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ABSTRACT

This research examined the relationship between parental social capital and children's educational track placement in Germany, and how parental social capital differentially affected the tracking experiences of German and non-German children. Parental social capital was defined as the degree to which adults used family networks or connections to the community. Data were obtained from the 1995 wave of the German Socio-Economic Panel study, and the track placement patterns among 600 children, ages 10 to 16, of German and non-German background were investigated. The findings suggested that social capital effects were universal. Within-group analyses revealed that such effects remained limited to non-Germans, among whom parental social capital produced mixed effects. Non-German children whose parents frequently engaged in socializing activities were more likely to attend the lowest track. Non-German children whose parents maintained inter-ethnic friendships (contact with Germans) were less likely to attend the lowest track. (Contains approximately 100 references.) (KB)

The Ethnic Dimensions of Social Capital: How Parental Networks Shape Track Placement in Germany

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Abstract

Researchers in the U.S. have increasingly focused on how various forms of social capital shape educational outcomes. But to date, we know little about the impact social capital has on educational outcomes in other countries. Moreover, few have focused on the ethnically specific dimensions of social capital, assuming instead that social capital effects are universal. This article addresses both shortcomings by asking two questions: In Germany, does a relationship exist between *parental social capital* -- i.e., the degree to which adults use family networks or connections to the community -- and children's track placement? If so, does it differentially affect the tracking experiences of German and non-German children? Using sample data from the 1995 wave of the German Socio-Economic Panel (GSOEP), I examine track placement patterns among 10-16 year olds of German and non-German backgrounds. General analyses suggest that social capital effects are universal. But within-group analyses reveal that such effects remain limited to non-Germans, among whom parental social capital produces mixed effects: Non-German children whose parents frequently engage in socializing activities are more likely to attend the lowest track. Non-German children whose parents maintain inter-ethnic parental friendships (contact with Germans) are less likely to attend the lowest track.

I Introduction

When Coleman (1987, 1988, 1990:5927) articulated the idea that "social capital" shapes educational outcomes, he was drawing on classic sociological traditions: Durkheim (1951) had discussed the negative effects social isolation can have on individuals and their behavior. And Coleman's own mentor, Robert Merton (1957), subsequently explored how choosing specific reference groups can influence social mobility. In turn, Coleman used the term "social capital" to describe the interpersonal relationships that help people become or remain embedded in society.[1]

By popularizing this concept Coleman enabled educational researchers to further distinguish how different types of family resources shape children's educational experiences. Adding it to the family's socio-economic resources and to parental human and cultural capital, the interpersonal dimension of social capital provides a direct link between individuals, their families, and the community or social institutions at large. Consequently, analyses of social capital examine how structural opportunities influence interpersonal networks, social relationships within and outside of the family, and access to information.

Coleman distinguished between different kinds of interpersonal ties: intra- vs. extra-familial and inter- vs. intra-generational relationships. Focusing on the need for parent-child communication, he considered this type of parental social capital a major determinant of children' educational outcomes and most researchers have focused on this type of social capital. We have not considered systematically whether *parents' extra-familial networks* are just as crucial for children's educational success as is parents' involvement in their children's education. Research

[1] See Coleman (1990) for a further discussion of the intellectual debts he owed e.g., to economists, in developing this concept.

on other countries is particularly affected by a dearth of research in this area.

Just as we know little about whether access to social capital *among adults* has the same effects on children's educational outcomes, few researchers have examined whether social capital has ethnically specific effects. In this paper, I examine how parental social capital affects the track placement of native and immigrant students in Germany. This article centers around two questions: Does a relationship exist between parents' access to social capital -- i.e., the degree to which they use family networks or connections to the community -- and children's track placement? If so, does parental social capital differentially affect the tracking experiences of German and non-German children? To address these questions, I examine track placement patterns among 10-16 year olds of German and non-German backgrounds, using sample data from the 1995 wave of the German Socio-Economic Panel (GSOEP).

II Contextual Information

A. Literature Review

Despite obvious differences in the organization of schooling, occupational outcomes and long-term mobility trends appear similar for ethnic minorities in Germany and the U.S. (England et al. 1988; Hallinan 1992; Oakes 1985; Oakes and Guiton 1995). How can we explain that school systems with such profound organizational and institutional differences produce similar outcomes for minorities and immigrants, who are disproportionately found in the lowest tracks and suffer the highest attrition rates?

To examine tracking outcomes researchers have relied on competing theoretical frameworks. They typically focus on institutional or individual-level explanations. But

information about social integration and access to intra- and extra-familial networks (i.e., social capital) may also provide important insights into how families of different ethnic backgrounds "navigate" educational institutions with which they may or may not be familiar (Bankston and Zhou 1995; Kalmijn & Kraaykamp 1986; Teachman et al. 1997).

Structural and institutional explanations have produced several key findings: First, insofar as class-based inequality in access to specific tracks has decreased since World War II, it has largely affected increased access to the Realschule rather than the purely academic track called Gymnasium. In particular, federal policy changes regarding mandatory school attendance through the 9th grade have facilitated an expansion in the Realschul-sector (Müller & Haun 1994). Second, as the proportion of foreigners increases, so does the tendency to send German children to higher tracks. Some argue that this leads to the inclusion of foreigners in the regular school system, albeit in a way that benefits children of German background. Others maintain that it leads to the over-representation of foreigners in the Hauptschule and in schools aimed at the learning disabled (Baker et al. 1985; Baker & Lenhardt 1988; Kornmann & Schnattinger 1989). Most importantly, parental involvement in their children's education -- a classic aspect of social capital -- is itself conditioned by the kind of school a child attends (Ho and Willms 1996; Oswald et al. 1988).

Apart from the institutional dimensions, how do micro-level factors affect track placement and other educational outcomes? Of course, family background and prior academic performance shape educational achievement (e.g., Alexander & Cook 1982; Alexander, Pallas & Cook 1981; Bankston & Zhou 1995; Entwisle & Alexander 1993; Garet & Delany 1988) and educational attainment. Status attainment and mobility studies are known for their strength in cross-national comparisons (e.g., Blossfeld & Shavit 1993; McClendon 1980; Müller et al. 1989; Müller &

Shavit 1998) and longitudinal trends (e.g., Baker et al. 1985; Blau and Duncan 1967; Boss-Nünning 1990; Bowles and Gintis 1976; Faist 1993; Grusky and Hauser 1984; Müller and Haun 1994). But relevant research on Germany still examines class-based intergenerational attainment patterns at the expense of ethnic patterns.

