

Relations between Second-Language Proficiency and National Identification: The Case of Immigrants in Germany

Hochman, Oshrat; Davidov, Eldad

Postprint / Postprint

Zeitschriftenartikel / journal article

Zur Verfügung gestellt in Kooperation mit / provided in cooperation with:

GESIS - Leibniz-Institut für Sozialwissenschaften

Empfohlene Zitierung / Suggested Citation:

Hochman, O., & Davidov, E. (2014). Relations between Second-Language Proficiency and National Identification: The Case of Immigrants in Germany. *European Sociological Review*, 30(3), 344-359. <https://doi.org/10.1093/esr/jcu043>

Nutzungsbedingungen:

Dieser Text wird unter einer Deposit-Lizenz (Keine Weiterverbreitung - keine Bearbeitung) zur Verfügung gestellt. Gewährt wird ein nicht exklusives, nicht übertragbares, persönliches und beschränktes Recht auf Nutzung dieses Dokuments. Dieses Dokument ist ausschließlich für den persönlichen, nicht-kommerziellen Gebrauch bestimmt. Auf sämtlichen Kopien dieses Dokuments müssen alle Urheberrechtshinweise und sonstigen Hinweise auf gesetzlichen Schutz beibehalten werden. Sie dürfen dieses Dokument nicht in irgendeiner Weise abändern, noch dürfen Sie dieses Dokument für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, aufführen, vertreiben oder anderweitig nutzen.

Mit der Verwendung dieses Dokuments erkennen Sie die Nutzungsbedingungen an.

gesis
Leibniz-Institut
für Sozialwissenschaften

Terms of use:

This document is made available under Deposit Licence (No Redistribution - no modifications). We grant a non-exclusive, non-transferable, individual and limited right to using this document. This document is solely intended for your personal, non-commercial use. All of the copies of this documents must retain all copyright information and other information regarding legal protection. You are not allowed to alter this document in any way, to copy it for public or commercial purposes, to exhibit the document in public, to perform, distribute or otherwise use the document in public.

By using this particular document, you accept the above-stated conditions of use.

Mitglied der

Leibniz-Gemeinschaft

Relations between Second-Language Proficiency and National Identification: The Case of Immigrants in Germany

Oshrat Hochman^{1,*} and Eldad Davidov²

Abstract: This article discusses and empirically tests the relations between German language proficiency and national identification with Germany among first-generation immigrants in Germany. It presents three theoretical arguments: (i) language proficiency positively affects national identification; (ii) contrastingly, national identification positively influences language proficiency; and (iii) there is a reciprocal relationship between both constructs. To test these potentially contradictory claims empirically, we use data on first-generation immigrants in Germany measured in four waves (1997, 1999, 2001, and 2003) from the German Socio-Economic Panel study. Language proficiency is operationalized with the variable proficiency in German language. Hypotheses are tested using autoregressive cross-lagged structural equation models. Findings demonstrate an effect of language proficiency on national identification among immigrants in Germany. However, data provide no support for an effect in the other direction.

Introduction

Immigration and immigrants' incorporation into the receiving society has maintained its dominance as one of the central social processes characterizing contemporary industrialized societies. Although these societies are continuously taking measures to decrease the flow of immigration, they are also engaged in efforts to incorporate those immigrants who are already living within them. Immigrants' incorporation is referred to in the literature using two different concepts: assimilation and integration. Assimilation is typically used in the US context, whereas integration is more dominant in European immigration research (Brubaker, 2001).

Historically, the concept of assimilation was normatively charged with positive values towards the receiving society and negative values towards the ethnic heritage. Brubaker (2001) maintains that during the 1990s, with Alba and Nee's (1997, 1999) renewed formulation of a new assimilation theory and the emergence of the segmented assimilation perspective (Portes and Rumbaut, 2001), assimilation has become normatively 'agnostic', and the difference between assimilation and integration has been minimized. Brubaker (2001) ignores, however, the vast body of research on acculturation, in which assimilation and integration still have very different meanings.

Berry's (1997) multidimensional model of acculturation, for example, defines assimilation as a transition from one's heritage culture to the culture of the receiving society, whereas integration represents equal commitments to the heritage and the host group's cultures.¹ This model views acculturation as dependent on two separate dimensions: one's connection with his/her heritage culture and his/her connection with the culture of the host society (LaFromboise et al., 1993). Based on this view, Hochman (2010) suggested that the two dimensions are guided by different mechanisms and should be investigated separately. Looking into the effect of policy on sociocultural integration, Ersanilli and Koopmans (2011) also investigated the two dimensions separately.

This study is focused on immigrants' relation with the host society, and particularly, the extent to which they accept its cultural practices in the form of acquiring skills in its language and their identification with it. Language proficiency has been on the agenda of integration research for

¹Ruppin Academic Center, Israel. Address is: Oshrat Hochman, the Institute for Migration and Social Integration, Ruppin Academic Center, Emek Heffer, 4025000, Israel; ²Eldad Davidov, Institute of Sociology, Andreasstrasse 15 CH-8050 Zurich, Switzerland.

*Corresponding author. Email: oshrath@ruppin.ac.il

many years and served as an important indicator of human capital, determining immigrants' structural integration (Chiswick, 1991). Yet as Tempel (2010) points out, much less has been done to investigate the relations between language and national identification (but see Alba, 1990; Waters, 1990; Berry, 1997; Portes and Rumbaut, 2001). This lacuna is particularly noteworthy, given the ongoing debates regarding current and former incorporation policies for immigrants (primarily in Continental Europe) and their consequences, both to immigration-receiving countries and to the immigrants themselves. Joppke (2004) proposes that states are increasingly moving away from the notion that it is their task to 'force identities upon people' (p. 254). Yet the decline of ethnicizing does not mark the victory of multiculturalism. In his account from 2007, Joppke stresses the wide consensus across Western Europe regarding the state's responsibility to impose on immigrants some form of cultural integration. Thus, immigrants arriving in these states are obligated to participate in language courses as well as 'civic' courses where the history and the institutional structures of the state are introduced. The new 'civic integration' therefore does not represent the willingness of European states to renounce their powers to 'mold' immigrants into 'nationals', but rather a shift in the source of legitimacy to do so, which is becoming less national and more liberal (Joppke, 2007). Under these new circumstances, the relations between receiving society's language and national identification become all the more interesting. As we demonstrate later, culture and identification have a mutual dependency relationship, which on the one hand may imply that cultural shifts lead to identificational changes, and on the other hand, that without a shift of identification, no real cultural shift is possible.

We try to provide a closer look at the relations between the identificational and cultural dimensions of integration by delineating the direction of the causal relations between the German language proficiency of immigrants in Germany and their national identification with Germany, one of the largest immigrant-receiving countries in Continental Europe (Koopmans and Statham, 1999). While most studies on language learning and national identification focus on young second-generation immigrants, this research concentrates on adult first-generation immigrants.²

Particularly during the second half of the 20th century, West Germany took in a rather large number of immigrants. Their arrival can be divided into six waves (Münz and Ulrich, 1997).³ The first and second waves took place between 1945 and 1961. They were mainly composed of German refugees and expellees who returned to West Germany after the Second World War and of immigrants from East Germany into West Germany. The third and fourth waves, between 1961 and 1980, were dominated by labour migrants and their family members who were recruited by the West German government in light of its fast-growing economy and shortage of workers. The two final waves included the large numbers of immigrants mostly from East Germany and the former communist bloc, arriving in Germany during the late 1980s and the early 1990s (Münz and Ulrich, 2003).⁴

While the legal status of immigrants in the united Germany was revised and regulated by the end of the 1990s, their integration remains a central issue, both on the political and public agenda as well as in the social sciences (Raijman, Semyonov and Schmidt, 2003; Schlüter, Schmidt and Wagner, 2008; Davidov and Weick, 2011; Luther, 2013). In recent years, the topic has regained dominance in both the public and academic spheres, as it became clear that inequality between native Germans and immigrants of the first generation persists into the second immigrant generation (Kalter and Granato, 2001; Constant and Massey, 2005; Biedinger, Becker and Rohling, 2008; Diehl and Koenig, 2009; Kristen and Dollmann, 2010).

