that they identify less strongly with their host country for a number of reasons no matter whether they recently experienced any discrimination or not.

Turning to adequate employment as a predominantly resource- and opportunity-driven dimension of integration, results confirm our expectation that perceived discrimination does not precede inadequate employment. The (weak) negative correlation between PD and adequate employment (see Table 1) is not robust across the models as we will see in the group specific analyses. In general, the chances of being adequately employed are lower for minority members who have recently attained higher educational credentials (D-coefficient=.39\*\*\*). This counterintuitive finding might not only reflect the fact that it takes time to find an adequate job after acquiring a higher educational degree. Entering higher strata of the German labor market has also been described as particularly difficult for "outsider groups" (Luthra 2013, 11) due to certain structural properties of the German

labor market such as high labor costs and protection against unemployment (for recent migrants see Kogan 2006, 699). In line with previous studies, we find that minority members benefit from individual resources, most importantly native friends (positive D and M coefficients) and German language skills (positive M coefficient), which increase the likelihood of being adequately employed quite substantially (Kalter 2006, Koopmans 2016). Of the psychological variables, openness has a positive effect on adequate employment, negative emotional experiences again a negative one.

In the model including interaction effects (PD\*group, see Table 3) we find no empirical link between PD and adequate employment for any of the groups under consideration either. Note that we do not find substantial unexplained differences in access to adequate employment between the groups even though the group coefficient for Turks is negative by tendency. In order to analyze whether or not groups differ in their access to adequate employment with respect to other potentially relevant factors, we calculated additional models including interaction effects (see Table A2 in the Appendix). These show no group-specific patterns except that the correlation between German language skills and German friends on the one hand and being adequately employed on the other hand is particularly *strong* for Turks (see Table A2). Religiosity does not affect the likelihood of having found adequate employment all for any group under consideration here.

Table 3: Impact of group membership and perceived discrimination on different dimensions of integration (interaction effects based on models from table 1)

	Identification with Germany		Adequate Employment	
	D	M	D	M
<i>Migrant group (ref. other labor migrants)</i>				
Turkey		0.17*** (0.08)		0.31 (0.19)
Eastern Europe		24.92*** (6.28)		1.00 (0.54)
Perceived discrimination (main effect)	0.75** (0.07)	0.02*** (0.01)	1.09 (0.17)	0.59 (0.33)
Perceived discrimination * Turkey (interaction effect)	1.61** (0.26)	4.50* (3.00)	0.94 (0.22)	0.56 (0.49)
<i>Main effect * interaction effect</i>	1.21 (0.15)	0.11*** (0.06)	1.03 (0.18)	0.34 (0.24)

Notes: \*p<=0.05, \*\*p<=0.01, \*\*\*p<=0.001, interactions based on models from table 1



## 6. Discussion

This paper's starting point was the difficulty to link ethnic discrimination and integration outcomes in empirical research. An increasing number of sociological studies have done so by assessing whether or not self-reported experiences of discrimination are related to negative integration outcomes. Our critical review of the existing studies revealed that most are based on cross-sectional data but still assume at least implicitly that a causal link runs from discrimination to integration rather than the other way around. We argued, *first*, that this is problematic because PD should not be taken as an accurate indicator of actual experiences of discrimination ("exposure") but partly as a subjective interpretation of often ambiguous situations ("attribution"). How often minority members experience those situations and how they interpret them is, in turn, related to their level of integration and also reflects group-level characteristics such as salient ethnic boundaries and individual psychological traits.

Our own analyses based on panel data from the SOEP suggest that perceptions reflect in fact both exposure to discrimination and attributional processes. While it is impossible to disentangle the two mechanisms empirically using survey data, we found indirect evidence of this: On the one hand, the share of individuals who either always or never felt discriminated against during their time in the SOEP is small. Obviously, PD is not a stable attitude that primarily reflects certain habitualized ways of interpreting misfortune or looking at the world. On the other hand, psychological factors such as an external locus of control or the "big five" affect how much discrimination migrants' report. Taken together, this lends support to the argument that PD reflects to some extent attributional processes in often ambiguous situations.

Our exploration of the relationship between integration and PD based on longitudinal data revealed overall that PD is generally and substantially lower for individuals who identify more strongly with Germany, who speak German, and who have German friends. There is, however, little evidence that rising levels of integration are followed by declining levels of PD. Group specific analyses lend some support to the "integration paradox", in particular to Flores' specification that the link between

integration and PD is groups specific. In fact, speaking German and identifying with Germany does only come along with less PD for individuals who belong to groups that do not face salient ethnic boundaries such as non-Turkish labor migrants and Eastern Europeans. For Turks, high and rising levels of identification with Germany are not related to lower levels of PD. Furthermore, Turks holding higher educational degrees report experiences of discrimination on average *more often* than less educated ones.