Studies on ethnic minorities in Germany tend to focus on institutional or cultural dimensions (Alamdar-Niemann et al. 1991; Alba, Handl & Müller 1994; Kornmann & Schnattinger 1989; Leenen et al. 1990; Nauck et al. 1997; Nauck & Özel 1986). They rarely explore the role social capital plays in shaping educational trajectories (exceptions: Büchel & Duncan 1998; Büchel et al. 1997). Due to the scarcity of literature on how social capital affects educational outcomes in Germany, I draw on empirical and theoretical literature about the U.S.

Most studies have focused on peer networks among children or on direct parental involvement in their children's education, for instance through participation in PTA-related activities or meetings with a child's teachers (Coleman 1987; George & Kaplan 1998; Ho and Willms 1996; Pong 1998). Social class and status clearly affect parents' involvement in their children's education (Lareau 1987, 1989; Lareau & Horvat 1999; Stanton-Salazar & Dornbusch 1995; Useem 1992). We also know that, at least in the U.S., network ties within and across generations influence a host of educational indicators: aspirations, trajectories (dropping out, track placement), and achievement (grades, GPA, test scores) (Baca, Bryan, McLean-Bardwell and Gomez 1989; Carbonaro 1998; Downey 1995; George & Kaplan 1998; Lareau 1987, 1989; Lee & Croninger 1996; McNeal 1999; Pong 1998).

Although social capital is usually regarded in a positive light, not all networks necessary have a positive impact on students' educational trajectories (Carbonaro 1998; McNeal 1999;

Teachman et al. 1997; Portes 1998). For example, extensive *peer* group ties may have a negative impact on student achievement (Portes and Sensenbrenner 1993; Rumberger 1987). Yet few researchers have examined the degree to which specific *parental networks* may influence children's trajectories in a positive or negative manner. The degree to which parental integration into the family and community at large shapes their children's educational trajectories has remained largely unexamined, especially outside of the U.S. While Carbonaro's work (1998) suggests that children in the U.S. benefit from having ties to adults other than their parents, studies by Büchel and associates indicate that parents' ties to other adults have a more equivocal impact on children's educational trajectories in Germany. In other words, the context in which adults engage with each other determines whether networks have a positive or negative effect on children's educational outcomes.

Building on the small but growing literature in this field (Büchel & Duncan 1998; Büchel et al. 1997), I ask whether such contextual network effects are also ethnically or group specific. Family/peer socialization and general cultural practices have been held responsible for tracking outcomes in Germany (Alamdar-Niemann et al. 1991; Büchel and Wagner 1995; Leenen et al. 1990; Malhotra 1985; Nauck and Özel 1986). And in the U.S., the degree of parental assimilation, acquisition of mainstream cultural capital and language skills are known to influence opportunities of immigrant children (Bankston and Zhou 1995; Büchel and Duncan 1998; Büchel and Wagner 1995; DeJong 1988; Kalmijn and Kraaykamp 1996; Rumberger and Larson 1998; Stanton-Salazar and Dornbusch 1995; Warren 1996). To add to the complexity of these issues, Korte (1990) observes that, in Germany, immigrants' active social integration paired with intentions to return to the home country are not necessarily mutually exclusive. What remains

missing is an explicit comparison of how access to various forms of social capital affects tracking outcomes for immigrant and indigenous majority students. Therefore, my study focuses on the role parental social capital plays in determining track placement across and within Germany's ethnic groups.

B. Germany's Educational System

Why examine ethnic tracking in Germany? Tracking helps reproduce social inequalities in most industrialized countries (Baker, Esmer, Lenhardt & Meyer1985; Blossfeld & Shavit 1993; Gamoran 1989; Lucas 1999; Müller & Shavit 1998; Müller & Haun 1994; Müller et al. 1989; Yogev 1981). As these countries are becoming increasingly ethnically diverse, tracking also tends to reinforce inequalities along ethnic lines.

Like other industrialized nations, Germany has a long history of mass secondary education (Ramirez and Boli 1987). However, Germany has absorbed more immigrants than any other European country since the end of World War II -- and it continues to do so. This makes a study on ethnic tracking patterns particularly timely. Similar to the U.S., Germany relies on influx of low-wage workers from relatively impoverished southern and eastern European countries. For example, Turks constitute the largest and most visible immigrant group and hold a social position comparable to that of Hispanics (especially Mexicans) in the U.S. Children of immigrants are generally under-represented in the academic track and instead placed in vocational tracks. They are also more likely to experience teenage unemployment and pursue low-level and unskilled occupations with little income potential. This is especially true for immigrants of Turkish descent (Faist 1993).

The German educational system has been described in detail by other researchers (see

Oswald et al. 1988; Shavit & Müller 1998). But Turner (1960) first pointed to the different institutional and organizational contexts in which tracking takes place in Europe ("external tracking") as opposed to the U.S. ("internal tracking"). Although national differences exist in how and when secondary students are externally tracked, Germany's system is generally representative of Europe.

The German-U.S. comparison illustrates the striking organizational and institutional differences in how educational opportunities are structured: In the US, most tracking occurs internally and is course-based (Allmendinger 1989; Brint 1998; Shavit and Müller 1998[2]). But the pervasiveness of differentiation between tracks differs, as does the method of assigning students. This makes the U.S. track placement process more murky (Arum and Hout 1998; Garet and DeLany 1988; Gamoran and Mare 1989; NCES 1994) and has led some observers to view the U.S. system as more meritocratic than European systems. Yet others have focused on how the organizational and institutional characteristics shaping track placement contribute to the reproduction of social inequalities (Gamoran 1992; Hallinan 1991, 1994; Jones et al. 1995; Oswald et al. 1988).

In contrast, Germany's rigid external tracking practices lead to students attending different schools starting with the 5th grade ("Hauptschule" (vocational), "Realschule" (general), or "Gymnasium" (academic)). Only recently has a comprehensive type of high school emerged, but it remains unusual.[3] Although it is technically possible to switch tracks in Germany, few students

[2]In addition to stressing the difference between both education systems as "organizational spaces" (U.S.) vs. "qualificational spaces" (Germany), they discuss the importance of internal vs. external tracking, differences in the extent/form of tracking, and the standardization of provisions (curriculum standards/exit exams).

