

Soft Factors Mediating School Success: A Comparison of Migrant and Native Families

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Abstract

Cultural resources are central strategic means for families to promote their children's school success. Cultural resources become particularly relevant in micro-interactional processes between parents and their children as well as between parents and school agents in order to ensure the child's success. Two mediating ways that possibly affect children's school carrier are of analytical interest here: first, via frequent and qualitatively high contact between parents and school agents, and second, via regular school related exchange between parents and their child (Coleman, 1988). Parents' motivation and initiative are potential 'soft' factors of success that, as one piece of the puzzle, might contribute to the explanation of systematic ethnic differences in the educational outcome (Lareau & Weininger, 2003). Migration is predominantly believed to at least in part devalue innate resources (e.g., strategic knowledge or skills) of migrants which at the same time lack resources specific to the receiving country (Esser 2006, Kalter 2003). In contrast, 'soft' factors such as educational motivation and engagement are rather context independent resources that might have a positive impact on academic achievements. Educational aspirations of certain migrant groups are known to be remarkably high (Kao & Tienda 1995). For school agents, these factors might as well be a signal of high educational motivation in the migrant family. Consequently, the following assumption can be made: If interactions of parents, both with the child and with school agents, are characterized by high educational interest and school involvement, the probability of a favourable positioning in the educational system increases when controlling for achievement test scores. This article investigates types of exchange that can enhance children's achievements and favour teachers' recommendation for the transition to the secondary school level; in Germany, this early transition is quite decisive for child's entire educational carrier. Furthermore, this article looks at differences between migrant groups in Germany and asks whether these 'soft' factors account for varying positioning of the respective groups in the educational system.

The analysis are conducted using longitudinal data from the project *Immigrants' Children in the German and Israeli Educational Systems* (n=3014). The groups of interest are Ethnic Germans from the former Soviet Union and the offspring of immigrants from Turkey compared to natives who attend grade four in the German educational system, which is right before the transition to the secondary school system. The dependent variables are competence levels and teachers' recommendation; explaining variables are quality and quantity of parents' contact with school agents and their involvement in the child's school issues.

1. Introduction

In Germany, social integration of ethnic minorities is currently a vexed question. During the last fifty years, migration to Germany existed in significant numbers, but just for a short time, since 2005, lagging integration of migrants and their children have become a crucial topic on the political agenda of all parties¹ (Geißler 2006). Since PISA (2003, 2006), the disadvantageous position of migrants and their children in the educational system is well known, and many investigations have focused on forms, extent and reasons for the lacking success of migrants and their descendants in the educational system.

An exemplary finding is that immigrants' children have lower transition rates to higher education, they are less often recommended for gymnasium, the school track leading to the *Abitur* and thereby opening the door to university. The first educational selection takes place at grade four, at the transition from elementary school to secondary education. This quite early transition point yet indicates probable future outcomes in the labour market closely related to general life chances. Consequently, educational outcome can be considered as one indicator of structural integration.

In Germany, the selection process is a result of intertwining factors: a child's competences, teachers' school recommendation based on teacher-assigned grades and teacher-perceived disposition of students and their families as well as parents' choice (by law)². Teachers' recommendation is most often found to be biased by social origin and family background (Bos et al. 2004, Ditton & Krüsken 2006, Kristen 2006, Schulze et al. 2008). Concerning migrants, some studies report a negative effect of migrant status on teachers' recommendation when controlling for social status. Others, however, found a *migrant bonus* when controlling for achievements (Lehmann & Peek & Gänsfuß 1997).

Diffuse factors of school selection beyond standardized ability tests are often claimed to contribute to educational inequality (Erikson & Jonsson 1996) but it might also be an opportunity for highly motivated migrant families to promote their children's school success. So far, the investigation of the mechanisms mediating background effects on recommendation is rather scarce, and very little is known about effective mechanisms, the relevance of particular factors and concurrent causes during primary school time (Birkelbach, 2007:5). Many studies report determinants such as grades and social status (Bos et al. 2004, Ditton & Krüsken 2006, Kristen 2006). Ditton and Krüsken (2007) reconstructed teachers' recommendation³ as a function of

¹ Geißler (2006) mentioned a political agreement in 2005 of all parties that declares the integration of ethnic minorities to an outstanding problem that is no longer to ignore.

² The opportunities of parents to decide about students' transition is differently ruled in the federal departments of Germany and it is in change.

³ According to a resolution of the KMK from 1970, the recommendation is to consider the children's general volitional and motivational personality traits important to school success besides the performance in terms of

achievement, grades, teachers' evaluation of parental support and students' social and work related competences as well as parents' aspiration level and their social status. However, how do teachers assess the background of the child? Thus far, no further questioning of what exactly influences teachers' evaluation and what kind of experience with the family provide a base for teachers' impressions of the parental aspiration or the social status of the family has taken place.

Hence, this paper aims to put light on the aspects of interaction between parents and school. It investigates possible ways for parents to influence the child's school success, via interaction with school agents and via interaction with the child. Concerning the last aspect, intergenerational transmission processes are addressed. The broader question is whether structural integration of migrants' children is favoured by a strong parental motivation that positively influences interaction processes – even if parental social, cultural and structural integration is on a low level.⁴

Applying the general resource investment argument (Erikson & Jonsson 1996, Kristen & Granato 2004, Kogan & Kristen & Reimer 2008), each parental interaction, with school agents as well as with their child, is considered as a decision to invest resources and time to reach a certain goal, e.g. a favourable recommendation.⁵ In addition, Bourdieu's approach of cultural capital is used to assess the educational field; according to him, cultural resources at an individual's disposal are particularly relevant for investments to succeed in this field (Bourdieu 1991). Furthermore, researchers assume a partial devaluation of resources in the new context of the receiving country as a consequence of migration (Esser 2008, Kalter 2003). Therefore, they analytically distinguish between generalisable and context specific resources. For instance, the language and specific knowledge about the educational system of the country of origin are context specific, and thus, no longer useful and productive in the new context.