Given the complex and partly subjective nature of PD, we argued further that it only makes sense to analyze the impact of PD on those dimensions of the integration process that primarily reflect migrants' motivations, most importantly their identification with the receiving society or acculturation. In those domains, the question of whether or not perceptions of discrimination are accurate is irrelevant. Empirical results revealed that PD affects levels of identification *only* for non-Turkish migrants, whereas Turks' identification remains unaffected by PD. Given this group's much lower level of identification with Germany, this suggests that many Turks do not identify with Germany for a number of reasons, no matter whether they experienced discrimination or not. However, for all groups, the negative correlation between PD and identification is so strong that it suggests that both concepts measure something quite similar. This needs to be taken into account in future studies.

In line with our theoretical reasoning, we found the link between PD and structural integration (inadequate employment) to be much weaker than the link between PD and identification with Germany. In fact, we did not even find a robust correlation between PD and adequate employment, not to mention evidence for a possible causal relationship, for any of the groups under consideration. Our results confirm findings from earlier studies that minority members' labor market integration reflects, above all, resources (most importantly language skills and social ties) and opportunities. While the latter can surely be hampered by discrimination, this sort of discrimination is difficult to detect at the individual level and may thus go unnoticed. Of course, minority members may also wrongly attribute, for example, an unsuccessful job application to discrimination. Our results reveal

that adequate employment is generally difficult for migrants who have recently completed their education. This lends further support to the idea that “newcomers” on the labor market for better jobs face problems that are related to structural aspects of the German labor market (Kogan 2006) rather than to individual discrimination.

In sum, our analysis is one of the few studies on PD that is based on longitudinal survey data and looks into both paths: the one leading from integration to PD and the one leading from PD to integration. Accordingly, our analysis is closer to a causal analysis than the many available studies that are based on cross-sectional data. For individuals of Turkish origin in particular – and thus for the very group that is the focus of the debate over the impact of discrimination on integration – we showed that integration outcomes do not reflect PD in the sense that PD is followed by reduced levels of identification with the host society or a diminished likelihood to be adequately employed. Based on these findings, further research should assess whether or not the relationship between PD and integration that we found for Turkish migrants applies to other groups facing salient ethnic boundaries and is robust even when other indicators of integration in different domains are considered. It would also be worthwhile to analyze if the relationship differs depending on the duration of stay in the country, in particular how it looks for newcomers.

Further research should also seek to empirically disentangle exposure to discrimination and attribution of ambiguous situations as discriminatory, e.g., by holding exposure to discrimination constant in a (field) experimental setting. Factorial surveys are another promising method of attempting to disentangle exposure and attribution (Maxwell 2015). Another limit of our research is that we could not look into the psychological traits longitudinally. While it seems unlikely that different “personality types” are more exposed to discrimination, some studies suggest that at least some psychological characteristics may also reflect experiences of discrimination (Sutin et al. 2016).

In terms of the societal implications of our research, we do not want to suggest that discrimination does not play a role in migrants’ integration processes. Ethnic discrimination does exist. We know this not only from necessarily biased reports by victims of discrimination but also from audit studies.

After all, social distances are large between natives and certain groups of immigrants, and it seems highly unlikely that these do not translate into behavior at some point. But we should not forget that we actually know very little about how (strongly) individual and group differences in migrants' integration processes and outcomes reflect individual experiences with discrimination. This is partly because incidents of discrimination affect integration outcomes in a cumulative and complex way by affecting migrants' motivations to integrate as well as their opportunities to achieve and obtain appropriate returns for resources that are needed to get ahead in the receiving country.

Finally, one should keep in mind that discrimination is a problem even if it is not a major factor in explaining group-specific integration outcomes. After all, discrimination is unfair and has been shown to have adverse psychological effects, e.g., on people's self-esteem and health. While we believe this is reason enough to detect and prevent discrimination and to help those affected by it, the link between actual discrimination and its perceptions and integration outcomes is much more complicated than many studies suggest.