[3]The "Gesamtschule" is modeled after U.S. high schools. But even students in these schools are encouraged to consistently take the same level of courses in order to receive high school accreditation oriented after the three traditional tracks. Only those students who consistently take college-preparatory classes and stay 13 years

actually do so (Henz 1997). This makes the initial track in which students are placed at age 10 ever more important. The Hauptschule is increasingly being viewed as a dead end, as it de facto limits students' exposure to subjects such as a second foreign language, chemistry and physics. Yet mastery in these areas is necessary to switch to the Gymnasium and earn the "Abitur." In addition to regulating access to post-secondary education, the Abitur increasingly serves as the necessary credential to obtain desirable apprenticeships in the dual system, especially in the white collar sector (banking, insurance accounting). As competition for apprenticeships has increased, students who only have a Hauptschule diploma are increasingly being squeezed out of the dual system, unable to enter the primary labor market via regular apprenticeships (Faist 1993; Müller & Haun 1994). Not surprisingly, children of foreign "guestworkers" are predominantly found among those attending the Hauptschule and least likely to obtain apprenticeships (Baker et al. 1985; Bommes & Radtke 1993; Esser 1990; Kornmann & Schnattinger 1989; Nauck & Özel 1986).

Although parents are well aware of the three-tiered tracking system, decisions about where to place children are typically based on a more simplified typology. In other words, for teachers and parents the question typically asked is whether to send a child to the Gymnasium or not or whether to send it to the Hauptschule or not. This also helps explain why I have chosen to dichotomize track placement as the dependent variable (cf. methods section).

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qualify for entrance into the university system. This type of school only exists in a few German state and is absent from the East German secondary school system. The vast majority of pupils in Germany continue to attend one of the three traditional, externally tracked types of schools. Oswald et al. (1988) point out that large regional fluctuation exists in the number of high school students attending such comprehensive schools, varying between 2% in southern states and 25% in West-Berlin. My analyses include a total of n=55 Gesamtschule students (roughly 9% of the sample; see Table 1).

III Data and Methods

A. Data Source

The GSOEP was originally designed with mobility researchers in mind. Its main focus lies with documenting the educational and occupational experiences of a stratified random sample of the adult population in Germany. To date, it remains one of the best panel data sets available for a European country. Immigrants were purposely oversampled in order to facilitate quantitative analyses like the one presented here. For detailed information concerning sampling procedures please see Wagner et al. (1993 in English) or Wagner et al. (1994 in German).

Compared U.S.-based data sets like the National Education Longitudinal Study (NELS), the GSOEP has a number of flaws. For example, because of its primary focus on adult mobility, it does not contain any indicators of children's (prior) academic achievement. Several researchers have already critiqued the shortcomings of this data set (e.g., Nauck et al. 1997:497), and I support their call for in-depth data collection efforts aimed at facilitating comparative-international studies. Nonetheless, the strengths of the GSOEP far outweigh its weaknesses. For the purposes of this study, the GSOEP remains to only data set available that enables us to test whether intra- and extra-familial social capital shape educational outcomes in Germany More importantly, the GSOEP also contains several critical measures of immigrant social integration akin to those used in NELS (e.g., language skills, inter-ethnic ties).

My analyses focus on the link between parental social capital and ethnically specific track placement patterns in Germany. I exclude the former East Germany because the minuscule proportion of immigrants in this area would skew comparisons. Similar to Büchel and Duncan (1998), I extracted information on all children attending secondary school (the GSOEP defines children as members of the household age 16 or younger) and matched relevant household

information and information on their parents' background, family and community ties.

Unlike Büchel and Wagner (1995), who have conducted crucial analyses on ethnic tracking patterns based on a longitudinal sample of 14-year olds selected from ten different GSOEP waves (1984-93), my analyses are based on a cross-sectional sample of all 10-16 year olds attending a secondary school in 1995. I decided to create a cross-sectional, age-heterogeneous sub-sample for two reasons: (1) Recent changes in immigration law and the influx of Eastern Europeans into Germany warranted limiting the sample to post-unification West Germany. (2) 1995 was the most recent year available in which the GSOEP survey obtained information about parental social capital. (3) By expanding the age range to include all 10-16 year old secondary students I maximized the number of observations on German and, more importantly, non-German students. But an age-heterogeneous sample has the disadvantage that students may change tracks after the 6th grade (age 12). While this is not a common practice it could produce biased results.[4] In analyses not reported here I restricted the sample to include only 12 to 16 year old students, an age group essentially "locked" into a particular track, but obtained very similar empirical results. Those analyses are available upon request.

The 1995 wave contains 600 secondary students between the ages of 10 and 16, of whom 417 are ethnically German and 183 are considered foreigners. Missing data on some parental social capital measures further reduces the extended analyses.[5] Table 1 contains further details.[6]

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[4] Henz (1997) demonstrates that only about 10% of secondary students in Germany change tracks, and that among these an equal proportion moves on to higher and lower tracks.

[5] In analyses not reported here I retained the full number of observations by using means substitution for missing values in key independent variables and further controlling for this method by introducing dummy variables into the model. The results obtained were very similar to those reported here, indicating that the missing cases are randomly distributed and do not influence the empirical effects discussed.

[6] In general, missing information is more likely to exist in parental variables linked to the students' fathers rather than their mothers. This provided the main reason for identifying the children's nationality via their

****TABLE 1 about here****

B. Mode of Analysis and Modelling Issues

Track placement forms the dependent variable. To repeat, the German school system technically consists of three tracks: Hauptschule, Realschule, and Gymnasium. While some U.S. and German researchers have constructed multinomial logit/probit models, most have employed simple logits by collapsing three tracks into two and separating the Gymnasium students from all others. As Table 1 shows, collapsing tracks in this manner works well for the German students, who are tracked into three roughly equal groups. But only a very small number of non-Germans are placed in the academic track/Gymnasium or even the alternative school form akin to a U.S. comprehensive high school. This makes it more feasible to create a dichotomous dependent variable that separates the Hauptschule/vocational students from all others.[7] I have coded this variable "1"if the student attends the Hauptschule and "0" otherwise. Please see Table 2 for descriptive information about each variable.

TABLE 2 about here

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mothers' nationality. However, because mothers' social capital measures usually failed to achieve statistical significance (despite the larger number of observations; also see Büchel & Duncan 1998), I repeatedly decided to rely on information concerning the fathers' network ties. In analyses not reported here I used other means of assigning children's ethnic identity (e.g., by classifying all children with at least one foreign parents as non-German). Only a small number of children was affected by this change in measurement, results were overall consistent with those reported here.