The enduring structural inequalities between native Germans and immigrants in Germany are often traced back to the latter's lack of German language skills, shortage of interethnic networks, and their persisting identification with their heritage ethnic group (Seibert and Solga, 2005; Kalter, 2006; Constant and Zimmermann, 2008). Intergenerational transfer of cultural and human capital from the first to consecutive immigrant generations (Nauck, 2001; Portes and Rumbaut, 2001) implies that one should seek answers not only among the younger generations but also among their parents' generation.⁵

The contribution of this study is 2-fold: First, it considers theoretical explanations for the causal influence of language proficiency on national identification and for the opposite causal relationship. Second, to empirically test these relationships, we use panel data from the German Socio-Economic Panel (SOEP; Wagner, Frick and Schupp, 2007) and an autoregressive cross-lagged (ARCL) structural equation model (Finkel, 1995; Schlüter, Schmidt and Wagner, 2008). In the next section, we present the theoretical framework of this study. The setting in which this study takes place is presented next, followed by a description of the data and method used and a discussion of the main results.

Theoretical Framework

Immigrants' integration has been understood differently by different approaches. Early studies considered it as a

process by which, over years and generations, immigrants and their descendants gradually replace their heritage culture and orientation with those of the receiving society (Warner and Srole, 1946; Park, 1950). Later accounts on immigrants' integration pointed out that the path representing the assimilation process is not necessarily a 'straight line' (Gans, 1997). For Gans (*ibid.*), this simply meant that for some immigrants (mainly African Americans and Latinos), there might be bumps along the way. Yet for others, there was more than one 'line' of assimilation.

The Segmented Assimilation Theory thus proposes that assimilation is not the sole path taken by immigrants and their descendants into integration. Among some immigrant minorities, primarily in the United States, a successful integration was achieved through maintenance of their cultural and social origin-based preferences (Wilson and Portes, 1980; Zhou, 1997; Portes and Rumbaut, 2001). Alternatively, immigrants in the United States were also increasingly found to assimilate into the American underclass or inner-city ghettos (Wilson, 1991).

In the past decade, a middle way between the two perspectives has emerged that acknowledges the complexities of the integration process, with its multiple outcomes shaped by interactions between individual and contextual conditions. Among the first to portray this complexity were Alba and Nee (1997), who broadly depicted the relationships between the macro, mezzo, and micro factors shaping the process of integration among individual immigrants. Later accounts noted that while a multilayered understanding is a useful tool to capture the process of integration, Alba and Nee's theory falls short in conveying the individual mechanisms through which these factors shape individual behaviour (Kalter and Granato, 2002; Esser 2008).

Acknowledging the importance of moving from listing of potential factors to the specification of mechanisms in the formation of integration processes, this article focuses on the causal relations between language proficiency and national identification with the host society.

National identification with the host society is one of the clearest manifestations of Gordon's (1964) identificational dimension of assimilation. The identificational (or emotional) dimension of assimilation represents a unique sense of unity experienced by individuals with the social unit to which they belong. It is marked by the emergence of feelings of national pride with the receiving society or a 'we' feeling one develops towards other members of the group (Esser, 2001).

Proficiency in the language of the receiving society (the 'second' language) has been postulated in the sociological and economics literature as a form of human capital. Chiswick and Miller (1996), for example, understand language to 'enhance prospects for economic success' (p. 19). However, second-language proficiency is also regarded as a central cultural indicator that is closely associated with one's national group membership and identity (Miller, 1999; Hojat et al., 2009; Ersanilli and Koopmans, 2010). In this study, we focus on the latter approach to second-language proficiency.

The Cultural Integration Model

This causal path between second-language proficiency and national identification is based on the understanding of the acquisition of knowledge and skills in the culture of the receiving society as an indication of one's increasing similarity to its members, leading to one's increasing identification with it (Taft, 1957). This path also mirrors Gordon's (1964) understanding of the identificational dimension of integration as its end point. The mechanisms for understanding this path can be associated with both self-categorization theory and identity theory (Stryker and Serpe, 1982; Tajfel and Turner, 1986). Using the terms 'fit' or 'compatibility', respectively, both theories underline the importance of holding the properties considered as markers of group membership to the emergence of identification with the group. Both thus imply that language, as an important cultural marker of ethnic membership, is central to the emergence of identification with this group.

Self-categorization theory maintains that individuals tend to categorize themselves and identify with people to whom they feel similar (Turner et al., 1987). Following this logic, as one adopts elements of the culture of the receiving society, his/her similarity or 'fit' to this group will increase, leading to an increase in his/ her level of self-identification with this group. In identity theory, one's identification with a specific 'role identity' strongly relies on the normative expectations associated with this role. In the context of master role identities, like being a member of an ethnic group, adherence to the culture of the group represents such a central expectation. Thus, in the terms of identity theory, an adoption of cultural practices and knowledge of the receiving society is predicted to increase one's compatibility with it, and again encourages one to identify with the group (Noels, Pon and Clement, 1996; Bisin et al., 2006; Becker, 2009).

The Emotional Integration Model

Adopting an opposite perspective on the relations between cultural and emotional integration, several researchers suggest that the learning of a second language

requires one's willingness to identify in terms of the new culture. To the contrary, individuals who are reluctant to make adjustments in their ethnic self-concept are expected to be less willing and less successful in learning the second language. The main mechanism behind both processes is embedded in individuals' need to maintain and demonstrate their loyalty to the ethnic-cultural group they belong to or aspire to belong to (Giles and Johnson, 1987; Bergman, Watrous-Rodriguez and Chalkley, 2008).

This type of behaviour fits the propositions of self-verification theory (Swann and Read, 1981), maintaining that individuals' actions derive from their deepest convictions and values. If we are to understand social identification as one such deep conviction, we can expect that individuals who identify with a certain ethnic/national group will be more motivated to acquire its language. It is also associated with recent theoretical developments in linguistics that stress the importance of 'possible selves' for second-language learning (Dörnyei, 2009).

Some studies have demonstrated this claim with regard to individuals' mother-tongue skills and their identification with their country of origin. Giampapa (2001) demonstrates, for example, how her Canadian-Italian respondents take pride in their Italian language skills as a marker of the importance of their Italian identification. Some of her respondents stress the importance of high proficiency in the second language as a tool for the demonstration of their strong identification with the receiving society (Giampapa, 2001). Tempel (2010) demonstrates that Polish speakers in England related learning the English language to changes they are willing or unwilling to make in their lives and in their self-concepts. Similarly, Cervatiuc (2009) demonstrates how re-categorization into a community of bicultural persons increases first-generation immigrants' ability to acquire second-language skills.

The Reciprocal Model

The existence of solid theoretical grounds for both directions of relations between language and national identification requires a test for the possibility that both directions are in progress. However, this possibility has only been rarely tested (Henning-Lindblom and Liebkind, 2007). Esser (2008), for example, suggests that while knowledge in the receiving society's language may increase immigrants' identification with it, identification with the receiving society may, to the contrary, also encourage cultural integration. With the empirical approach used here, we shall try to further delve into the possibility of a reciprocal relationship between identification and language skills. Based on these theoretical propositions, our hypotheses are as follows:

H1: Immigrants' cultural integration in the form of German language proficiency influences their emotional integration in the form of German identification.

H2: Immigrants' emotional integration in the form of German identification influences cultural integration in the form of German language proficiency.

H3: Cultural integration in the form of German language skills and emotional integration in the form of German identification influence each other reciprocally.

Data, Measurements, and Method

The empirical test of a causal structure requires the use of panel data, allowing a clear temporal sequence between the measurements.⁶ Second, it requires a method that allows a simultaneous estimation of two regression models – the first predicting language proficiency and the second predicting national identification. To meet the first requirement, we use data from the SOEP study, an ongoing research project that has been collecting data in Germany for more than 27 years. To meet the second requirement, we apply an ARCL model (Finkel, 1995; Jonge et al., 2001; Schlüter, Davidov and Schmidt, 2007).