Apart from that, migrants might be a selective group with high motivation to succeed and to take advantage of opportunities in the new country (Kao & Tienda 1995, Vallet 2005). In this respect, motivation can be seen as a general resource of migrants – rather unsusceptible to contextual change – and thereby becoming a potential cultural resource in the educational system.⁶ In two different ways, it might affect a child's school outcome: first, motivation of parents might be transmitted to their children, and thus drive learning processes. Second, given

subject-specific objectives of the curriculum (KMK 2006a). Moreover, the recommendation is to be made consistent with the educational ability of the children and independently of socio-cultural characteristics – without regard to social status and wealth of parents – of the children (Bos et al. 2004:51).

⁴ Kalter (2008) and Esser (2008) point out the respective direction and interaction of each analytical dimension of integration has not been worked clearly, so far. For helpful comments, I thank Benjamin Schulz.

⁵ The interaction is considered as strong motivation to invest, and indicates not only the wish but is also a strong indicator of intention to act and to fight for it. Although some interaction might also pertain to problems of the child in school.

⁶ It can also be seen as an ethnic cultural resource as not all migrant groups possess it.

the actual contact between the three actors, migrants' motivation can be a signal of soft skills for the teacher. This means that even if they lack formal qualification or educational expertise, motivated parents have the ability to deal with their child's problems, thereby compensating a lack of cultural resources.

Consequently, this article investigates types of exchange that actually enhance children's achievements and favour teachers' recommendation for the transition to the secondary school level. By now, there is also very little empirical study on the mechanisms of the intergenerational transfer of cultural capital in the early childhood (Becker 2009). Strong empirical assessment and empirical tests for migrant groups in Germany are rare, as well. Therefore, this article investigates differences between migrant groups and asks whether these soft factors account for a varying positioning of specific minority groups in the educational system.

Analyses are conducted using longitudinal data from the project *Immigrants' Children in the German and Israeli Educational Systems*. The groups of interest are Ethnic Germans from the former Soviet Union and the offspring of immigrants from Turkey compared to natives who attend grade four in the German educational system, which is right before the transition to the secondary school system (n=614). The dependent variables are competence levels and teachers' recommendation; explaining variables are quality and quantity of parents' contact with school and their involvement in the child's school issues.

The paper is structured as follows: first, it continues with a short explanation of the theoretical approach followed by the formulation of the hypotheses; afterwards, it gives an exemplary overview on studies investigating determinants of school recommendation and studies addressing intergenerational transmission processes. After a description of data and methods hypotheses are tested. In the final part, results are discussed.

2. Theoretic approach

Educational outcome is considered to be the result of a long-time, stepwise accumulated investment process within the educational career (Kristen & Granato 2004). According to the resource investment argument (Erikson & Jonsson 1996, Kristen & Granato 2004, Kogan & Kristen & Reimer 2008), individuals strategically invest resources to maximize their utility to reach a certain goal. Goods, personal traits and positions are assumed to be productive resources. Moreover, for migrants a systematically restricted resource endowment is expected due to several aspects: first, as a consequence of migration a partial devaluation of resources, and second – closely related to this shortage – a disadvantage of accumulation (Kristen & Granato 2004). The

first aspect pertains to an analytical differentiation between resources that are generally productive in all contexts and resources that are specific to a certain context. Consequently, the latter might not have the same productive relevance in other contexts and transferability to other contexts is restricted (Chiswick 1978, Kogan & Kristen & Reimer 2008). A second restriction assumed for migrants' assets pertains to accumulation deficits and addresses to a characteristic of capital – the more amount of resources the more it increases (Kalter 2003, Kristen & Granato 2004). Subsequently, Kristen and Granato (2004, 2007) assume for migrant families a lack of knowledge of the educational system, of experiences and familiarity with the institutions and their formal and informal rules. Additionally, they emphasize the role of high positions in the labour market related to an advantageous access to information. Taking into account, that migrants rather occupy low positions of the society and do not possess a German educational diploma, they conclude and empirically confirm a negative influence of the social status of migrants on educational outcomes of their offspring (ibid).

Hence, in an alternative view and apart from their relatively low social status, migrants might be a selective group with high motivation to take their chance in the new country by using education as vehicle of success (Kao & Tienda 1995, Vallet 2005). Despite of lacking language knowledge, immigrated youth may succeed as good as and even better than their native counterparts in school, because their school related behaviour is boosted by parental optimism with respect to social mobility chances (Kao & Tienda 1995). In this respect, motivation can be concerned as a general resource of migrants – rather unsusceptible to contextual change – becoming a potential cultural resource in the educational system.⁷

The resource investment argument comprises several resources: social, financial, cultural and 'educational resources' (Bourdieu 1983, Erikson & Jonsson 1996). According to Bourdieu (1983, 1991), some resources are more relevant than others in particular fields, e.g. cultural resources are assumed to be most productive in the educational field. In a critical review of Bourdieu's ideas, Lareau and Weininger (2003:596) name several cultural resources helping parents to navigate the educational system. Thus, they state implicit standards of the school imposed to parents during interaction with school agents: "[...]standards of parents to be: 'active', 'involved', 'assertive', 'informed', 'educated', 'advocated' for their children[,] parents involvement is virtually universal and widely praised" (Lareau and Weininger, 2003:596).

Consequently, the following definition of cultural resources can be applied to school relevant issues: Within micro-interactional processes between actors (e.g. parents both with the teacher and with their child), cultural resources in diverse forms – such as knowledge, disposition and behaviour – are strategically invested to be converted into educational success.

⁷ It can also be seen as an ethnic cultural resource since not all migrant groups possess it.

Moreover, educational attainment is seen as a result of intergenerational transmission processes in which – under afford of time – social and cultural resources are invested in order to maintain the social status obtained (Bourdieu 1983). Motives and knowledge are passed on between generations.⁸ Accordingly, migrants' motivation is considered as a cultural resource serving as a signal for school agents, that is, children gain motivational support of their parents.

H1: Referring to the transmission argument, parental motivation is transferred to children the more frequent school related topics are discussed at home, and thereby affects the children's achievement in a positive way. As a result, children's work-related behaviour is then orientated by parents' motivation.

H2: Further on, this motivation is perceived by the teacher when parents are in intense and frequent contact with school.

H3: With respect to the school recommendations: Parents motivation and parents contact both with school (directly) and with their child (indirectly) might positively affect teachers' school recommendation to higher education when controlling for achievements.