[7] In addition to this empirical reason, choosing a dichotomous dependent variable also makes sense from more methodological and theoretical points of view: Multinomial logits/probits are based on the assumption that the categories of the dependent variable are scaled in a nominal fashion. The three tracks are, in fact, ordinal (Hauptschule=lowest, Gymnasium=highest), but not equidistant in terms of years of education or the social status associated with particular tracks. Moreover, parents and teachers usually do not consider all three tracks as equally viable options and typically assign students based on dichotomies (see discussion above).

Studies of ethnic tracking in Germany tend to focus on ethnic differences across groups but rarely examine differences in educational outcomes within groups. Building on Büchel & Duncan's (1998) and Büchel & Wagner's (1995) work, I conduct analyses in two stages. The first stage includes a general model in which ethnic background serves as one of the explanatory variables. This enables me to assess differences across ethnic groups. The second set of analyses employs reduced samples comparing how parental access to social capital affects ethnically German students as opposed to children from non-German backgrounds. This helps draw out differences within ethnic groups.

Tables 3a and b present zero-order correlations of the variables included in the analyses (full sample and non-German subsample). Tables 4 and 5 contain the results of a series of logistic regressions. I report one-tailed significance tests because the hypotheses outlined below are unidirectional. All analyses include a person-level cross-sectional weight constructed for the 1995 GSOEP wave (see Haisken-DeNew & Frick 1998). Beyond that weight, the baseline model (Model 1) contains control variables regarding the student's gender, ethnicity, family size, the family's socio-economic background, and child care arrangements.[8] Model 2 contains additional variables related to the parents' and the family's social status -- i.e., information about parental educational background and access to communication and media-based resources. Model 3 adds a series of parental social capital measures available for German and non-German families. This includes intra-familial ties as well as and extra-familial networks, which can be subdivided into community-based vs. socializing activities. Model 4 instead adds crucial information about the degree of social integration among non-Germans, notably German language ability, intentions to

[8] Analyses not reported here also controlled for the child's age and for family structure (marital status). Neither measure had an empirical effect on the findings presented here. I exclude them from Tables 4 and 5 solely to simplify the regression tables.

stay in Germany, and personal ties to Germans. The final analysis, also limited to the sub-sample of foreigners, combines all background, social capital, and integration-related variables.

TABLES 3a&b about here

The control variables in Model 1 are measured as follows:

To account for the family's SES, all models include information about the household's monthly net income in DM. Like other household and parental variables this information was pasted onto the children. To measure the student's nationality I employ a dichotomous variable, where 0=German and 1=non-German. The GSOEP does not record the children's national background but instead asks the adults in the household about their nationality. Because information about the mother's nationality was more easily available (and less plagued by missing values), I linked the mother's national background to each child in the household.[9] The analyses also control for the gender of the student (1=female, 0=male). Finally, many researchers argue that parental resources (financial and otherwise) become diluted as the size of the household increases, making it more difficult for large families to send some or all of their children to the higher academic tracks. To account for this possibility I include household size (# of people) and mothers' involvement in child care (# hours spent on childcare). Unfortunately the GSOEP does not

[9] This variable is based on two variables called NATION95 and MOTHER, which are asked of every adult in the sample. To identify the fathers and determine their ethnicity we created a proxy labeling those adult males as "fathers" who were identified as heads of households. While this proxy may be considered problematic, it is still customary in Germany to identify fathers or, in their absence, the oldest male relative living with the family as head of the household. In cases where male adults existed but were not identified as heads of households we assumed them to be regular family members (oldest sons, grandfathers, etc.). In analyses not reported here I exchanged this dummy with a dichotomous variable indicating whether the child was of Turkish descent. The empirical results were identical to those reported; i.e., ethnicity as such failed to achieve statistical significance.

provide detailed information linking mothers' child care duties to the specific child in question. I discuss empirical expectations regarding these standard control measures in footnote 10.[10]

TABLES 4 and 5 about here

Model 2 includes two measures of parental educational background (years of education) and other educational resources tied to the family's social status. We know that parents' education remains one of the best predictors of children's educational attainment. Thus, I expect both mother's and father's educational background to have a negative impact on the likelihood that their child attends the Hauptschule. In addition, The GSOEP asks three dichotomous questions about whether there is a phone, a TV, and a PC in the household (1=yes). Not surprisingly for the mid-1990s, most households had a phone or a TV (97%) but only one third of

[10] As income increases, we should expect a decrease in the likelihood of being placed in the Hauptschule. While these socio-economic effects have been documented across and within ethnic groups, I also expect class effects to diminish as I expand the model to include information about the parents' social status and social capital measures. Similarly, we know foreigners to be more likely to be tracked into the Hauptschule and should therefore expect a positive coefficient. The question is whether ethnicity itself plays a role in track placement or whether intermediary mechanisms tied to SES, status, or social capital produce the ethnic patterns at hand. I include gender because of the continuing debate among U.S. researchers about gender differences in children's track placement and other forms of educational achievement/attainment (e.g., Alexander et al. 1981; Garet & Delany 1988; Gamoran and Mare 1989; Grant1984; Hirschman and Wong 1986; LePore and Warren 1997; Rosenbaum 1980; Rumbaut 1997). Moreover, international researchers have also examined the role gender plays in access to education (Alamdar-Niemann et al. 1991; Faist 1993; Katsillis & Rubinson 1990; Yogev 1981). Historically speaking we should expect a gender gap favoring boys' access to more academically oriented tracks, regardless of gender differences in aspirations. But Müller & Haun (1994) have shown that gender inequities in access to secondary school types has decreased in post-World War II Germany. And Alba et al. (1994) and others have shown that nowadays, boys in Germany are actually more likely to be placed in the Hauptschule, the lowest track. This leads me to expect an overall negative relationship between gender (1=female) and the likelihood of being sent to the Hauptschule. For the sub-sample of foreigners, traditional gender norms may limit girls' access to education (see Alamdar-Niemann et al. 1991), thus increasing girls' chance of being placed in the lowest track. Alternatively, non-German girls may be less likely placed in the lowest track, possibly because their parents view access to academic training an asset for girls, regardless of whether they are expected to become gainfully employed as adult women. While evidence concerning the "dilution hypothesis" in the U.S. is mixed (see Blake 1989; Downey 1995; Powell & Steelman 1993), I expect a positive impact of household size on track placement for the overall and the ethnically specific analyses. I also expect this effect to wane as the expanded models account for the impact of specific resources rooted in the family's social status and parents' access to networks.

the households included in this study owned a PC. Because all three measures are correlated I created an index, in which values can range from zero (own none of the above) to three (own all of the above). Analyses not reported here showed this combination measure to be more effective at capturing ethnic-group differences than the PC measure by itself. Prior research by DiMaggio (1982), which stresses the importance of a family's cultural resources for children's educational outcomes, leads me to expect that children with access to these resources are less likely to attend the Hauptschule (also see Downey 1995; Kao 1995).[11] In fact, access to such economically-based resources may play an even bigger role in shaping non-German children's track placement.

