

# Defying Discrimination?

## Germany's Ethnic Minorities within Education and Training Systems

Irena Kogan, Markus Weißmann, and Jörg Dollmann

### Abstract

To establish the impact that discrimination or unfair treatment has on ethnic minority students, this chapter explores the trajectories and outcomes of students in the German education and training system. Compared to native-born students, migrant and ethnic minority students who report discriminatory experiences are, on average, more likely to enter more educational pathways marked by larger uncertainty. However, results from the authors' study indicate that minority students who experience discrimination in school are also likely to pursue favorable educational paths, perhaps because they develop better coping strategies and resilience in light of adverse situations in school. Ultimately, students who report discrimination at school are more likely to fail in attaining any degree. Yet, the relationship between discrimination experienced in school and educational or training outcomes is largely uniform for minority and for native-born students.

### Introduction

Ethnic and migration-related inequalities in the German education system has been the subject of extensive research (Beicht and Walden 2019; Dollmann 2010, 2017; Kristen et al. 2008; Mentges 2020; Tjaden 2017; Tjaden and Hunkler 2017). Scholars emphasize differences in scholastic performance and educational decision making between descendants of immigrants and native-born students without migration backgrounds (Kristen and Granato 2007). In terms of educational decision making, research has established that immigrants and their descendants generally strive for more demanding educational tracks (Dollmann 2017; Dollmann and Weißmann 2020; Kristen et al. 2008; Tjaden and Hunkler 2017). One explanation for this lies in the higher educational and

occupational aspirations that immigrants usually hold (Kao and Tienda 1998; Raleigh and Kao 2010; Salikutluk 2016; Wicht 2016). Furthermore, the *expectations and anticipations of discrimination in the labor market* have also been identified as another potential driver of immigrants' ambitious educational choices (Beicht and Walden 2019; Dollmann 2010; Heath and Brinbaum 2007; Tjaden 2017). Yet little is known about whether and how *experiences of discrimination in school* relate to educational and training outcomes in minority students.

In this chapter, we address whether those who report discrimination or unfair treatment in school follow different trajectories within the German education and training system than those without such experiences. Further, we examine whether students who experience discrimination or unfair treatment are subjected to penalties, in terms of educational attainment or training qualifications. Particular attention is given to discriminatory experiences among immigrants and ethnic minority groups.

### Perceptions of Discrimination by Minorities

Before we address the consequences of discrimination on educational trajectories and educational or training outcomes, it is necessary to understand the concept of perceived or self-reported discrimination. On one hand, self-reported discrimination can reveal actual instances of discrimination (Diehl et al. 2021). On the other, it reflects a subjective evaluation of often ambiguous situations (Diehl et al. 2021) and may be related to an individual attributing (or failing to attribute) negative situations to discrimination, for example, as a sort of a coping strategy (Major and O'Brien 2005).

Starting with the subjectivity behind discrimination perceptions, it is argued that members of nonstigmatized and stigmatized groups react differently to the same situation, in part because they bring different collective representations to the situation (Major and O'Brien 2005:400). In other words, members of ethnic minority groups, particularly those facing salient ethnic boundaries, are more likely to attribute negative feedback to discrimination (Branscombe et al. 1999:136; Phinney et al. 1998:938), not least as a way to protect their self-esteem (Crocker et al. 1991). Furthermore, being socialized in preparation for bias and discrimination makes minorities aware of discrimination and helps them adopt coping strategies in terms of psychological resources (Iqbal 2014). This point resonates with the notion of immigrant resilience (discussed below).

The ambiguity of the attribution process presents a challenge for utilizing self-reported discrimination to detect actual discrimination. Another challenge is that reports of discrimination reflect cases of group discrimination even in the absence of individual discrimination (Lindemann 2020). Empirically, individuals tend to perceive more group discrimination than individual discrimination, which leads to overreporting of discrimination (Taylor et al. 1990).

Underreporting is also possible, as some individuals might not be entirely aware of experiencing discrimination or undercount acts of discrimination in a type of coping strategy (Blank et al. 2004).

Assuming that reports of discrimination are accurate and reflect actual instances of individual discrimination, we might ask why ethnic minorities should be more prone to experience discrimination in a school setting. Several theoretical approaches address the existence of ethnic discrimination in schools (Diehl and Fick 2016). One possible explanation for migration-related or ethnic discrimination is *intergroup bias* (Sidanius and Pratto 1999). The key elements of intergroup bias are that individuals distinguish between in- and out-group members and evaluate the attributes of in- and out-group members differently: the attitudes toward out-groups are more negative (see also the concept of separation within the stigma framework, Link and Phelan 2001; Pachankis and Wang, this volume). One of the most prominent social-psychological theories that seeks to explain this phenomenon is *social identity theory* (Tajfel 1982; Tajfel and Turner 1986), whereby integrated or intergroup threat theory addresses the variation across ethnic groups in the extent of out-group discrimination (Stephan and Stephan 2000; Stephan et al. 2009).