3. State of the art

What are criteria and determinants for different track recommendations? A resolution by *The Standing Conference of the Ministers of Education and Cultural Affairs of the Länder in the Federal Republic of Germany* states that the recommendation at grade four should include achievements concerning the aims of the curriculum, as well as volitional and motivational personal traits supporting school success (KMK 2006). In addition, it states that the evaluation of students' educational ability should be independent of socio cultural attributes and irrespective of social status and assets of the parents (Bos et al. 2004: 51).

Current studies on school achievements, such as IGLU (2003), LAU (1996) and KESS 4 (2006), examined the correlation of competence levels with school recommendations by teachers and the respective grades. First of all, they all found a significant overlapping section (44%) of children with comparable achievements but different track recommendation (IGLU 2003, Birkelbach 2007:3). Bos et al. (2004) and Kristen (2006) state that grades are most decisive for school recommendation (66% of explained variance); but, in addition, social status of the parents has an independent impact on it. A child whose father had finished upper secondary school with achievements below the average receives a recommendation for the gymnasium, whereas a child whose father has no school diploma needs surpassing achievements for the same outcome (Bos

⁸ Bourdieu (1983) distinguishes cultural resources in different forms: embodied, institutionalized and objectified. In this paper, the embodied form is the one of interest.

et al. 2004). Furthermore, personal traits like willingness for exertion and performance anxiety are additional factors explaining variance in recommendation. Also, the grade in German is more important than the grade in Mathematics (Bos et al. 2004, Ditten & Krüsken & Schauenberg 2005). Ditton and Krüsken (2006) report the following determinants for school recommendation: when controlling for grades they find strong effects of parental aspiration for all recommended tracks. Furthermore, teachers less often propose a transition to the Hauptschule, a lower secondary school, if they perceive the parental support as positive. The same applies to social and work related competences of children. Teachers less often recommend the Hauptschule if they judge work related skills positively. A teacher more often suggested the Gymnasium if he or she has valuated a child's talent high. At these points, migrants' motivation could directly influence teachers' recommendation.

What is the picture for migrant offspring? Children with migration background are systematically more frequently recommended to Hauptschule and Realschule, a mid secondary school, than their native counterparts (Bos et al. 2004:52). Children whose parents were not born in Germany have a 1.66 times lower chance to receive a recommendation for the gymnasium.⁹ Lehmann, Peek and Gänsfuß (1997:89f. 101) detect a reverse tendency of favouring migrants and state a migrant bonus: They receive lower rates of gymnasium recommendation, but compared to native students notably lower achievement test scores are sufficient for recommendation. Ditton, Krüsken and Schauenberg (2005) also found evidence for a favouring of migrants in Bavaria. Tiedemann and Billmann-Mahecha (2007) put emphasis on the persistence of discrepancies in achievements for migrant students, and adhere there was no disadvantage with respect to transition recommendations when controlling for grades and independent achievement test scores and social background. Thus, lower attainment seems to follow primarily from class origin rather than from genuine ethnic traits (Alba et al. 1994, Kristen & Granato 2004).

These findings show that migrant parents might dispose of good opportunities to influence educational outcomes of their children. To sum up, teachers' educational track recommendation is a function of children's achievements at school, teacher-assigned grades and other valued traits, like motivation of the child and its family. But how do teachers assess educational orientation and motivation of parents and their social status?¹⁰ So far, concrete mechanisms that mediate effects of social and migrant status on teachers' recommendation are missing.

Transmission processes

⁹ This factor varies between the federal departments of Germany: for Bavaria and Hesse it is not significant and for Baden-Wuerttemberg it reaches 2.61. (vgl. Bos et al. 2004:211ff.)

¹⁰ It might be argued, that considering child's performance, behaviour and traits is enough to assess parents aspiration and support potential.

In hypotheses 1, an intergenerational transfer of motivation is expected. Concerning intergenerational transmission processes, a few exemplary studies exist. Bourdieu stressed the idea of cultural transmission processes in the early childhood. The following exemplary studies empirically assessed the idea of intergenerational transmission. Jaeger (2007) – amongst other aspects – addressed a ‘socializing’ and a ‘learning’ aspect of cultural capital. He approached the idea of parents investing cultural capital in a child by assuming both, an intensive parental cultural communication with their child and an adequate support of child with its homework. Jaeger (2007) concluded indirect effects of parents’ cultural capital on a child’s educational outcome are quite substantial, underlining the relevance of transmission processes. Becker also investigated the transfer of cultural knowledge by frequent parental activities with their child. Thereby, effects of social origin on achievements get dissolved mediated through interaction between parents and child (Becker 2009). Likewise, Cheung and Andersen (2003) emphasized the action of both, parents and children, and interaction between them and found, independently of class origin, the amount of time parents read and the encouragement they give to their children to read benefit children’s educational outcome (Andersen & Cheung, 2003:427). One can then suggest parental encouragement as one aspect of their motivation.

4. Data and Operationalization

Hypotheses are tested with data collected in the project *Immigrants’ Children in the German and Israeli Educational Systems*. The project investigates reasons of persisting ethnic differences in the educational systems of Germany and Israel.¹¹ The groups of interest in Germany are Ethnic Germans from the Former Soviet Union and descendants of migrants from Turkey compared to native Germans without migration background.¹² The survey is designed as a two wave panel studying conditions right before the transition and at the second time investigating the effective transition.¹³ Data collection took place in three Federal Departments of Germany: Hamburg, Hesse and North Rhine Westphalia.¹⁴ The data set so far comprises all interviews of the first survey wave with students at grade four, nine and ten and their mother. The entire dataset comprises 3014 cases of students and their mothers (completed interviews n=724). For this investigation, only the fourth graders are of particular interest here. Students of grade four were interviewed shortly before their transition to secondary school level. At this stage, they receive a

¹¹ The subproject in Germany inquires reasons for divergence and convergence in school performance of Ethnic Germans and Jewish immigrants from the former Soviet Union and the offspring of Turkish immigrants compared to the native reference group.

¹² In Israel, there is no school recommendation, thus, the analyses can only be computed for the German data set.

¹³ A third follow up is planned for autumn 2009.

¹⁴ These federal departments of Germany were chosen, because their institutional setting at grade four is comparable and they have high proportions of the groups of interest.

school recommendation. Data was collected by bilingual interviewers, both in personal interviews with mother and student as well as in school surveys with personal or telephone interview with mother afterwards. The interview with the student consisted of two parts, standardized achievement tests¹⁵ and a student questionnaire. Omitting all cases with missing values, dataset for analysis includes 489 cases¹⁶.