In Model 3, which serves as the "full model" for the whole sample and the German sub-sample, I add a series of social capital variables. Unfortunately, the GSOEP questions regarding parental activities do not provide any indication whether the parents engage in these activities with or without their children. Nonetheless, the gender-specific information about fathers' and mothers' activities allows significant insights into the parents' use of intra- and extra-familial activities. Here, I am taking my cue from Nauck et al. (1997), who argue that intra-familial ties are crucial for 1st-generation immigrants, whereas extra-familial ties play a more important role for the 2nd generation. While the GSOEP does not identify immigrants in terms of their "generation," I attempt to address this issue by including both types of networks. In addition, Büchel & Duncan (1998) explore how family background and parental social capital affect track placement, noting that parents engage in some activities together with each other (socializing, helping family), while other activities appear complementary and occur in gender-specific ways (e.g., participating in

[11] For further discussion and evidence regarding the role of cultural capital in educational outcomes see e.g., Bourdieu 1977, DiMaggio 1982; Lareau 1989; Lareau & Horvat 1999, Kalmijn & Kraaykamp 1996; Katsillis & Rubinson 1990. See McNeal (1999) for a theoretical discussion of social capital effects on various educational outcomes.

sports, volunteer and, to some degree, political work). Büchel & Duncan's main emphasis lies with the gender-specific impact parental activities have on track placement. They do not examine ethnically specific impacts, nor do they disaggregate different forms of socializing.

From the point of social capital theory, intra- and extra-familial networks may serve fundamentally different purposes. Similarly, specific types of extra-familial involvement may have a positive or a negative impact. I try to disentangle which specific social ties affect track placement, and wether their impact differs just across or also within ethnic groups. The GSOEP questions ask about the frequency of activities on a scale from 1 (daily) to 5 (never). Based on Büchel & Duncan's observation, I have constructed two extra-familial parental social capital measures by adding the mothers' and father's scores (going out to eat and drink, playing card and board games), one parental measure concerning family visits, and two gender- specific measures for parental involvement in the community: fathers' participation in sports and mothers' volunteer/political activities. Based on prior research we should expect children's likelihood of attending the Hauptschule to decrease if their parents spend little time socializing but are involved in their family and the community at large. To reiterate, my interest lies primarily in teasing out the ethnically specific effects of parents' intra- and extra-familial ties on track placement.[12]

In Model 4, I test instead a set of crucial social capital and integration measures available for the sub-sample of foreigners. Specifically, I include two classic measures of social integration: German language ability and the father's plans to stay in Germany. Quite contrary to U.S. based

[12] Büchel & Duncan (1998) used modified scales. Having estimated all models using their as well as the original GSOEP scaling, I found no substantive differences but superior diagnostic statistics (x^2) when using the original 1-5 scales. I also logged all social capital and integration measures to correct for skewness but obtained very similar empirical results. I present the unlogged results to ease interpretation. In other analyses not reported here I tested alternative measures concerning parental participation in voluntary associations (sports, church) and ties to neighbors, but none reached statistical significance within or across ethnic groups.

analyses but based on prior research on Germany (Büchel & Wagner 1995), we should expect German language ability to remain nonsignificant and the father's plans to stay in Germany to have a negative impact on the children's likelihood of attending the Hauptschule.

Most importantly, no one has examined the degree to which parental inter-ethnic networks, i.e., ties between foreigners and Germans, affect children's educational trajectory. This variable is also based on an index created by summing the dichotomous responses of non-German fathers and mothers to two questions about whether they visited Germans and received visits from Germans during the previous year (range 0 to 4). Interestingly, the GSOEP does not ask Germans whether they have had contact with non-Germans, making it impossible to examine inter-ethnic networks from both angles. Just as we expect family ties to provide an important support network, we should view foreigners' ties to Germans -- i.e., visiting Germans or receiving visits from them -- as a crucial way of building social capital. Research on Mexican immigrants in the U.S. reveals that parents are "generally unaware of their rights and obligations as parents in the U.S. school system" (Baca et al. 1989). Similarly, German acquaintances might be able to help parents and children navigate the German school system by serving either as sources of information or as mediators between parents and teachers.

IV Results

Models 1 through 3 produce few surprises. As expected, children from households with higher incomes are less likely to attend the Hauptschule (in general and among Germans), just as children from non-German backgrounds are more likely to attend the lowest track, but both effects weaken or evaporate once we take the family's educational resources into account. Similarly, the resource dilution proxies (household size and mother's time spent doing child care) are positively

associated with children's likelihood of attending the lowest track, especially among Germans. No statistically significant gender difference exists regarding track placement. At first glance the student's gender appears to shape track placement for non-Germans, suggesting that non-German girls are less likely to attend the Hauptschule. But diagnostic tests show that the two sub-group coefficients are not statistically different from each other.[13]

Models 2 and 3 in both tables show that parental educational background remains the strongest predictor among Germans and non-Germans: as their educational attainment rises, their children's risk of being placed in the Hauptschule declines. This parallels findings of other researchers who have studied status attainment processes and intergenerational mobility, noting that fathers' *and* mothers' education serves as an important determinant of children's educational attainment (e.g., Blossfeld & Shavit 1993; Büchel & Duncan 1998; Müller & Haun 1994; Müller & Shavit 1998). Although the coefficient for mothers' education fails statistical significance tests for the non-German sub-sample, diagnostic tests reveal once again that these two ethnically specific coefficients are not statistically different from each other. Within-group comparisons also highlight one difference in the track placement of German and non-German children: Access to media-based educational resources such as a PC reduces the likelihood of attending the Hauptschule among non-Germans. In this case, the sub-group coefficients differ in a statistically significant way.

Now I turn to the effects of social capital on track placement. Please remember the GSOEP's counterintutitive coding for social activities, where 1=daily and 5=never. At first, the

[13] In models not reported here I estimated all regressions with interaction terms for control and independent variables, rather than estimating the models for each ethnic sub-sample. None of the interaction terms involving control variables reached statistical significance, but the cultural capital measure ('cultural capital*mother's nationality') and the two "socializing measures" discussed below ('going out*mother's nationality' and 'playing board games*mother's nationality') did reveal statistically significant group effects.

negative effects of some forms of social capital on track placement appear to exist for everyone, as shown by Büchel & Duncan (1998). But while adding social capital measures dramatically increases model fit for the non-German analyses (see jump in χ^2 and drop in log-likelihood ratio), it appears to do little to improve track placement predictions among Germans.