Data

The SOEP is a longitudinal survey distributed by the Deutsches Institut für Wirtschaftsforschung (DIW, German Institute of Economic Research) on a yearly basis since 1984 (Wagner et al., 2007). The survey is based on a stratified sample of households in Germany, and its purpose is to collect information on a wide variety of indicators from all members of these households. Although the SOEP is not specifically designed to study integration, it includes a sufficient number of respondents with an immigration background and useful indicators related to the topic. Several studies have used data provided by the SOEP to study integration of immigrants in Germany (Reinecke, Schmidt and Weick, 2005; Diehl and Blohm, 2008; Davidov and Weick, 2011; Hochman, 2011).⁷

This article focuses on first-generation immigrants identified by their self-reported country of birth. Importantly, there are theoretical reasons to assume that the mechanisms underlying the relations between

the cultural and emotional dimensions of integration among members of the first and consecutive generations are different. While among first-generation immigrants, their ascribed ethnic group is the ethnic heritage group, among second-generation immigrants, the ascribed membership is not so clear-cut. Although they are often socialized into the same group their parents belong to, immigrant descendants are also exposed to the culture of the receiving society to Language and identification preferences among them may thus be governed by reactive motivations (Portes and Rumbaut, 2001) – either to pressures placed on them by their parents or to those placed on them in society.

The present study is also selective in terms of the immigrant groups it includes. Specifically, we focus on immigrants into Germany who are not of German descent (not recognized as 'ethnic Germans' or *Aussiedler*) and who do not hold a German citizenship. Ethnic immigrants whose ancestors were German and immigrants who hold a German citizenship may differ from other migrants in their attachment to and identification with Germany. We thus removed from the sample ethnic Germans and all individuals from Eastern Europe who have the German nationality (citizenship). Immigrants from Eastern Europe who do not hold German citizenship are included in our subsample.

The SOEP has included data on immigrants since 1984; however, the items included in each wave have not always been the same. Questions to measure language proficiency and national identification were introduced in 1984 (1985 for language proficiency). The national identity items were removed after 2003 and re-introduced in 2010. Background variables we control for in this study (such as discrimination experiences or interethnic friendships) were included only in some of the waves.⁸ The following estimations are thus based on data from four waves, namely, 1997, 1999, 2001, and 2003.⁹ The subsample we derived from the SOEP included 2,444 respondents. Specifically, 1,733 respondents were included in 1997, 1,513 in 1999, 1,785 in 2001, and 1,581 in 2003. The increase in the number of respondents in 2001 is a result of a refreshment sample pooled in 2000 (descriptive statistics are provided in Tables A1 and A2).^{10,11}

Measurements

To measure respondents' language proficiency, we use their self-reported German language speaking and writing skills. We propose to view second-language proficiency as a main indicator of an immigrant's cultural integration.

The SOEP includes the following two questions to measure these skills: 'Foreigners who come to Germany find learning German difficult. In your case, (i) how well do you speak German, and (ii) how well do you write German'. The answers range from 1 (very well) to 5 (not at all). Previous studies indicate that these measurements provide reliable and valid information regarding the respondents' language skills (Lanca et al., 1994). Responses were recoded so that higher scores indicated higher German language proficiency. The correlation between both scores ranged between 0.78 and 0.82 in the four survey years.

Respondents' emotional integration is measured using their self-reported level of German identification. To measure German identification we used the question: 'To what degree do you think of yourself as German?' Response categories ranged from 1 (completely) to 5 (not at all). Respondents' answers were recoded so that higher scores imply stronger identification with Germany.

Our control variables include socioeconomic status, education, parents' education, discrimination experiences, cultural heritage preferences (music and cooking), mother-tongue skills, identification with country of origin, interethnic contact, age at immigration, and ethnic origin.¹² Previous studies consistently demonstrate that higher levels of education, socioeconomic status, and parental education have small to negligible effects on identification with the host society and are typically positively correlated with second-language skills (Chiswick, 1998; Golash-Bosa, 2006; Walters, Phythian and Anisef, 2007; Maliepaard, Lubbers and Gijsbert, 2009). Identification with the country of origin, perceived discrimination, cultural heritage practices, and mother-tongue skills decrease identification with the receiving society and second-language proficiency (Berzonsky, 1997; Portes and Rumbaut, 2001; Ono, 2002; Sears et al., 2003; Michel, Tizmann and Silbereisen, 2012). In contrast, contact with Germans and having German friends were found to be positively associated with stronger identification with the receiving society and second-language proficiency (Simon, 2004; Van Tubergen and Kalmijn, 2005; Oropesa, Landale and Grief, 2008). Finally, it is expected that European immigrants in Germany will display a higher level of German identification and better proficiency in the German language than other immigrants (Diehl and Schnell, 2006).

Method

ARCL models assume that each latent construct (or observed variable) measured at time 1 is a function of its former value at time -1, plus stochastic error (Equation

1). It also relies on a valid measurement model that relates each latent variable to its respective indicators and to random measurement errors when more than one indicator is used to measure it (Schlüter et al., 2007). In a univariate case, autoregressive models can be formulated in the following way:

$$\eta_{it} = \alpha_t + \beta_{t,t-1} \eta_{i,t-1} + \zeta_{it} \quad (1)$$

where α_t represents the intercept for the estimate of time point t , and $\beta_{t,t-1}$ indicates prior influences of $\eta_{i,t-1}$ on $\eta_{i,t}$. This influence is called a stability coefficient. Index i denotes an individual case, and index t denotes time (Schlüter et al., 2007: 5).

In a bivariate case, with two latent constructs η_i measured at two or more points in time, each of the two latent constructs is regressed at time 1 on its lagged score at time -1 plus the lagged score of the other latent construct at time -1 (Finkel, 1995). The autoregressive 'stability coefficients' resulting from this model provide information about the stability in the rank ordering of individuals over time. The cross-lagged coefficients report how much change in one construct is caused by the other construct. Formally, the ARCL bivariate case can be represented as follows:

$$\eta_3 = \alpha_3 + \beta_{31} \eta_1 + \beta_{32} \eta_2 + \zeta_3 \quad (2)$$

$$\eta_4 = \alpha_4 + \beta_{41} \eta_1 + \beta_{42} \eta_2 + \zeta_4 \quad (3)$$

where η_3 and η_4 represent two latent constructs, and η_2 represent their respective lagged scores, and α_3 and α_4 depict the intercepts of the models. The autoregressive parameters are described by β_{31} and β_{42} , while the cross-lagged coefficients by β_{32} and β_{41} . ζ_3 and ζ_4 display the stochastic error terms (Schlüter et al., 2007: 5). In our analysis, we use a latent variable to measure the German language proficiency of the respondents with two questions. Thus, we can additionally control for measurement errors of German language proficiency of immigrants. German identification is measured with a single observed item.

To determine whether a model fits the data, we rely on the root mean square error of approximation (RMSEA, see Steiger and Lind, 1980), accompanied by the comparative fit index (CFI, see Bentler, 1990). According to Hu and Bentler (1999) and Marsh, Hau, and Wen (2004), a good fit is indicated by an RMSEA value not much larger than 0.05 and a CFI value >0.90. To compare between the models, we use the chi-square difference test (Marsh and Hocevar, 1985). This test is suitable to compare between nested models and determines whether the model fit significantly deteriorates when we constrain certain causal paths to zero. A non-significant chi-square change between two models implies that the additional constraints are supported by the data. Further support may be provided by a minimal difference in CFI between the models. A difference in CFI <0.01 may imply that the more restrictive model is not worse than the original one (Chen, 2007). Analyses were conducted using the software package AMOS 18 (Arbuckle, 2009) and the full information maximum likelihood procedure, which is most suitable to deal with the problem of missing values (Schafer and Graham, 2002).