School recommendation, grades and independent achievement tests (dependent variables)

Educational outcome, as dependant variable, is measured by school recommendation. The mother was asked about the school form her child received a recommendation for, ranging from a general secondary school (HS), over a general secondary school and intermediate secondary school (RS and HS), intermediate secondary school (RS) and comprehensive school (GS) to upper secondary school (GY). Since school recommendation is mainly determined by grades, it is controlled for the average of reported grades in German and Mathematics. Average grade point comprises grade in German and Mathematics of a student's last school report.

In independent achievement tests, competence level was assessed in both, reading literacy and cognitive skills (c.f. footnote 15). In the literacy test, the child was given twenty minutes to read through three texts, each followed by multiple questions (altogether n=21) testing reading comprehension. This test should asses the German language skills of all students. The cognitive test was an explicit language free test, the child was presented figure analogies (items n=25): in each item, one analogy pair and the first part of another pair was given and the second part of the second pair was to be selected out of five different figures. These independent tests are expected to represent a child's achievement better than teachers-assigned grades. For analysis, the sum score of both tests is generated, ranging from 0 to 46. The score will be used also as independent variable in order to strictly separate indirect effects of parents' motivation on achievements and grades (primary effects) from direct effects of parents' motivation, effective in their contact with the teachers and on teachers' recommendation.

Social origin

The following measures are admitted in the analysis to assess a child's social background:

Parents' highest educational and occupational level is used; the classification is based on the ISEC-97 Coding and used in the following manner: the first and second categories of ISCED are combined in 'low education', categories three, four and 5B as 'intermediate education' and

¹⁵ The standardized achievement test contains a reading literacy achievement test taken from LAU 5 Form A (selected: 3 texts, 21 questions, 20 minutes) and a cognitive achievement test taken from KFT 4-12 +R (selected: given material for grade 4, 25 items, 8 minutes).

¹⁶ A large number of cases (n=214) needed to be dropped since we did not ask for information on the school recommendation and on the realistic aspiration of the mother sampled in the telephone interview.

ISCED 5A as 'high education'. Therefore, we account for graduation made in Germany as well as foreign certificates. We have the information for both parents, for the analysis we only consider the highest one. Additionally, the per capita income is included in the models by weighting the first member of the household with 1 and all the others with 0.5.

Ethnic origin

Children's migration background is constructed for the several groups as follows: *Ethnic Germans from the Former Soviet Union*: both parents were born in a country of the Former Soviet Union and at least one carries the status of Ethnic German. *Turkish migration background*: both parents were born in Turkey or have Turkish migration background, meaning at least their parents (grand parents of the child) came from Turkey. *Germans without migration background*: both, mother and father were born in Germany and so were their parents (the child's grand parents).

Motivation

As a measure of mother's motivation her realistic aspiration for the child's further school track was inquired – it could be answered on a five level scale (1 'impossible' to 5 'very sure') to the question: How sure are you that your child will make the following school-leaving certifications (degree from general secondary school (HS), degree from intermediate secondary school (RS), vocational diploma (Fachabitur), degree from upper secondary school (GY/Abitur)? For analysis, a dummy out of the last two categories was generated, coded with 1 if mother answered with 'sure' or 'very sure' and with 0 if she answered with 'impossible', 'unlikely' or 'possible'.

Contact of parents with school agents

Mother was asked in which ways she or her partner had contact with the child's school during the last school year: such as being involved in several school activities, attend at least one parent evening, having a dialogue with the teacher about child's future in schooling and talk to the teacher because of child's problems in school. Each item could be answered with 'yes' (1) or 'no' (0) and all items that pertained had to be crossed.

School related contact of parents with the child

Furthermore, we asked children for school related communication with their parents in four different dimensions: parents' interest in school issues (1), parents set rules for grades (2), parents help with homework (3) and parents eat together with the child (4). Each item was scaled from 1

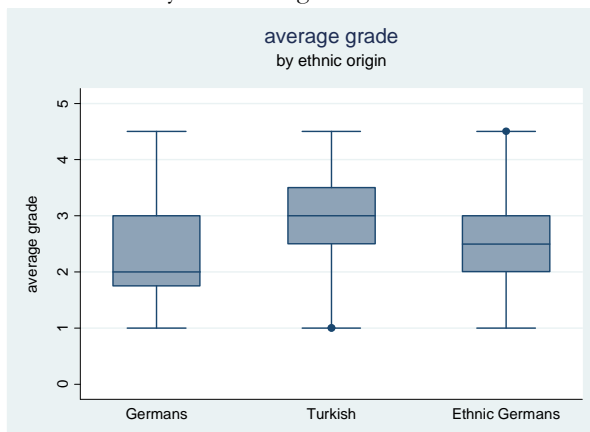
‘never’ to 5 ‘weekly’. Since items do rarely correlate and represent different features of interaction, each will be included separately.¹⁷

In all models, ethnic origin, sex, age of migration, federal department, sample (household vs. school survey) are included as control variables. Table A.1 in the appendix contains all variables and Table A.2 shows proportions/means and standard errors by ethnic origin. After brief descriptions of track recommendations by groups, the relative importance of parental interaction processes is analysed in binary logistic regression on school recommendation.

5. Results

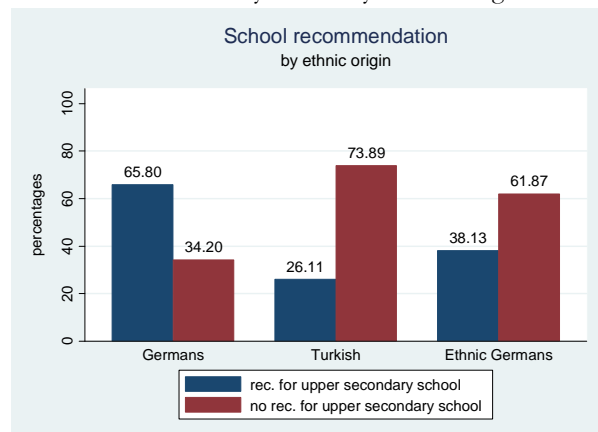
Figure 1 shows the distribution of the first independent variable: the overall average grade of reported grades in German and Mathematics by ethnic origin. According to other research findings, school achievements vary a lot between migrant groups: Ethnic Germans from the Former Soviet Union are positioned in a mid field compared to the other groups, whereas students with Turkish migration background perform poorest (Kristen 2003).