The within-group analyses in Table 5 reveal that parental "socializing" activities, to use Büchel & Duncan's (1998) terminology, only affect the track placement of non-German children. The counterintutitive coding means: the less frequently parents engage in socializing activities the less likely their children are to attend the Hauptschule. Though they point in the same direction, the coefficients in the German sample fail to reach statistical significance. Let me emphasize again that these ethnically specific coefficients are statistically significantly different from each other.[11] Moreover, family ties or parents' community involvement through sports, volunteer or political work, does not seem to affect track placement within or across groups. While these findings seem to contradict Büchel & Duncan (1998) and related work on parental social capital in the U.S., the coefficients do point into the predicted direction.

Model 4 serves as a prelude to Model 5 and produces the same results. Therefore, my discussion now focuses on the final model in Table 5, in which I add inter-ethnic social capital and key measures of social integration among non-Germans. Essentially, the final model confirms the social capital effects discussed above: In addition to father's educational background and access to media-based technology, some forms of parental social capital influence the likelihood that a child is tracked into the Hauptschule. On the one hand, parental socializing measures increase the chance of attending the Hauptschule. On the other hand, parents' inter-ethnic, extra-familial networks have a positive impact on children's educational trajectories. Children whose parents visited Germans and/or received visits from Germans during the previous year are less likely to

attend the Hauptschule.

As expected, parents' German language ability had no statistically significant impact on their children's track placement. Also as expected, the father's intentions to stay in Germany appear to reduce the chance that a child attends the Hauptschule (Alba et al. 1994; Büchel & Wagner 1995), but the coefficient does not reach statistical significance in my analyses.[14] Though other research shows that length of residency and return intentions affect children's track placement, my findings indicate that availability of social ties with Germans overshadows those effects.

V Discussion

The purpose of this article is to examine the degree to which parental social capital affects the track placement of adolescents in Germany. Specifically, I explore whether parental social capital operates in similar ways within and across ethnic groups. Comparing the determinants of track placement for Germans and non-Germans provides some answers, but the analyses also raise important new questions, which call for additional quantitative and ethnographic data collection.

The main findings from Table 5 indicate that access to educational resources and social capital have ethnically specific effects on track placement. Taking into account standard family background characteristics, access to media-based technology (e.g., a personal computer) does reduce the likelihood that a child attends the lowest track in the German system, the Hauptschule. Remarkably, access to such technology primarily helps explain differences in track placement among non-Germans and has no measurable influence on how Germans are tracked. This

[14] In analyses not reported here I also estimated models including the residential history of the respondents' households and their sense of national identity. None of these measures achieved statistical significance.

indicates that technology has little impact on track placement as long as it is generally available -- and quite possibly little impact on educational outcomes at large. But it continues to influence educational trajectories in populations where access to cultural capital remains scarce.

The most striking findings revolve around the social capital effects on track placement. Teachman et al. (1997) raise the question whether social capital can have a compensatory effect among immigrant groups, i.e., whether it helps overcome disadvantages related to parents' lower educational attainment and other socio-economic factors.[15] Their study does not provide a direct answer, but the analyses presented here suggest that, at least for immigrants in Germany, extra-familial social capital has mixed effects on children's educational trajectories.

For example, we do not know why the frequency with which non-German parents visit restaurants or engage in fundamentally social activities like playing board games seems to have a negative impact on their children's trajectory. Let me state clearly that the mean scores for Germans and non-Germans are similar. In fact, Germans appear to engage in socializing activities more frequently than non-Germans (see Table 2). Additional data collection is required to examine whether ethnic differences exist in the context and the quality of such interactions among adults.

Moreover, we should question the causal direction of this relationship. On the one hand, if parents engage in such activities without their children, lack of supervision at home might adversely affect children's educational trajectory. On the other hand, parents of these 10-16 year olds may feel more at ease leaving adolescents alone precisely because the key educational choice

[15] Studies by Esser (1990) and Büchel et al. (1997) point to an, albeit indirect, benefit of building peer-based ties at a young age. They argue that non-German children benefit from attending Kindergarten before entering elementary school. Future studies are necessary to determine how interethnic ties among children influence German and non-German students' educational trajectories.

has already been made. This would indicate a reverse causal relationship between track placement and parental social activities and requires further examination.

It is also possible that parents and children pursue such (evening and weekend) entertainment together. While such activities may strengthen family ties, it may also impede their children's ability to form extra-familial friendships within and outside of their own ethnic group. This relates to findings by Leenen et al. (1990), who argue that Turkish adolescents in Germany face a catch-22 : The more independent from their families they become, especially regarding traditional cultural norms, the better they perform in German schools. But doing so they risk fundamental intergenerational conflicts, which many find difficult to manage. Nauck et al. (1997:491) take this line of reasoning one step further by suggesting that extra-familial contacts play a particularly crucial role for 2nd-generation immigrants in Germany.

Interestingly, strong parental ties to extended family members do not seem to influence track placement for either group (no statistical difference exists between the nonsignificant coefficient for Germans and the marginally significant one for non-Germans in Model 3). Instead, extra-familial inter-ethnic ties provide benefits for non-German children, who are less likely to attend the lowest track if their parents report maintaining personal contact with Germans. How do we interpret this finding? It stands to reason that non-German parents' personal ties to Germans generally benefit their children: On the one hand, such inter-ethnic ties among German and non-German adults may provide an important source of information about the German educational system and the significance of individual tracks. On the other hand, it may be easier for non-German parents to build inter-ethnic ties with other adults *if* their children already attend a higher track. Again, further research is needed to determine the causal direction of this positive association between adult inter-ethnic ties and immigrant children's track placement.

On a related note, we need to determine whether these inter-ethnic ties are, in fact, intragenerational, and whether they lend themselves to some form of "intergenerational closure." If these ties exist among adults, we would benefit from understanding more about the basis of these relationships, whether they involve German coworkers, parents of their children's peers, teachers or other "institutional agents" (Lareau & Horvat 1999; Stanton-Salazar & Dornbusch 1995). For example, Baca et al. (1989) show that immigrant parents are often unfamiliar with the structure of educational systems in the host country. This may cause immigrant parents to rely heavily on teacher recommendations (Leenen et al. 1990). Moreover, building on Coleman's work Carbonaro (1998) suggests that "intergenerational closure," i.e. parents' ties to their children's friends' parents, affects a series of educational outcomes in the U.S. However, these findings remain tentative and require further empirical corroboration (see Carbonaro 1999; Morgan & Sorensen 1999).