Findings

To compare between the emotional integration model, the cultural integration model, and the reciprocal model, we ran a series of three nested models. We began with a model that allowed German proficiency and German identification to influence each other reciprocally (Model 1). This model controls for stability coefficients of German identification and German language proficiency that are set equal between the different waves. The second model consisted of cross-lagged effects only from German language proficiency to German identification (Model 2 – the cultural integration model). The stability constraint was maintained here and in the third model as well. Finally, the third model postulated causal effects only from German identification to German language proficiency (Model 3 – the emotional integration model). We ran each model without and with control variables to test the robustness of our findings (Schlüter et al., 2008). The results with respect to our hypotheses were essentially the same (see Table A3 for summary of results with controls).

The reciprocal model (Model 1) was estimated first. The advantage of starting with this model is that the two alternative models tested are restricted versions of this model and are thus nested within it (Schlüter et al., 2008). As demonstrated in Table 1, the reciprocal model fits the data well. First, it should be noted that the

Table 1 Global fit measures

	RMSEA	CFI	Chi ² /df
Model 1 – The reciprocal model	0.06	0.97	11.33
Model 2 – The cultural integration model	0.06	0.97	10.67
Model 3 – The emotional integration model	0.07	0.96	14.63

Source: SOEP 1997, 1999, 2001, 2003

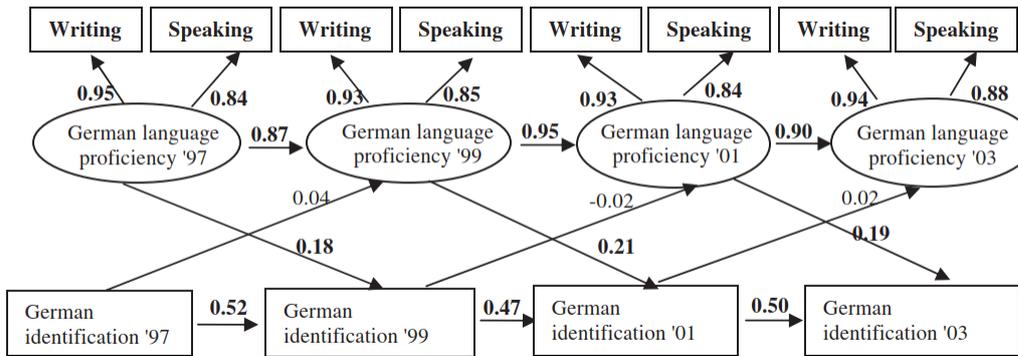


Figure 1 The reciprocal model; N = 2,444. Regression coefficients from German national identification to German language proficiency are not significant but for the effect from 1997 to 1999. All other regression coefficients are significant at the 0.01 level. Standardized estimates are displayed (Source: SOEP 1997, 1999, 2001, 2003)

indicators measure German language proficiency in a valid way with standardized factor loadings >0.72 (Figure 1). Furthermore, it was possible to constrain respective factor loadings to be equal over time without any deterioration in model fit. This implies that the measurement of German language proficiency is invariant over time and valid for longitudinal comparison (Steenkamp and Baumgartner, 1998). Thus, we retain equality constraints of these factor loadings throughout the subsequent analyses.¹³ Considering the stability coefficients in this first model, it is noteworthy that stability is considerable and higher for German language proficiency compared with the stability of German identification, as evident in Figure 1.¹⁴

Moving next to the cross-lagged coefficients indicating the effects of German identification on German language proficiency and the opposite effects, the model suggests that the cross-lagged effects of German identification on German language proficiency are mostly insignificant, with the exception of the effect of German identification in 1997 on German language proficiency in 1999, as displayed in Figure 1. The reciprocity hypothesis may thus be rejected. In contrast, the (standardized) cross-lagged effects of German language proficiency on German identification across all temporal paths are significant ($P < 0.001$) and range between $\beta = 0.18$ in 1999 and $\beta = 0.21$ in 2001.¹⁵

To further validate the one-directional path suggested by the reciprocal model, we estimated the cultural integration model (Model 2) next. In this model, only the cross-lagged effects of German language proficiency on German identification were estimated. The fit of the model to the data as reported in Table 1 was acceptable. A non-significant chi-square difference test ($P > 0.054$) indicated that this cultural integration model is not significantly worse than the reciprocal model. Further support is provided by the CFI, which did not deteriorate.

As presented in Figure 2, the stability coefficients in this model are similar to those reported in the reciprocal model. Figure 2 additionally indicates that the cross-lagged effects of German language proficiency on German identification are significant and positive at the three time points with a similar size to those observed in Model 1. The cultural model is thus supported by the data.

Finally, we estimated the emotional integration model (Model 3). Here, only the effects of German identification on German language proficiency were estimated. Table 1 demonstrates that the fit of this model to the data was considerably worse than the fit of Models 1 and 2 to the same data. Particularly, while the CFI measure of fit is still within the acceptable range, the value of the RMSEA is higher than the recommended cut-off value. Furthermore, the chi-square difference test was significant, indicating that this model is significantly worse than the reciprocal model (Model 1). This result receives further support from the decrease of >0.01 in the value of the CFI compared with the reciprocal and the emotional integration model (i.e., Models 1 and 3) (Chen, 2007).

Turning to the cross-lagged effects, Figure 3 illustrates that the effect of the respondents' German identification levels on their German language proficiency is weak. It is significant ($P < 0.01$) when observed between 1997 and 1999 and between 2001 and 2003, but not when observed between 1999 and 2001. Support for the emotional integration model is thus much weaker than the support provided for the cultural integration model.

It is possible that the relations between German language proficiency and German identification are

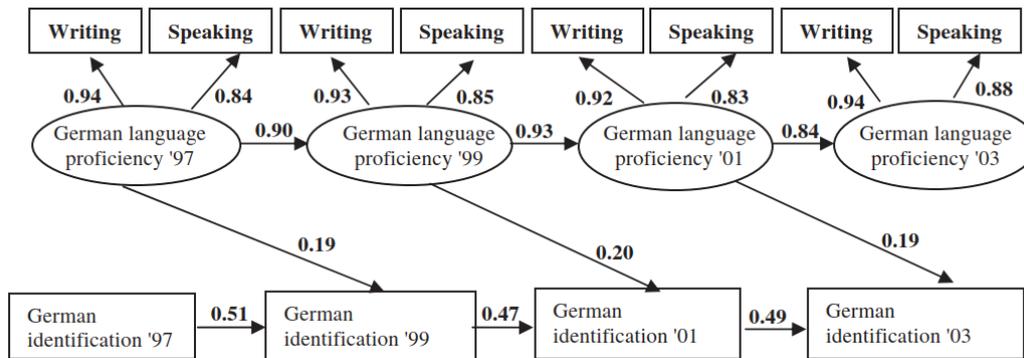


Figure 2 The cultural integration model; N = 2,444. All coefficients are significant at the 0.01 level. Standardized estimates are displayed (Source: SOEP 1997, 1999, 2001, 2003)

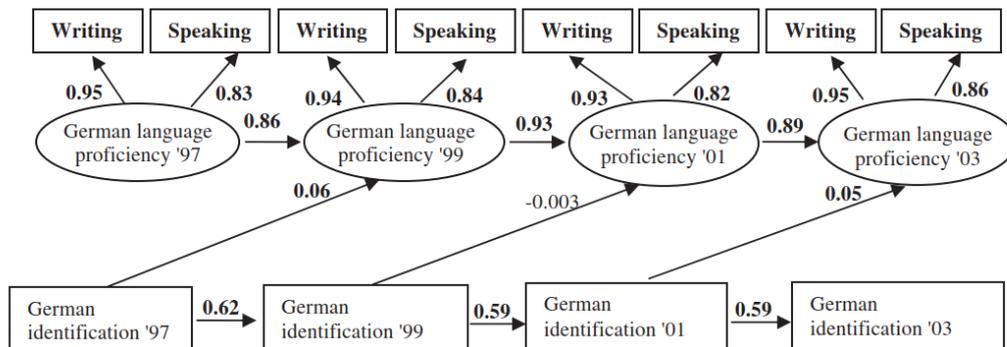


Figure 3 The emotional integration model; N=2,444. All stability coefficients are significant at the 0.01 level. Of the three cross-lagged effects, only the cross-lagged effect from German identification in 1999 to German language proficiency in 2001 is insignificant. Standardized estimates are displayed (Source: SOEP 1997, 1999, 2001, 2003)