Figure 1: Distribution of achievement test scores by Ethnic Origin



source: Study: Immigrants’ Children in the Israeli and German Educational System
notes: n=450

Figure 2: School Recommendation for the Upper Secondary School by Ethnic Origin



source: Study: Immigrants’ Children in the Israeli and German Educational System
notes: n=489

Correspondingly, results show a similar picture for school recommendations by ethnic origin. Figure 2 presents the proportions of students receiving a school recommendation for the upper secondary school (Gymnasium) versus a recommendation to other (lower) school forms by ethnic origin (c.f. a more differentiated view of the track recommendation Figure A.1 in the Appendix.). Almost 66% of the Germans without migration background were recommended to the Gymnasium, on the contrary, only 26% of students with Turkish migration background and

¹⁷ This conclusion was made after an item correlation test and testing of Cronsbach’s alpha (0.3) of all items.

almost 40% of the Ethnic Germans from the Former Soviet Union were recommended to upper secondary school.

Table 1: Distribution of Explaining Variables by Ethnic Origin

means (Min-Max)	Germans		Turkish Migrants		Ethnic Germans from FSU	
	<i>Mean</i>	<i>sd</i>	<i>Mean</i>	<i>sd</i>	<i>Mean</i>	<i>sd</i>
recommendation for Gymnasium (1,0)	0.66	-	0.26	-	0.38	-
independent achievement test scores (1,45)	32.39	9.71	26.18	8.86	30.52	9.68
average grade in German and Mathematics (1, 4.5)	2.28	0.77	2.81	0.71	2.48	0.73
realistic aspiration: Abitur (1,0)	0.49	0.50	0.36	0.48	0.36	0.48
parents' general interest in school issues (1-5)	4.08	0.86	3.81	0.99	4.04	0.90
parents: set rules for grades (1-5)	3.57	1.29	2.97	1.35	3.54	1.18
parents: controlling homework (1-5)	1.83	1.11	3.25	1.37	3.41	1.27
parents: eating together (1-5)	4.44	0.96	3.97	1.09	3.66	1.18
parents' interacting with school: engagement in school events (1,0)	0.87	-	0.68	-	0.60	-
parents' interacting with school: take part in parents' evening (1,0)	1	-	0.97	-	1	-
parents' interacting with school: due to future plans for the child (1,0)	0.97	-	0.90	-	0.94	-
parents' interacting with school: due to problems of the child (1,0)	0.54	-	0.81	-	0.84	-
income per capita (0 - 6.5)	2.53	0.7	1.48	0.54	1.74	0.60
ISCED (10 - 50)	37.52	10.63	18.68	11.51	32.71	11.65

source: Study: Immigrants' Children in the Israeli and German Educational System

notes: n=489

Descriptive analyses (of means) by ethnic origin (c.f. Table 1) for Turkish migrants yield significantly lower achievement test scores than for Germans. The realistic aspiration level for their child to make a degree from upper secondary school is significantly lower for both migrant groups than for Germans, this result might indicate that adjustment processes had already taken place. Concerning migrants' behaviour towards school issues, the descriptive analysis illustrate: only Turkish migrant parents show lower rates of interest in child's school issues and set fewer rules for grades. German parents give less support for homework, whereas Ethnic Germans control homework of their child most often compared to the other groups, but on the contrary, they do least often eat together with their child. Regarding parents school activities, the groups do not significantly differ with respect to participation in parents evening and in terms of teacher contact to discuss the child's future. But Ethnic Germans from the Former Soviet Union are most likely to be in contact with school due to problems of their child, whereas Germans seem to

be rather scarce in contact with teachers in this respect which might indicate that migrants' children have more problems at school. Moreover, German parents seem to be the most active ones with regard to organizing and helping with school activities. The educational level of Turkish migrants is the lowest; the same picture can be shown for income level.

The quality of parental contact with both school and the child shows really different pictures between and in-between the groups which indicate that each item represents a different dimension of interaction. Consequently, the different types of exchange will be added separately in the models. Furthermore, it seems more reasonable to refrain from using the respective variables together in an additive index in the models.

In the next step, the mediating role of parental interaction with the child and school agents on school achievements is examined in multivariate analysis. Table 2 presents the results of the OLS regression on average grades.¹⁸ In all models (A.1 – A.8), it is controlled for sampling method, federal department as well as for child's sex and age of migration. Model A.1 contains the ethnic group variables; only Turkish migrants have significantly poorer grades than the German reference group. Controlled for cognitive (A.2) and literacy competences (A.3), the disadvantage in average grades for Turkish students disappears, and yields a significant gender effect: boys have compared to girls a better average grade if language proficiency is controlled.¹⁹ Model A.4 includes parents' education and displays for the group with high education the expected negative direction, but the coefficient is insignificant. This result seems to indicate that grades are not affected by social origin, but alternatively, parents' education might be covered by independent achievement tests. In Model A.5, a significant negative income effect scraps the idea that social background does not matter. The more money parents have at their disposal the better the average grade of the student. Model A.6 displays the effect of parents' educational aspiration: if they are sure that their child will once make the upper secondary degree ('Abitur'), the average grade resulted a 0.5 point better. If then the interaction effect of migrant status and high aspiration is included the coefficient takes the opposite direction. Controlling for achievements, this might indicate that migrant parents' motivation not only influences child's achievements in a positive way. Contrary to the assumed hypotheses, parents' motivation might set out a negative pressure on the child that hinders good achievements. This idea is supported by the effects of parents' school related interaction with the child: if parents set rules for grades students' average grade worsens. Concerning effects of parents' school related behavior on achievements, reverse

¹⁸ Effects on independent achievement test scores were also examined, but, regarding that school related behavior concerning grades is addressed with this item, it seems more reasonable to examine the effect on grades. Moreover, teachers might gain an insight in parent-child interaction, and thereafter, form their evaluation of parents' motivation and willingness to support.