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## Appendix

Table A1: Distribution of independent variables by group (mean\*)

	Turkey	Other labor migrants	Eastern Europe/GUS
Perceived discrimination	60	<b>40</b>	<b>42</b>
<i>Integration</i>			
Good German language skills	66	<b>72</b>	70
Good home country lang. skills	95	97	<b>98</b>
Share of German friends	25	<b>39</b>	<b>52</b>
Identification with Germany	19	24	<b>73</b>
Identifies with home country	45	40	<b>33</b>
Religious attendance >= once/week)	14	<b>8</b>	14
More than basic education	21	<b>31</b>	<b>44</b>
Adequate employed	83	84	<b>76</b>
<i>Personality</i>			
Negative emotional experiences	2.49	2.48	2.41
Externally oriented locus of control	3.79	<b>3.50</b>	<b>3.35</b>
Big Five			
openness	4.06	<b>4.34</b>	<b>4.40</b>
conscientiousness	5.73	<b>5.91</b>	<b>6.08</b>
extraversion	4.53	<b>4.87</b>	4.55
agreeableness	5.50	5.45	<b>5.70</b>
neuroticism	3.99	3.98	4.06
Tendency to forgive	3.71	<b>3.95</b>	<b>4.19</b>
Believe most people try to treat other people fairly	43	45	<b>53</b>
Believe most people attempt to be helpful	37	34	39
Number of persons	448-2671	878-4248	1408-5883

Notes: significant differences in bold between migrant groups (reference Turkey) ( $p < 0.001$ ). For time varying independent variables, these means were calculated in a two-step procedure. In order to avoid an overrepresentation of long-term SOEP participants, one average value for each person on the basis of person year information of time varying variables was generated separately (mean for negative emotional experiences and share of German friends, mode for all other time varying independent variables). Based on this, the means of these person specific average values were generated for each origin group and compared.

Table A2: Group specific impact of different integration indicators on adequate employment  
(interaction effects based on models from table 1)

Integration indicator	Adequate employment							
	Language skills		Identification		Social integration		Religiosity	
	D	M	D	M	D	M	D	M
Migrant group ( <i>ref.</i> <i>other labor</i> <i>migrants</i> )								
Turkey		0.31 (0.19)		0.31 (0.19)		0.31 (0.19)		0.31 (0.19)
Eastern Europe		1.00 (0.54)		1.00 (0.54)		1.00 (0.54)		1.00 (0.54)
Integration indicator (main effect)	0.86 (0.16)	11.86*** (6.02)	0.82 (0.14)	1.17 (0.58)	2.48*** (0.61)	2.33 (1.14)	1.06 (0.28)	1.60 (1.10)
Integration * Turkey (interaction effect)	1.72 (0.48)	2.67 (2.03)	1.34 (0.41)	2.13 (1.84)	0.61 (0.24)	2.84 (2.49)	0.85 (0.34)	0.45 (0.46)
Main effect * interaction effect	1.49 (0.36 )	31.71*** (20.48 )	1.11 (0.28)	2.50 (1.81)	1.52 (0.48)	6.64* (5.12)	0.91 (0.26)	0.73 (0.54)

Notes: \*p<=0.05, \*\*p<=0.01, \*\*\*p<=0.001. Interactions based on models from table 1.

<sup>i</sup> Socio-Economic Panel (SOEP). Data for years 1984-2015, version 32, SOEP, 2016, doi:10.5684/soep.v32.

<sup>ii</sup> The share of those who report to have experienced discrimination often is very low (between 8 and 18% for Turks and much lower for the other groups). We therefore have to collapse these two categories into one.

<sup>iii</sup> The different groups include individuals born abroad and those born in the country as well as naturalized and non-naturalized individuals.

<sup>iv</sup> Being adequately employed is defined as follows: people with tertiary or higher qualifications are adequately employed if they have an occupational position assigned to ISCO occupational coding 1-3 on the first level scheme. People with lower secondary education up to post-secondary non-tertiary education are adequately employed if they have an occupational position assigned to ISCO occupational coding 1-8 on the first level scheme (the 'normative' approach, which uses an a priori presumed correspondence between education and occupations (Quintini 2011: 13).

<sup>v</sup> All interaction terms were included at once. For the ease of interpretation, we include the combination of main effects and interaction effects in the last row of the table. Odds ratios, standard errors and p-values for the linear combination of the main effect and the interaction effect were computed using *lincom* in Stata.

<sup>vi</sup> Note, however, that a recent study on adolescents suggests that the link between native friends and identification could be group-specific. Schulz and Leszczensky demonstrate that native friends do increase identification with Germany for most groups but not for Turks and Poles (2016: 184f.).