defined differently for respondents from different countries of origin. To test this possibility, we ran a multiple-group comparison of our ARCL models for those origin groups where we could find a sufficient number of cases (Turkey, ex-Yugoslavia, and the South European countries: Greece, Spain, Portugal, and Italy). This comparison indicated that effects are robust across the three origin-country groups (CFI = 0.961; RMSEA = 0.04; Pclose = 1). It is noteworthy that in the case of immigrants from the former Yugoslavia, German identification was found to significantly affect German language proficiency. These effects were, however, considerably weaker than the effects of German language proficiency on German identification. Finally, we computed the same models to predict national identification and German language proficiency in 1997, while controlling for the effect of the exogenous variables discussed earlier. The model pooled all immigrant groups together because the aforementioned information suggests no meaningful differences between the effects for the different immigrant groups. The effects of the control variables were consistent with previous studies (Table A4). Notably, decreasing identification with the country of origin had a strong effect on German identification, ($\beta = 0.43$), and decreasing tendencies towards heritage cultural practices were strongly and positively correlated with German language skills ($\beta = 0.18$). Levels of German language proficiency were found to decrease with Turkish origin ($\beta = -0.20$), and also with age at migration – the older one was at immigration, the lower one's German language proficiency ($\beta = -0.34$). The findings in the three models with respect to the cross-lagged effects between German identification and German language proficiency remained essentially the same (Table A3).

Summary and Conclusions

This article tried to delineate, both theoretically and empirically, the mechanisms underlying the reciprocal relationship between cultural and emotional integration of immigrants. The discussion was limited to the respondents' relationships with the host society's culture. We started by presenting two theoretical arguments: The first maintained that German language proficiency positively affects German identification. The second suggested the opposite direction, that is, that German identification positively influences German language proficiency. We additionally tested the possibility of a reciprocal relationship between both constructs. To the best of our knowledge, this is the first study that provides a dynamic test of these competing theoretical perspectives. To test these propositions, we used longitudinal data from the German SOEP between the years 1997 and 2003 on first-generation immigrants in Germany. For the analysis, we used ARCL models to test the effects in both directions simultaneously.

The findings suggest first that the causal relations are mainly shaped by the effect of German language proficiency on respondents' German identification. There was no empirical support for an effect in the opposite direction. This finding may have a significant implication for policy issues regarding the requirement in Germany (and Western Europe) that immigrants should learn the German language (within the German context). Improving proficiency in the second language may be important not only for immigrants' labour market achievements but also for their identification with their host society. Theory suggests that language learning facilitates this process because of its strong association with the delineation of cultural boundaries and cultural group membership. Importantly, we found only weak indications for an effect of German identification on German language proficiency. We find only little, if any, change in the respondents' German language proficiency over time. Thus, not much variation in language proficiency is left for German identification to explain. In other words, cultural integration in the form of German language proficiency is a highly stable characteristic of immigrants in Germany that is not easy to manipulate or change.

This study provides support for early theories of integration that understood the emergence of national identification to represent the final stage of integration (Gordon, 1964; Taft, 1957). However, it might also imply that to promote the national identification process of immigrants, they should be encouraged to become proficient in the host society's language. In this manner, the cultural stress that often characterizes the integration process and immigrants' ability to create positive social group identification themselves may also be reduced. Whether intended or not, cultural integration exerts observable effects on identificational integration, promoting a process of assimilation in its most traditional form.

This study is not without limitations. First, identification with Germany was measured by a single indicator. Such a measurement does not allow controlling for measurement errors and testing the longitudinal equivalence of this measurement and its validity for longitudinal analysis. Second, our focus was dedicated entirely to the German integration process, leaving aside the processes underway in terms of immigrants' affiliation with their ethnic group and their mother-tongue proficiency. Given that we investigate only the first immigrant generation, this compromise is not hard to defend; however, it would be useful to also look at the ethnic-related processes primarily in the context of immigrant offspring.

This study should be understood as a first step in understanding the relations between different dimensions of integration. More broadly, it invites students of integration to take advantage of available data and methods to closely study those aspects of integration research that remain, to date, subjects of debate also in other contexts. The collection of panel data on integration and expanding them to cover measurements of further dimensions of immigrants' integration into the host society not only in Germany but in other immigration countries are necessary steps to help in answering these questions.

Notes

1. Esser (2008) prefers to use the term 'multiple inclusion' to represent this dual cultural commitment, preserving the term 'integration' for the more general process of individual immigrants' incorporation. In the current study, 'integration' refers to the general process of incorporation as well.
2. Our definition of 'first generation immigrants' includes all foreign-born individuals regardless of their age on arrival.
3. After the Second World War and up to the early 1990s, Germany was divided into East and West Germany. The information provided here refers solely to West Germany.
4. Approximately during the same period, refugees and asylum seekers from conflict regions in Yugoslavia

and Turkey were also arriving into Germany in relatively large numbers.

5. As is often the case, even though the German society is constantly concerned with the stagnation in the cultural integration of immigrants, studies suggest that it has improved over years and generations (Diehl and Schnell, 2006; Kristen and Dollmann, 2010).
6. Obviously, experimental designs provide more powerful tests of causality. Nevertheless, panel data enable us more flexibility in causality tests than can be found in cross-sectional data.
7. Importantly, the SOEP does not represent the entire population of foreigners in Germany (Diehl and Schnell, 2006).
8. For instance, discrimination experience was only introduced in 1996, and social networks information is available only until 2001.
9. The selection of these four waves derives from our effort to include data that cover several background variables and present the most recent information. We are aware of the newest 2010 wave where ethnic identification was re-introduced into the SOEP; however, the method we apply requires the gaps between the years to be equal and hence we could not integrate the data from 2010 into the models presented here.
10. Separate analyses were conducted with and without the refreshment samples. Results were essentially the same.
11. More information on the SOEP can be obtained from <http://panel.gsoep.de/>
12. Further information about the measurements of the control variables may be obtained from the first author on request.
13. Cross-group invariance in the factor loadings of German language proficiency was also achieved.
14. The unstandardized stability coefficients for language proficiency between 1997 and 1999, 1999 and 2001, and 2001 and 2003 were $b = 0.88$ (S.E. = 0.02), $b = 0.93$ (S.E. = 0.02), and $b = 0.97$ (S.E. = 0.02), and for German identification, $b = 0.52$ (S.E. = 0.26), $b = 0.46$ (S.E. = 0.03), and $b = 0.53$ (S.E. = 0.03), respectively.
15. The unstandardized effects for 1999, 2001, and 2003 were $b = 0.17$ (S.E. = 0.02), $b = 0.20$ (S.E. = 0.03), and $b = 0.19$ (S.E. = 0.03), respectively.

Acknowledgements

The authors thank Clemens Kroneberg and Uzi Revhun for their comments and suggestions and Lisa Trierweiler for the English proof of the manuscript. The second author thanks the Scientific Exchange Programme – SCIEX (Switzerland) and the URPP program, University of Zurich. The data used in this publication were made available to the authors by the German Socio-Economic Panel (SOEP) study at the German Institute for Economic Research (DIW Berlin), Berlin (<http://www.diw.de/soep>). Any data or computational errors in this article are those of the authors.