¹⁹ This gender effect might pertain to generating the grade average of German and Mathematics, but mean differences tests show significant poorer grades in Mathematic for girls and insignificant poorer grades for boys in German.

effects might also be assumed: it is possible that a child's achievements and grades are good enough that parents do not need to support their child. Moreover, parents that set rules for grades also might react on poor achievements of the child at school.²⁰

Table 2: The influence of ethnic origin on school achievements (average grades) and the mediating role of parents' motivation and contact with the child (OLS regression, standardized coefficients).

	Model A.1 ^{a)}	Model A.2 ^{a)}	Model A.3 ^{a)}	Model A.4 ^{a)}	Model A.5 ^{a)}	Model A.6 ^{a)}	Model A.7 ^{a)}	Model A.8 ^{a)}
	b	b	b	b	b	b	b	b
Child's sex (ref. boy)	0.13	0.13	0.14*	0.14*	0.14*	0.12	0.12	0.17**
Child's age of migration	0.02	0.02	-0.01	-0.01	-0.02	-0.03	-0.03	-0.02
missing category	-0.02	0.01	0.11	0.14	0.04	0	-0.01	-0.12
Turkish Migrant (ref. German)	0.44***	0.43***	0.12	0.09	0.02	0.09	-0.08	-0.2
Ethnic German FSU	0.16	0.17	0.09	0.05	-0.01	-0.01	-0.18	-0.36**
Cognitive competences test		-0.01**	0	0	0	0	0	0
Reading literacy test			-0.06***	-0.06***	-0.06***	-0.05***	-0.05***	-0.05***
Education: median (ref. low)				0.11	0.13	0.19	0.16	0.17
Education: high				-0.1	-0.04	0.11	0.12	0.13
Income per capita					-0.12*	-0.12*	-0.11*	-0.12*
missing category					-0.36	-0.3	-0.29	-0.26
Number of siblings					-0.06	-0.05	-0.05	-0.04
Realistic aspiration: Abitur						-0.53***	-0.76***	-0.73***
High aspiration * migrant status							0.41**	0.39**
Parents - child: general interest in school								0.03
Parents - child: control homework								0.03
Parents - child: set rules for grades								0.09**
Parents - child: eat together								-0.03
Constant	1.96***	2.21***	3.00***	2.95***	3.29***	3.32***	3.39***	3.03***
N	450	450	450	450	450	450	450	450
Adjusted R ²	0.06	0.07	0.15	0.16	0.16	0.23	0.24	0.25
/df	6	9	10	12	15	16	17	21

source: Study: Immigrants' Children in the Israeli and German Educational System

legend: * p<.1; ** p<.05; *** p<.001; *notes:* n=450, a) controlled for school survey, federal department (ref. Hamburg)

In Model A.8, this interpretation seems to be confirmed, the Ethnic German effect turns to a significantly negative effect, i.e. when controlling for parental monitoring of poor grades the average grade of Ethnic German students comes out to be significantly better.

Consequently, the first hypotheses cannot be confirmed: Although, a high motivation is related to better grades, but, parental motivation is not mediated through parental interaction

²⁰ Bivariate correlation analyses between parents' realistic aspiration (ranging from one 'never' to five 'daily') and several types of parent-child interaction reveal that parental rule setting for grades is negatively correlated with their realistic aspiration. This bivariate result might imply bad achievements in school demands parental strictness. The same but insignificant correlation emerged for parents helping the child with homework. In contrast, the interaction type 'parents' general interest in school' is positively correlated with their realistic aspiration (in bivariate tests). This possibly indicates that parental motivation might be rather transferred into school related general communication than if school related monitoring actions had become necessary.

with the child in school related topics. In contrary, a reverse causal relation might also apply: good grades lead to high respectively already adjusted motivation of parents.

In the following step, the influence of parental motivation and the mediating role of parents' school contact on school recommendation are examined (c.f. Table 3). Model B.1 shows significant ethnic effects; the probability of Turkish migrants to receive a recommendation for upper secondary school is 89% and for Ethnic Germans from the Former Soviet Union 63% lower than for the German reference group (controlled for sampling method, federal department, child's sex and child's age of migration).

Table 3: The influence of the social and ethnic origin on school recommendation to upper Secondary school and the mediating role of parents' motivation and contact with school (Binary logistic regression model (odds ratios)).

	Model B1 ^{a)} b	Model B2 ^{a)} b	Model B3 ^{a)} B	Model B4 ^{a)} b	Model B5 ^{a)} b	Model B6 ^{a)} b	Model B7 ^{a)} b	Model B8 ^{a)} b	Model B9 ^{a)} b
Child's sex (ref. boy)	0.82	0.85	0.85	0.82	0.81	0.79	0.74	0.69	0.73
Child's age of migration	0.97	1.04	1.06	1.05	1.05	1.08	1.07	1.09	1.09
Missing category	1.03	1.24	1.44	1.37	1.33	1.14	1.23	1.05	1.18
Turkish Migrant (ref. German)	0.19***	0.27***	0.29***	0.48*	0.54	0.45*	0.8	0.89	0.68
Ethnic German FSU	0.37***	0.26***	0.26***	0.32**	0.35**	0.36**	0.59	0.71	0.64
Average grade point		0.05***	0.05***	0.06***	0.06***	0.07***	0.08***	0.09***	0.08***
Missing category		0.00***	0.00***	0.00***	0.00***	0.00***	0.00***	0.00***	0.00***
Achievement test scores			1.04**	1.04**	1.04**	1.03**	1.03**	1.03**	1.04**
Education: median (ref. low)				1.6	1.55	1.35	1.42	1.5	1.33
Education: high				4.48**	4.04**	3.37**	3.35**	3.44**	3.03**
Income per capita					1.11	1.11	1.14	1.1	1.06
Missing category					2.43	2.46	2.73	2.85	2.49
Number of siblings					0.93	0.94	0.93	0.93	0.9
Realistic aspiration: Abitur						2.31**	6.86***	6.97***	2.01
High aspiration * migrant status							0.21**	0.22**	0.28*
Parents - school: school activities								1.35	0.79
Parents - school: parents' evening								0.4	0.36
Parents - school: student's future								1.16	1.18
Parents - school: student's problems								0.50*	0.47**
high aspiration*active in school events									4.43**
Constant	2.59**	5386.43*	1001.48*	427.39**	340.07**	150.04**	91.49***	223.70**	741.85**
		**	**	*	*	*			*
N	489	489	489	489	489	489	489	489	489
/df	8	10	11	13	16	17	18	22	23
Pseudo R ²	0.1	0.43	0.45	0.46	0.47	0.48	0.49	0.49	0.5
X ²	64.5	291.59	299.78	311.49	313.54	321.55	327.56	331.67	335.91

source: Study: Immigrants' Children in the Israeli and German Educational System

legend: * p<.1; ** p<.05; *** p<.001

notes: n=489, a) controlled for school survey, federal departments (ref. Hamburg)