Finally, while my analyses point to the crucial impact of adult inter-ethnic friendships on the educational trajectories of immigrant children in Germany, future studies are needed to assess whether inter-ethnic ties also benefit the educational trajectories of German children. Do inter- and intra-ethnic friendships have universal benefits or does their impact on school outcomes remain contextual and group-specific? The answer has far-reaching implications, as it can influence whether families and communities try to integrate immigrants into the respective host culture or actively foster inter-cultural exchange and network formation. While the former represents a uni-directional process reminiscent of classic assimilation approaches, the latter necessitates a multi-directional strategy bound to change immigrants and the host culture alike.

TABLE 1: Distribution of 10-16 year old students attending secondary school tracks

Secondary School Tracks	Nationality		Total
	German	Non-German	
Hauptschule	124	99	223
Realschule	104	43	147
Gymnasium	152	23	175
Gesamtschule	37	18	55
Total	417	183	600

Pearson $\chi^2(3) = 45.42$ Pr = 0.000

Source: GSOEP, Wave L (1995). Hauptschule=vocational track; Realschule=general track; Gymnasium=academic track; Gesamtschule=modelled after U.S. comprehensive high schools.

TABLE 2: Variable Descriptions and Sample Means

variable name	variable metric	N	full sample (n=600) mean (SD)	sub-sample Germans (n=417) mean (SD)	sub-sample non-Germans (n=183) mean (SD)	difference of sub-sample means (SE)[a]
Dep. Var.: Hauptschule	1=yes, 0=otherwise	600	.37 (.48)	.30 (.46)	.54 (.50)	- .24*** (.04)
Controls: Nationality	1=non-German, 0=German	600	.31 (.46)	-----	-----	-----
Income	monthly net HH income in DM 1,000	600	4.82 (1.99)	5.07 (2.12)	4.25 (1.48)	.83*** (.15)
Gender	1=female, 0=male	600	.51 (.50)	.52 (.50)	.48 (.50)	.05 (.04)
Household Size	# persons in household	600	4.40 (1.19)	4.28 (1.11)	4.68 (1.32)	-.40*** (.11)
Educational Resources: Child Care	# hours/weekday mother spends doing childcare	600	3.67 (4.26)	4.05 (4.41)	2.81 (3.77)	1.24*** (.35)
Mother's education	years of schooling or training	600	10.66 (2.47)	11.28 (2.31)	9.25 (2.22)	2.02*** (.20)
Father's education	years of schooling or training	509	11.40 (2.90)	12.23 (2.88)	9.72 (2.08)	2.51*** (.22)
Access to Media (index)	household owns phone, TV, and/or PC; range 0 to 3	600	2.35 (.55)	2.49 (.53)	2.05 (.45)	.44*** (.04)
Social Capital: Parents go out (index)	1=daily to 5=never (per parent); range 2 to 10	509	6.96 (1.58)	6.70 (1.46)	7.49 (1.68)	-.79*** (.15)
Parents play games (index)	1=daily to 5=never (per parent); range 2 to 10	507	7.21 (1.89)	6.88 (1.78)	7.90 (1.93)	-1.03*** (.18)
Parents visit family members (index)	1=daily to 5=never (per parent); range 2 to 10	507	5.62 (1.78)	5.79 (1.60)	5.26 (2.07)	.53** (.18)

Father's sports activities	1=daily to 5=never	507	3.77 (1.30)	3.43 (1.30)	4.47 (1.00)	-1.04*** (.10)
Mother's volunteer or political activities (index)	1=daily to 5=never (per activity); range 2 to 10	591	9.44 (1.12)	9.24 (1.23)	9.87 (.63)	-.63*** (.08)
Parental contact with Germans (index)	visited 1=yes, 0=no; received visits 1=yes, 0=no (per parent); range 0 to 4	156	-----	-----	3.01 (1.55)	-----
Father plans to stay in Germany	1=next twelve mths 2=a few years 3= permanently	158	-----	-----	2.46 (.51)	-----
Father's German speaking and writing ability (index)	1=very good to 5=badly (per question); range 2 to 10	155	-----	-----	6.15 (1.71)	-----

[a] Due to rounding, differences in sub-sample means listed here are imperfect.

*** p>0.000

** p>0.001

Source: GSOEP, Wave L (1995).

TABLE 3a: Zero-Order Correlations, Full Sample (n=495)

	Hauptschule	Income	Nation.	Gender	HH-Size	Child-care	Mother's Education	Father's Ed. Education	Access to Media	Go Out	Play Games	Visit Family	Play Sports
Hauptschule	1.00												
Income	-0.21	1.00											
Nationality	0.27	-0.22	1.00										
Gender	-0.06	-0.02	-0.04	1.00									
HH-Size	0.18	0.13	0.16	0.01	1.00								
Childcare	0.05	0.06	-0.13	-0.02	0.28	1.00							
Mother's Ed.	-0.29	0.34	-0.40	0.09	-0.17	0.13	1.00						
Father's Ed.	-0.36	0.46	-0.41	0.06	-0.16	0.07	0.51	1.00					
Access to Media	-0.23	0.33	-0.37	-0.08	-0.13	0.01	0.27	0.32	1.00				
Go Out	0.00	-0.19	0.23	-0.02	0.19	0.02	-0.17	-0.17	-0.22	1.00			
Play Games	-0.03	-0.07	0.25	0.04	0.03	-0.04	-0.18	-0.14	-0.08	0.21	1.00		
Visit Family	-0.11	0.13	-0.13	0.01	0.01	0.04	0.10	0.10	0.07	0.11	0.09	1.00	
Play Sports	0.18	-0.18	0.38	0.00	0.19	-0.12	-0.21	-0.32	-0.29	0.25	0.28	-0.02	1.00
Volunteer	0.08	-0.15	0.27	0.01	-0.02	-0.10	-0.23	-0.21	-0.16	0.14	0.15	-0.04	0.13

TABLE 3b: Zero-Order Correlations, non-German Sub-Sample (n=150)