References

- Alba, R. D. (1990). *The Transformation of White America*. New Haven and London: Yale University Press.
- Alba, R. and Nee, V. (1997). Rethinking assimilation theory for a new era of immigration. *International Migration Review*, 31, 826-847.
- Alba, R. and Nee, V. (1999). Rethinking assimilation theory for a new era of assimilation. In Hirschman, C., Kasinitz, P. and DeWind, J. (Eds.), *The Handbook of International Migration: The American Experience*. New York: Russell Sage Foundation, pp. 137-160.
- Arbuckle, J. L. (2009). *AmosTM 18 User's Guide*. Chicago: SPSS.
- Becker, B. (2009). Immigrants' emotional identification with the host society: the example of Turkish parents' naming practices in Germany. *Ethnicities*, 9, 200-225.
- Bentler, P. M. (1990). Comparative fit index in structural models. *Quantitative Models in Psychology*, 107, 238-246.
- Bergman, M. E., Watrous-Rodriguez, K. M. and Chalkley, K. M. (2008). Identity and language: contributions to and consequences of speaking Spanish in the workplace. *Hispanic Journal of Behavioral Sciences*, 30, 40-68.
- Berry, J. W. (1997). Immigration, acculturation, and adaptation. *Applied Psychology: An International Review*, 46, 5-34.
- Berzonsky, M. D. (1997). Identity development, control theory, and self-regulation: an individual differences perspective. *Journal of Adolescent Research*, 12, 347-353.
- Biedinger, N., Becker, B. and Rohling, I. (2008). Early ethnic education inequality: the influence of duration of personal attendance and social composition. *European Sociological Review*, 24, 243-256.

- Bisin, A. et al. (2006). 'Bend it like Beckham': identity, socialization and assimilation. CEPR Discussion Papers. London: CEPR, pp. 2-40.
- Brubaker, R. (2001). The return of assimilation? Changing perspectives on immigration and its sequels in France, Germany, and the United States. *Ethnic and Racial Studies*, 24, 531-548.
- Cervatiuc, A. (2009). Identity, good language learning, and adult immigrants in Canada. *Journal of Language, Identity and Education*, 8, 254-271.
- Chen, F. F. (2007). Sensitivity of goodness of fit indexes to lack of measurement invariance. *Structural Equation Modeling*, 14, 464-504.
- Chiswick, B. R. (1991). Speaking, reading and earnings among low skilled immigrants. *Journal of Labor Economics*, 9, 149-170.
- Chiswick, B. R. (1998). Hebrew language usage: determinants and effects of earnings among immigrants in Israel. *Journal of Population Economics*, 11, 253-271.
- Chiswick, B. R. and Miller, P. W. (1996). Ethnic networks and language proficiency among migrants. *Journal of Population Economics*, 9, 19-35.
- Constant, A. and Massey, D. S. (2005). Labor market segmentation and the earnings of German guest-workers. *Population Research and Policy Review*, 24, 489-512.
- Constant, A. and Zimmermann, K. F. (2008). Measuring ethnic identity and its impact on economic behavior. *Journal of the European Economic Association*, 6, 424-433.
- Davidov, E. and Weick, S. (2011). Transition to home-ownership among immigrant groups and natives in West Germany, 1984-2008. *Journal of Immigrant and Refugee Studies*, 9, 939-415.
- Diehl, C. and Blohm, M. (2008). Die Entscheidung Zur Einbürgerung: Optionen, Anreize und Indikative Aspekte [The decision to naturalize: Options, incentive and indicative aspects]. *Kölner Zeitschrift für Soziologie und Sozialpsychologie*, 48, 437-464.
- Diehl, C. and Koenig, M. (2009). Religiosität Türkischer Migranten im Generationenverlauf: Ein Befund und einige Erklärungsversuche [The religiosity of Turkish immigrants over generations: A finding and some attempts to explain it]. *Zeitschrift für Soziologie*, 38, 300-319.
- Diehl, C. and Schnell, R. (2006). "Reactive ethnicity" or "assimilation"? Statements, arguments, and first empirical evidence for labor migrants in Germany. *International Migration Review*, 40, 786-816.
- Dörnyei, Z. (2009). The L2 motivational self system. In Dörnyei, Z. and Ushioda, E. (Eds.), *Motivation, Language Identity and L2 Self*. Bristol: MPG Books, pp. 9-42.
- Ersanilli, E. and Koopmans, R. (2010). Rewarding integration? Citizenship regulations and socio-cultural integration of immigrants in the Netherlands, France and Germany. *Journal of Ethnic and Migration Studies*, 36, 773-791.
- Ersanilli, E. and Koopmans, R. (2011). Do immigrant integration policies matter? A three country comparison among Turkish immigrants. *West European Politics*, 34, 208-234.
- Esser, H. (2001). *Integration und Ethnische Schichtung [Integration and ethnic stratification]*. Working papers. Mannheim: Mannheimer Zentrum für Europäische Sozialforschung.
- Esser, H. (2008). Assimilation, Ethnische Schichtung oder Selektive Acculturation? Neueren Theorien der Eingliederung von Migranten und das Model der Intergenerationalen Integration [Assimilation, ethnic stratification or selective acculturation? New theories about the incorporation of migrants and the model of intergenerational integration]. *Kölner Zeitschrift für Soziologie*, 48, 81-107.
- Finkel, S. E. (1995). *Causal Analysis with Panel Data*. Beverly Hills: Sage Publications.
- Gans, H. J. (1997). Toward a reconciliation of "assimilation" and "pluralism": the interplay of acculturation and ethnic retention. *International Migration Review*, 31, 875-892.
- Giampapa, F. (2001). Hyphenated identities: Italian-Canadian youth and the negotiation of ethnic identities in Toronto. *International Journal of Bilingualism*, 5, 279-315.
- Giles, H. and Johnson, P. (1987). Ethnolinguistic identity theory: a social psychological approach to language maintenance. *International Journal of the Sociology of Language*, 68, 69-99.
- Golash-Bosa, T. (2006). Dropping the hyphen? Becoming Latino(a)-American through radicalized assimilation. *Social Forces*, 85, 27-55.
- Gordon, M. (1964). *Assimilation in American Life. The Role of Race, Religion and National Origins*. New York: Oxford University Press.
- Henning-Lindblom, A. and Liebkind, K. (2007). Objective ethnolinguistic vitality and identity among Swedish-speaking youth. *International Journal of the Sociology of Language*, 187/188, 161-183.
- Hochman, O. (2010). *Ethnic identification preferences among Germany's immigrants and their descendents: A comprehensive perspective*. Mannheim: Graduate School of Economics and Social Sciences, Mannheim University (Unpublished doctoral dissertation).