Including average grades and independent achievement test scores in Model B.2 and B.3, raises the probability for migrant students to be recommended for upper secondary school. In Model B.4 educational level and in Model B.5 income level of parents and siblings are included. As a result, higher educational level significantly and nearly independent of school achievements account for a higher chance to be proposed for the Gymnasium. Furthermore, the effect of Turkish students loses significance. When parental aspiration for upper secondary school is added (Model B.6), it turns again into significant lower chances. Controlling for aspiration for Gymnasium of all parents, the probability increases nearly sevenfold for receiving a recommendation to the upper secondary school. Model B.7 presents results for the interaction term of high aspiration and migrant status, and yields a significant lower chance for migrants' children if their parents are highly aspirated. This conditional effect interpretation indicates a 27% higher probability to receive a recommendation to upper secondary school if migrants are highly motivated. Model B.8 shows whether this effect could be explained by parents' contact with school: For parents engaging in school activities and parents in dialogue with the teacher about student's future the probability is boosted, but the effects are insignificant. Attending a parent evening has no effect. And talking to the teacher due to student's problems understandably decreases the chance significantly to be recommended for the upper secondary school. In the last model including interaction effects of high aspiration and high activities, the probability again raises highly (eightfold). With respect to hypotheses 2, results indicate rather quality than quantity of contacts between teacher and parents as decisive, depending on the purpose of interaction.²¹ High aspiration is mediated by engagement in activities in school events and therefore raises the probability independently of achievements. Regarding migrants' aspiration, the probability for migrant students to be recommended to the Gymnasium increases, the negative migrant effect turns insignificant, if their parents are engaged in school activities and are highly motivated with respect to higher education. Additionally, the effect of social origin, parents' educational level, is partially decreased, but is still significant. The results seem to partially support hypotheses 3: high aspiration of parents positively influences the recommendation to upper secondary school mediated through parental contact with school.

6. Discussion

This article addressed ethnic disadvantages in school outcome at the transition to the secondary school system in Germany. Thus, it aimed to shed light on the determinants of school recommendation students receive at grade four in the German educational system. Teachers'

²¹ Since effects show different causal directions, it did not make sense to include them in an additive index in terms of frequency. At this point, other measures are required.

recommendation – often found to be biased by social and ethnic origin – is scarcely raised to question by parents – especially if parents are of lower social status. At a very early stage in the life course, it decides about life chances – since a school recommendation leads to school tracks with differently valuable degrees associated with different future income options and variable employment outlooks. Moreover, the permeability of the educational domains in Germany is rather low. Consequently, the recommendation of the teacher is quite important. But, in this way, it could also be positively influenced by parents’ educational motivation and by their contacts with school agents in the fore field of teachers’ evaluation of child’s capability.

Therefore, Bourdieu’s approach of cultural resources that are strategically invested under afford of time in the educational field is stressed. Accordingly, (migrant) parents’ educational motivation is considered to be one strategic resource to facilitate child’s school success. The article, thus, approaches to answer the question on which experiences teachers base their evaluation. Considering school achievement and school recommendation, it investigated the mediating role of parents’ interaction with their child as well as with school agents. Thereby, parents with high educational motivation are assumed to be perceived by the teacher as more capable to compensate child’s problems in school and to support a child in their educational carrier. Accordingly, an intergenerational transmission of motivation was assumed enhancing child’s achievements in school. For the empirical results, data of the project *Immigrants’ Children in the German and Israeli Educational Systems* were used.

Results have shown that parents’ educational motivation mediated through contact with school matters when achievements are controlled for. However, the type of exchange is critical. Highly motivated parents that are engaged in school activities favor teachers’ recommendation. Likewise but less, the effect also pertains to migrants with same characteristics. At this point it can be stressed, that low language skills of the mother might hinder a fluent dialog with the teacher.²² Less evidence was found for the transfer of educational motivation argument via parent-child interactions. Furthermore, the effect of social origin was reduced when school contact variables were included in the model but the effect remained significant.

Also noteworthy is the problem of causality; there might be other unobserved factors influencing school recommendation. Findings might be correlational associated rather than causally linked.²³ Moreover, effects could also work in the reverse direction. Parental aspiration might be adjusted by students’ school achievements. Interaction of parents with the child in

²² Other results, not presented here, support this idea and show positive effects of mothers’ language proficiency on the school recommendation. Controlled for language skills, the effect for students of Ethnic Origin turns significantly negative.

²³ Table A.3 (Appendix) presents regression results on grades that were inquired in the second wave, when children had already made the transition. It displays almost the same effects.

terms of school related issues (like setting rules for grades and controlling homework) might rather be a reaction to child's problems in school than a necessary condition for good achievements.

Beyond that, measures used for analysis here, might not adequately fit the hypotheses, e.g. frequency of parent-school contact could not be best operationalised. Although, quality of contacts seems to matter, the topic of what shapes teachers' evaluation and what affects teachers' school recommendation beyond achievements is far from being completely investigated.

This article contributes to the explanation in which way a child's social and ethnic background influences teachers' recommendation. There is a demand for more investigation of what is crucial for teacher recommendation considering recent changes in some federal states of Germany, e.g. North-Rhine Westphalia. Parents' authorization in the decision which school is best for their child is strictly restrained and teachers are again assigned more competences to decide what track is best for students.