	Hauptschule	Income	Gender	HH-Size	Child-care	Mother's Education	Father's Ed. Education	Access to Media	Go Out	Play Games	Visit Family	Play Sports	Volunteer	German Contact	Plans to Stay
Hauptschule	1.00														
Income	-0.01	1.00													
Gender	-0.08	0.06	1.00												
HH-Size	0.17	0.46	-0.03	1.00											
Childcare	0.06	-0.03	-0.10	0.18	1.00										
Mother's Ed.	-0.15	-0.06	0.06	-0.25	0.10	1.00									
Father's Ed.	-0.24	-0.01	0.05	-0.14	0.12	0.32	1.00								
Access to Media	-0.25	-0.03	-0.12	-0.13	-0.19	0.17	-0.03	1.00							
Go Out	-0.21	-0.10	-0.02	0.16	0.06	-0.06	0.02	-0.04	1.00						
Play Games	-0.33	-0.00	-0.02	-0.05	0.00	-0.01	0.04	0.09	0.20	1.00					
Visit Family	-0.10	0.01	-0.01	-0.07	-0.00	-0.13	-0.09	-0.07	0.20	0.05	1.00				
Play Sports	-0.06	-0.03	0.03	0.16	0.03	-0.00	-0.00	-0.24	0.27	0.25	-0.01	1.00			
Volunteer	-0.06	0.04	0.03	0.18	0.04	-0.18	-0.08	0.04	0.11	0.08	-0.03	0.00	1.00		
German Contact	-0.23	0.08	0.04	-0.02	-0.20	0.03	0.15	0.10	-0.13	-0.07	0.08	-0.02	0.05	1.00	
Plans to Stay	-0.11	-0.03	-0.00	-0.00	-0.13	0.08	0.20	-0.08	-0.06	0.07	-0.05	0.03	0.01	0.09	1.00
German Language	0.14	-0.04	0.06	0.01	-0.05	-0.17	-0.31	-0.07	0.02	-0.06	-0.04	0.07	0.02	-0.12	-0.16

TABLE 4: Logistic Regression of Track Placement (Hauptschule) on Family Background and Parental Social Capital

Full Sample	Model 1	Model 2	Model 3
Controls: Income (in DM 1,000)	-.315*** (.000)	-.123* (.000)	-.139* (.072)
Nationality (1=non-German)	.569** (.236)	.251 (.287)	.416^{t} (.312)
Gender (1=Female)	-.157 (.182)	-.210 (.208)	-.226 (.216)
HH-Size	.287*** (.083)	.180* (.099)	.199* (.106)
Childcare	.050* (.023)	.044^{t} (.029)	.049* (.030)
Parental Resources: Mother's Education	-----	-.118* (.057)	-.161** (.061)
Father's Education	-----	-.233*** (.057)	-.255*** (.061)
Access to Media	-----	-.386* (.220)	-.367^{t} (.228)
Parental Social Capital: Parents Go Out	-----	-----	-.205** (.075)
Parents Play Games	-----	-----	-.155** (.063)
Parents Visit Family	-----	-----	-.049 (.061)
Father Plays Sports	-----	-----	.122 (.101)
Mother Volunteers	-----	-----	-.052 (.103)
Constant	-.369 (.443)	3.777 (1.049)	7.135*** (1.782)
Log-Likelihood	-353.972	-279.165	-262.714
LR χ^2	83.86***	106.57***	122.37***
N	600	509	495

Weighted results; standard errors in parentheses

t p>0.1; * p>0.05; ** p>0.01; *** p>0.001 (one-tailed)

TABLE 5: Logistic Regression of Track Placement (Hauptschule) on Parental Social Capital, by Ethnic Group (weighted results; standard errors in parentheses)

Sub-Samples	Model 1 Germans	Model 1 Non-Germans	Model 2 Germans	Model 2 Non-Germans	Model 3 Germans	Model 3 Non-Germans	Model 4 Non-Germans	Model 5 Non Germans
Controls:								
HH Income (in DM 1,000)	-.383*** (.073)	-.127 (.120)	-.134^t (.086)	-.094 (.131)	-.132^t (.089)	-.169 (.147)	-.150 (.147)	-.278^t (.176)
Gender (1=Female)	-.127 (.227)	-.284 (.309)	-.032 (.266)	-.581* (.347)	-.049 (.275)	-.567^t (.386)	-.536^t (.379)	-.574^t (.440)
HH-Size	.207* (.107)	.348** (.147)	.188^t (.133)	.173 (.160)	.151 (.145)	.301^t (.185)	.312* (.178)	.531** (.223)
Childcare	.053* (.027)	.065^t (.046)	.029 (.036)	.050 (.054)	.033 (.037)	.063 (.058)	-.025 (.065)	-.015 (.075)
Parental Resources: Mother's Education	-----		-.158* (.080)	-.044 (.086)	-.176* (.083)	-.163^t (.102)	.029 (.095)	-.088 (.119)
Father's Education	-----		-.261*** (.076)	-.218** (.093)	-.281*** (.083)	-.248** (.105)	-.214* (.106)	-.205* (.124)
Access to Media	-----		-.122 (.253)	-1.345** (.535)	-.085 (.260)	-1.296* (.597)	-1.905** (.642)	-2.052** (.768)
Parental Social Capital: Parents Go Out	-----		-----		-.057 (.100)	-.418*** (.137)	-----	-.399** (.194)
Parents Play Games	-----		-----		-.095 (.083)	-.287** (.111)	-----	-.390** (.131)
Parents Visit Family	-----		-----		.017 (.091)	-.126^t (.094)	-----	-.082 (.102)
Father Plays Sports	-----		-----		.072 (.116)	.171 (.222)	-----	-.149 (.264)
Mother Volunteers	-----		-----		-.037 (.114)	-.353 (.357)	-----	-.214 (.279)
Inter-Ethnic Contact	-----		-----		-----		-.268* (.137)	-.380** (.161)
Father Plans to Stay in Germany	-----		-----		-----		-.489^t (.375)	-.458 (.437)
Father's German Language Ability	-----		-----		-----		.040 (.119)	.023 (.142)
Constant	-.287 (.550)	-.891^t (.686)	3.814*** (1.330)	5.268*** (1.780)	5.323** (2.169)	15.155*** (4.536)	7.165** (2.571)	17.926*** (4.832)
Log-Likelihood	-230.688	-120.125	-173.253	-102.489	-165.893	-88.184	-87.840	-72.620
LR χ^2	46.21***	12.21*	51.76***	25.18**	52.34***	52.27***	31.73***	60.99***
N	417	183	342	167	329	166	151	150

t p>0.1; * p>0.05; ** p>0.01; *** p>0.001 (one-tailed)

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