- Hochman, O. (2011). Determinants of positive naturalization intentions among Germany's labour migrants. *Journal of Ethnic and Migration Studies*, 37, 1403-1421.
- Hojat, M. et al. (2009). A desire to return to the country of birth as a function of language preference: an empirical study with Iranian immigrants in the United States. *International Migration*, 48, 158-173.
- Hu, L. Z. and Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: conventional criteria versus new alternatives. *Structural Equation Modeling*, 6, 1-55.
- Jonge, J. et al. (2001). Testing reciprocal relationships between job characteristics and psychological well-being: a cross-lagged structural equation model. *Journal of Occupational and Organizational Psychology*, 74, 29-46.
- Joppke, C. (2004). The retreat of multiculturalism in the liberal state: theory and policy. *British Journal of Sociology*, 55, 237-257.
- Joppke, C. (2007). Beyond national models: civic integration policies for immigrants in Western Europe. *West European Politics*, 30, 1-22.
- Kalter, F. (2006). Auf der Suche nach einer Erklärung für die Spezifischen Arbeitsmarktnachteile Jugendlichen Türkischer Herkunft [In search of an explanation for the specific disadvantages in the labor market of adolescents with a Turkish origin]. *Zeitschrift für Soziologie*, 35, 144-160.
- Kalter, F. and Granato, N. (2001). Recent trends of assimilation in Germany. ZUMA Arbeitsbericht 2001/ 02. Mannheim, ZUMA.
- Kalter, F. and Granato, N. (2002). Demographic change, educational expansion and structural assimilation of immigrants: the case of Germany. *European Sociological Review*, 18, 199-216.
- Koopmans, R. and Statham, P. (1999). Challenging the liberal nation-state? Postnationalism, multiculturalism, and the collective claims making of migrants and ethnic minorities in Britain and Germany. *American Journal of Sociology*, 105, 652-696.
- Kristen, C. and Dollmann, J. (2010). Sekundäre Effecte der Ethnischen Herkunft: Kinder aus Türkischen Familien am Ersten Bildungsübergang [Secondary effects of ethnic origin: Children from Turkish families in the first educational transition]. In Birgit, B. and Reimer, D. (Eds.), *Vom Kindergarten bis zur Hochschule: Die Generierung von Ethnischen und Sozialen Disparitäten in der Bildungsbiographie [From the kindergarten to the institution of higher education: The creation of ethnic and social disparities in the educational biography]*. Wiesbaden: VS Verlag für Sozialwissenschaften, pp. 117-144.
- Lafromboise, T. et al. (1993). Psychological impact of biculturalism: evidence and theory. *Psychological Bulletin*, 114, 395-412.
- Lanca, M. et al. (1994). Effects of language choice on acculturation: a study of Portuguese immigrants in a multicultural setting. *Journal of Language and Social Psychology*, 13, 315-330.
- Luther, R. (2013). Explaining ethnic inequality in the German labor market: labor market institutions, context of reception, and boundaries. *European Sociological Review*, 29, 1095-1107.
- Maliapaard, M., Lubbers, M. and Gijsbert, M. (2009). Generational differences in ethnic and religious attachment and their interrelations. A study among Muslim minorities in the Netherlands. *Ethnic and Racial Studies*, 33, 451-472.
- Marsh, H. W., Hau, K. T. and Wen, Z. (2004). In search of golden rules: comment on hypothesis testing approaches to setting cutoff values for fit indexes and dangers in overgeneralizing Hu and Bentler's findings. *Structural Equation Modeling*, 11, 320-341.
- Marsh, H. W. and Hocevar, D. (1985). Application of confirmatory factor analysis to the study of self-concept: first and higher order factor models and their invariance across groups. *Psychological Bulletin*, 97, 562-582.
- Michel, A., Tizmann, P. F. and Silbereisen, R. K. (2012). Language shift among adolescent ethnic German immigrants: predictors of increasing use of German over time. *International Journal of Intercultural Relations*, 36, 248-259.
- Miller, J. (1999). Becoming audible: social identity and second language use. *Journal of Intercultural Studies*, 20, 149-165.
- Münz, R. and Ulrich, R. (1997). Changing patterns of immigration to Germany, 1945-1995. In Bade, K. J. and Weiner, M. (Eds.), *Migration Past, Migration Future*. New York: Berghahn Books, pp. 65-199.
- Münz, R. and Ulrich, R. (2003). The ethnic and demographic structure of foreigners and immigrants in Germany. In Alba, R., Schmidt, P. and Wasmer, M. (Eds.), *Germans or Foreigners? Attitudes toward Ethnic Minorities in Post-Reunification Germany*. New York: Palgrave Macmillan, pp. 19-44.
- Nauck, B. (2001). Intercultural contact and intergenerational transmission in immigrant families. *Journal of Cross Cultural Psychology*, 32, 159-173.

- Noels, K. A., Pon, G. and Clement, R. (1996). Language, identity and adjustment: the role of linguistic self-confidence in the acculturation process. *Journal of Language and Social Psychology*, 15, 246-264.
- Ono, H. (2002). Assimilation, ethnic competition and ethnic identities of US born persons of Mexican heritage. *International Migration Review*, 36, 726-745.
- Oropesa, R. S., Landale, N. S. and Grief, M. (2008). From Puerto Rican to Pan-Ethnic in New York City. *Ethnic and Racial Studies*, 31, 1315-1339.
- Park, R. E. (1950). The nature of race relation. In Park, R. E. (Ed.), *Race and Culture*. Glencoe, IL: Free Press, pp. 81-116.
- Portes, A. and Rumbaut, R. (2001). *Legacies: The Story of the Immigrant Second Generation*. Berkeley, CA: University of California Press.
- Raijman, R., Semyonov, M. and Schmidt, P. (2003). Do foreigners deserve rights? Determinants of public views towards foreigners in Germany and Israel. *European Sociological Review*, 19, 379-392.
- Reinecke, J., Schmidt, P. and Weick, S. (2005). Dynamic modeling with structural equations and stochastic differential equations: applications with the German Socio-Economic Panel. *Quality & Quantity*, 39, 483-506.
- Schafer, J. L. and Graham, J. W. (2002). Missing data: our view of the state of the art. *Psychological Methods*, 7, 147-177.
- Schlüter, E., Davidov, E. and Schmidt, P. (2007). Applying autoregressive cross-lagged models and latent growth curve models on a three-wave panel study. In Montfort, K. V., Oud, J. and Satorra, A. (Eds.), *Longitudinal Models in the Behavioral and Related Sciences*. Mahwah, NJ: Lawrence Erlbaum Associates, pp. 315-336.
- Schlüter, E., Schmidt, P. and Wagner, U. (2008). Disentangling the causal relations of perceived group threat and outgroup derogation: cross-national evidence from German and Russian panel surveys. *European Sociological Review*, 24, 568-581.
- Sears, D. et al. (2003). The origins and persistence of ethnic identity among the "new immigrant" groups. *Social Psychology Quarterly*, 66, 419-437.
- Seibert, H. and Solga, H. (2005). Can vocational training equalize job opportunities? The signaling value of certificates earned by non-German and German young adults. *Zeitschrift für Soziologie*, 34, 364-382.
- Simon, B. (2004). *Identity in Modern Society: A Social Psychological Perspective*. Oxford, UK: Blackwell.
- Steenkamp, J. E. M. and Baumgartner, H. (1998). Assessing measurement invariance in cross-national consumer research. *Journal of Consumer Research*, 25, 78-107.
- Steiger, J. H. and Lind, J. C. (1980). Statistically Based Tests for the Number of Common Factors. Paper presented at the Annual Meeting of the Psychometric Society, Iowa City, Iowa.
- Stryker, S. and Serpe, R. T. (1982). Commitment, identity salience, and role behavior: theory and a research example. In Ickes, W. and Knowles, E. S. (Eds.), *Personality, Roles, and Social Behavior*. New York: Springer, pp. 199-218.
- Swann, W. B. and Read, S. J. (1981). Self-verification processes: how we sustain our self-conceptions. *Journal of Experimental Social Psychology*, 19, 351-372.
- Taft, R. (1957). A psychological model for the study of social assimilation. *Human Relations*, 10, 141-156.
- Tajfel, H. and Turner, J. C. (1986). The social identity theory of intergroup behavior. In Worchel, S. and Austin, W. G. (Eds.), *Psychology of Intergroup Relations, The Nelson-Hall Series in Psychology*. Chicago: Nelson-Hall, pp. 7-24.
- Tempel, B. (2010). Feeling special: language in the lives of Polish people. *The Sociological Review*, 58, 286-304.
- Turner, J. C. et al. (1987). *Rediscovering the Social Group*. Oxford: Blackwell.
- Van Tubergen, F. and Kalmijn, M. (2005). Destination-language proficiency in cross-national perspective: a study of immigrant groups in nine Western countries. *American Journal of Sociology*, 110, 1412-1457.
- Wagner, G. G., Frick, J. R. and Schupp, J. (2007). The German Socio Economic Panel Study (SOEP). *Schmollers Jahrbuch*, 127, 139-169.
- Walters, D., Phythian, K. and Anisef, P. (2007). The acculturation of Canadian immigrants: determinants of ethnic identification with the host society. *Canadian Review of Sociology*, 44, 37-64.
- Warner, W. L. and Srole, L. (1946). *The Social System of American Ethnic Groups*. New York: Yale University Press.
- Waters, M. C. (1990). *Ethnic Options: Choosing Identities in America*. Berkeley, CA: University of California Press.
- Wilson, W. J. (1991). Studying inner-city social dislocations: the challenge of public agenda research: 1990 presidential address. *American Sociological Review*, 56, 1-14.
- Wilson, K. L. and Portes, A. (1980). Immigrant enclaves: an analysis of the labor market experiences of Cubans in Miami. *The American Journal of Sociology*, 82, 295-319.
- Zhou, M. (1997). Segmented assimilation: issues, controversies and recent research on the new second generation. *International Migration Review*, 31, 975-1008.