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Appendix

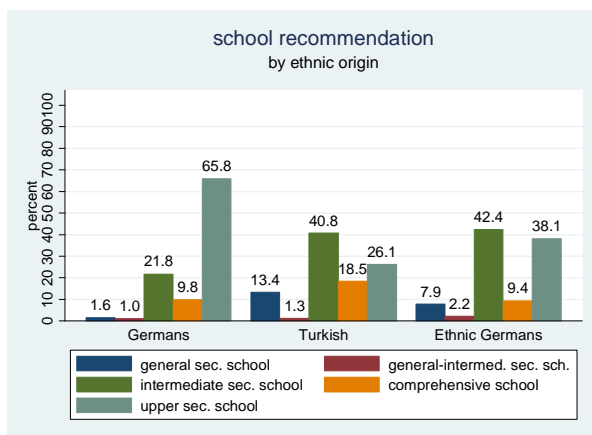
Table A.1: Descriptive Statistics: Variables in the model

	categories resp. min - max	ordinal /nominal variables: frequencies %	(quasi-)metric variable: mean (standard deviation)
school track recommendation	Hauptschule	7.16	
	Haupt-Realschule	1.43	
	Realschule	33.74	
	Gesamtschule	12.47	
	Gymnasium	45.19	
recommendation for Gymnasium	yes	45.81	
	no	54.19	
independent achievement test scores	min 1 – max 45		29.87 (9.78)
average grade in German and Mathematics	min 1 – max 4.5		2.5 (0.78)
ethnic origin	Germans	39.47	
	Turkish	32.11	
	Ethnic Germans FSU	28.43	
sex	female	55.42	
	male	44.58	
federal department of Germany	Hamburg	12.68	
	Hesse	5.73	
	NRW	81.60	
parents education	low	17.38	
	median	56.44	
	high	26.18	
realistic aspiration: Abitur	yes	40.9	
	no	59.1	
parents' interacting with school: engagement in school events (1)	yes	26.99	
	no	73.01	
parents' interacting with school: take part in parents' evening (2)	yes	99.18	
	no	0.82	
parents' interacting with school: due to future plans for the child (3)	yes	93.66	
	no	6.34	
parents' interacting with school: due to problems of the child (4)	yes	71.17	
	no	28.83	
contact with school index	min 0 – max 4		3.37 (0.78)
parents' general interest in school issues	min 1 - max 5		3.98 (0.91)
parents: eating together	min 1 - max 5		4.07 (1.11)
parents: set rules for grades	min 1 - max 5		2.73 (1.44)
parents: control homework	min 1 - max 5		3.37 (1.31)

school related contact with child index	min 5 – max 20	14.16 (2.71)
income per capita	min 0.5 – max 6	1.97 (0.80)
number of siblings	none	9.2
	one	39.88
	two	29.04
	three	13.29
	four and more	8.59
child's age of migration	min 0 – max 7	0.4 (1.33)

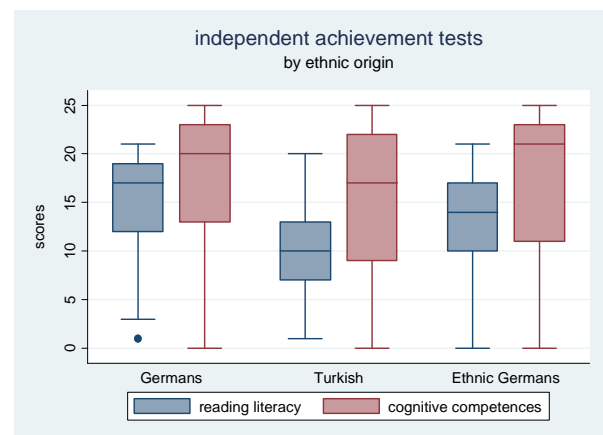
source: Study: Immigrants' Children in the Israeli and German Educational System
notes: n=489, min 1: impossible max: very sure

Figure A.1: Distribution of all school recommendations by ethnic origin



source: Study: "Immigrants' Children in the Israeli and German Educational System"
notes: n=489

Figure A.2: Distribution of achievement test scores by ethnic origin



source: Study: "Immigrants' Children in the Israeli and German Educational System"
notes: n=489

Table A.2: The influence of ethnic origin on school achievements (average grades) and the mediating role of parents' motivation and contact with the child (OLS regression, standardized coefficients).

	Model A1 ^{a)}	Model A2 ^{a)}	Model A3 ^{a)}	Model A4 ^{a)}	Model A5 ^{a)}	Model A6 ^{a)}	Model A7 ^{a)}	Model A8 ^{a)}
	b	b	b	b	b	b	b	b
child's sex	0.03	0.02	0.01	0.03	0.03	0.01	0.01	0.03
child's age of migration	0.04	0.04	0.02	0.02	0	0.01	0.01	0.01
missing category	-0.08	-0.13	-0.06	-0.05	-0.06	-0.04	-0.05	-0.05
Turkish Migrant	0.63***	0.60***	0.27**	0.12	0.03	0.12	0.01	-0.09
Ethnic German FSU	0.20**	0.22**	0.11	0.04	-0.02	-0.01	-0.11	-0.22*
school survey	-0.28	-0.28	-0.48	-0.62*	-0.61*	-0.41	-0.45	-0.39
Hesse	0.16	0.14	0.15	0.11	0.13	0.07	0.06	0.1
NRW	0.07	0.06	0.02	-0.01	-0.01	-0.09	-0.08	-0.05
cognitive competences		-0.02***	-0.01**	-0.01**	-0.01**	-0.01**	-0.01*	-0.01*
reading literacy			-0.07***	-0.07***	-0.06***	-0.05***	-0.05***	-0.05***
education: median				-0.19*	-0.17	-0.06	-0.09	-0.1
education: high				-0.47***	-0.39**	-0.19	-0.2	-0.2
income per capita					-0.14**	-0.13**	-0.13**	-0.12**
missing category					-0.37*	-0.35*	-0.34*	-0.31
Number of siblings					-0.03	-0.02	-0.02	-0.02
Realistic aspiration: Abitur						-0.47***	-0.60***	-0.60***
High aspiration * migrant status							0.24*	0.24*
Parents - child: general interest in school issues								0
Parents - child: control homework								-0.03
Parents - child: set rules for grades								0.07**
Parents - child: eat together								0.03
Constant	2.14***	2.53***	3.48***	3.72***	4.02***	3.99***	4.03***	3.79***
N	400	400	400	400	400	400	400	400
r2_a	0.1	0.14	0.29	0.32	0.33	0.4	0.41	0.42
df_m	8	9	10	12	15	16	17	21

source: Study: Immigrants' Children in the Israeli and German Educational System

legend: * p<.1; ** p<.05; *** p<.001

notes: n=400 a) controlled for school survey, federal department (ref. Hamburg)