Appendix

Table A1 Means (and standard deviations in parentheses) of the indicators used in the models

Country/ region of origin	German speaking skills 1997	German speaking skills 1999	German speaking skills 2001	German speaking skills 2003	German writing skills 1997	German writing skills 1999	German writing skills 2001	German writing skills 2003	German writing skills 2003	German identify- cation 1997	German identify- cation 1999	German identify- cation 2001	German identify- cation 2003
1) Turkish (N = 757)	3.15 (.97)	3.17 (1.00)	3.13 (.99)	3.24 (1.01)	2.45 (1.18)	2.47 (1.22)	2.46 (1.18)	2.62 (1.26)	2.07 (1.03)	2.17 (1.04)	2.34 (0.99)	2.51 (1.10)	
2) Ex-Yugoslavian (N = 473)	3.53 (.97)	3.70 (.86)	3.60 (1.00)	3.82 (.93)	2.85 (1.19)	2.97 (1.13)	2.86 (1.18)	3.07 (1.24)	2.40 (1.07)	2.67 (1.02)	2.83 (1.06)	3.03 (1.15)	
3) South European (N = 620)	3.46 (.93)	3.53 (.98)	3.56 (.98)	3.57 (.99)	2.61 (1.21)	2.67 (1.29)	2.72 (1.24)	2.77 (1.24)	2.22 (1.07)	2.32 (1.07)	2.70 (1.01)	2.75 (1.10)	
4) West European (N = 224)	4.61 (.62)	4.64 (.65)	4.57 (.77)	4.67 (.61)	4.18 (1.04)	4.32 (1.00)	4.28 (1.03)	4.32 (.97)	3.00 (1.48)	3.10 (1.43)	3.17 (1.40)	3.11 (1.36)	
5) East European (N = 149)	3.60 (1.06)	3.75 (.89)	3.85 (.91)	4.10 (.88)	3.20 (1.24)	3.20 (1.02)	3.45 (1.00)	3.77 (.96)	2.99 (1.39)	3.10 (1.25)	3.19 (1.17)	3.38 (1.28)	
6) Other (N = 221)	3.73 (.97)	3.82 (1.02)	3.75 (.93)	3.76 (1.00)	3.39 (1.22)	3.36 (1.08)	3.17 (1.24)	3.41 (1.16)	2.29 (1.20)	2.75 (1.20)	2.62 (1.18)	2.90 (1.18)	

Source: SOEP 1997, 1999, 2001, 2003.

Note: German speaking skills, German writing skills, and German identification range between 1 (low) and 5 (high).

Table A2 Means (and standard deviations in parentheses) of the control variables used in the models

	Primary education		Employed		Ethnic identification		Parents' primary education or less		Cultural preferences		Mother-tongue proficiency		Ethnic friends		Discrim.		Contact		Female	
1) Turkish (N = 757)	.79	(.40)	.47	(.50)	2.09	(.96)	.65	(.48)	2.22	(.73)	4.07	(.82)	.33	(.47)	.60	(.49)	.72	(.45)	.49	(.50)
2) Ex-Yugoslavian (N = 473)	.81	(.39)	.63	(.48)	2.17	(.89)	.50	(.50)	2.81	(.72)	4.49	(.65)	.53	(.50)	.56	(.50)	.76	(.43)	.51	(.50)
3) South European (N = 620)	.88	(.33)	.61	(.49)	1.91	(.88)	.65	(.48)	2.54	(.72)	4.28	(.71)	.50	(.50)	.46	(.50)	.81	(.39)	.44	(.50)
4) West European (N = 224)	.42	(.50)	.72	(.45)	2.30	(1.19)	.03	(.17)	3.34	(.72)	4.58	(.83)	.88	(.33)	.32	(.47)	.71	(.46)	.53	(.50)
5) East European (N = 149)	.54	(.50)	.41	(.49)	2.68	(1.19)	.10	(.30)	3.25	(.71)	4.51	(.64)	.74	(.44)	.63	(.49)	.40	(.49)	.62	(.49)
6) Other (N = 221)	.30	(.46)	.53	(.50)	2.08	(.95)	.23	(.42)	2.94	(.54)	4.70	(.63)	.77	(.42)	.41	(.50)	.60	(.49)	.50	(.50)

Source: SOEP 1997, 1999, 2001, 2003.

Note: Primary education or less = 1, otherwise = 0; employed = 1, otherwise = 0; ethnic identification ranges between 1 (low) and 5 (high); parents' education primary or less = 1, otherwise = 0; ethnic cultural preferences for music and cooking (index) ranges between 1 (high) and 5 (low); mother-tongue proficiency ranges between 1 (low) and 5 (high); has more ethnic than German friends = 1, otherwise = 0; experienced discrimination = 1, otherwise = 0; has contact with natives = 1, otherwise = 0; female = 1, male = 0.

Note: time-changing predictors were taken from data collected in 1997.

Table A3 Cross-lagged coefficients in the autoregressive cross-lagged model that controls for background variables

Predictors	Standardized	Unstandardized	S.E.
Language proficiency 1997	0.20	0.20	0.03
Language proficiency 1999	0.22	0.21	0.03
Language proficiency 2001	0.19	0.20	0.03
German identification 1997	0.02	0.02	0.02
German identification 1999	-0.03	-0.03	0.02
German identification 2001	0.02	0.03	0.02

Source: SOEP 1997, 1999, 2001, 2003.

Table A4 Effects of the control variables on language proficiency and identification with Germany

Variable	German language proficiency			German identification		
	Standardized	Unstandardized	S.E.	Standardized	Unstandardized	S.E.
Female	-0.06	-0.15*	0.04	-0.05	-0.11*	0.05
Low parental education ^d	-0.14	-0.34*	0.05	-0.06	-0.14*	0.05
Turkey ^a	-0.20	-0.51*	0.07	-0.09	-0.23*	0.08
Ex-Yugoslavia ^a	-0.10	-0.30*	0.07	-0.03	-0.09	0.08
South Europe ^a	-0.16	-0.45*	0.07	-0.04	-0.11	0.08
Identification with country of origin ^b	0.14	0.18*	0.02	0.43	0.51*	0.03
ISEI ^c	0.22	0.02*	0.002	0.02	0.002	0.003
Low education ^d	-0.14	-0.39*	0.06	-0.007	-0.02	0.06
Cultural origin practices ^e	0.18	0.27*	0.03	0.15	0.21*	0.04
Contact with natives ^f	0.09	0.24*	0.05	0.14	0.35*	0.05
Discrimination experience ^g	-0.05	-0.11*	0.04	-0.02	-0.04	0.05
Employed ^h	-0.09	-0.21*	0.06	-0.04	-0.08	0.07
German friends ⁱ	0.14	0.33*	0.05	0.10	0.24*	0.05
Mother-tongue proficiency ^j	0.08	0.13*	0.03	-0.01	-0.02	0.03
Age at immigration	-0.34	-0.04*	0.002	-0.06	-0.006*	0.003

Source: SOEP 1997, 1999, 2001, 2003.

Notes: *P < 0.05.

^aCountry of origin where Western European origin is the reference category.

^bIdentification with country of origin was measured on a scale from 1 (very strongly) to 5 (not at all).

^cISEI = International Socioeconomic Index of Occupational Status, an index measuring occupational prestige.

^dSecondary school or lower (with the rest as the reference category).

^eCultural origin practices is an index based on two items: cooking food from cultural heritage and listening to music from one's cultural heritage, both measured on a scale ranging from 1 (always) to 5 (never).

^fContact with natives is constructed from two items asking whether respondents had visitors from the receiving society and whether they were guests at homes of members of the receiving society. Those who answered positively to at least one form of visits are considered to have contact with natives and receive the value of 1, otherwise 0.

^gDiscrimination experience measures whether respondents reported having been discriminated against on grounds of their ethnic origin at least rarely. No discrimination experience is the reference category.

^hWith unemployed or out of the labour market as the reference category.

ⁱGerman friends measures whether respondents reported that at least one of their three closest friends was German. The reference category is no German friends.

^jMother-tongue proficiency is constructed as a mean index of respondents' writing and speaking skills ranging from 1 (very good) to 5 (very poor).