Another strand in social psychology considers important underlying causes of discrimination in cognitively based stereotypes and emotionally charged prejudices (Diehl and Fick 2016; Fiske 1998). The concept of stereotyping is prominent in stigma research (Link and Phelan 2001) and refers to the ways in which immigrant or ethnic groups become represented by generalizations, which typically carry negative connotations (Castaneda and Holmes, this volume). A common stereotype in the German context would be, for example, to view immigrant descendants of Turkish origin as coming from resource-poor, rural backgrounds. Such stereotypes might create low expectations in teachers, regarding the potential scholastic achievement of students with Turkish heritage (Lorenz et al. 2016). Yet stereotypes are not always negative; “stereotype promise” is used in reference to the positive stereotypes of Asian Americans in the United States (Lee and Zhou 2014).

When an individual holds and acts on negative prejudices, actual discrimination results. For instance, Becker’s (1971) theory of taste discrimination assumes the existence of stable tastes among individuals, which result in effective discrimination of unpreferred groups (Hunkler 2014; Kalter 2003). In contrast, the statistical discrimination approach assumes that due to lack of full information on individual skills (productivity), some group characteristics are assigned to individuals perceived to belong to the group in question (Aigner and Cain 1977; Arrow 1972; Phelps 1972). Statistical discrimination in the education and vocational education/training (VET) systems occurs at entry and transition points; it is less likely in daily classroom interactions due to teachers’ direct access to information (Kristen 2006).

In summary, the concept of perceived discrimination reflects both actual discrimination and subjective interpretations of nonsuccess in school. Both

might differ, depending on whether a student stems from a migrant or native-born background. In the following, we outline what consequences actual and perceived discrimination might have for educational and VET trajectories as well as their outcomes among minority students.

### **Consequences of Discrimination for Individual Educational and Training Trajectories**

Discrimination by teachers can lead to negative consequences for minority students through several distinct mechanisms. First, when a teacher awards low grades or gives poor track recommendations to a student, this can result in the student being placed in a less ambitious school or training track. Yet, claims about the existence of direct teacher discrimination in the German education system are largely equivocal (Diehl and Fick 2016). Field experiments document average causal effects of ethnic discrimination against minority students in track recommendations (Sprietsma 2013) and teacher expectations (Bonefeld et al. 2020; Wenz 2020). However, experimental evidence for discrimination in grading is rather inconclusive (Sprietsma 2013; Wenz 2020). Whereas Wenz (2020) does not find any discrimination in grading of essays hypothetically written by students with Turkish sounding names, Sprietsma (2013) reveals that essays with a Turkish name receive significantly lower grades. Yet, the observed effects originate from a small group of teachers, whereas most teachers do not discriminate based on the students' origin.

Second, regarding achievement expectations, teacher bias toward minority or students from low socioeconomic backgrounds may lead to differential treatment in the classroom, as in the amount of emotional support a student receives, the quantity and quality of teachers' feedback, as well as exposure to learning materials (Alexander and Schofield 2012; Gentrup et al. 2021; Lorenz et al. 2016). This, in turn, can affect students' competency and curb scholastic advancement. Both direct and indirect teacher discrimination can potentially create a stereotype threat to students, which becomes problematic when the affected students internalize and act according to these stereotypes regarding their migration status, ethnicity, or socioeconomic background (Owens and Lynch 2012; Steele and Aronson 1995). The underlying mechanism—a self-fulfilling prophecy (i.e., the idea of expectancy confirmation processes, see Jussim et al. 2009; Merton 1948)—operates as follows: The stereotypes and related behavior by classroom teachers may lead students to develop lower self-esteem and decreased interest in school, eventually resulting in poorer scholastic performance (Alexander and Schofield 2012; Diehl and Fick 2016; see also Pachankis and Wang, this volume, for a discussion of intrapersonal stigma mechanism). Indeed, research has shown that discrimination, both actual and attributed, has serious consequences for an individual's psychological well-being (Schmitt et al. 2014) and a student's sense of belonging (Jasinskaja-Lahti

et al. 2009; Skrobanek 2009). The internalization of school difficulties might lead to students' estrangement from the educational processes, not least due to the oppositional culture, particularly among the disadvantaged minorities (Ogbu 2003). As a result, perceptions of discrimination can lead to the *exclusion or diversion of minorities from more advantageous tracks*.

Negative consequences of discrimination, however, are not the only possible scenario: migrant students might be successful in defying discrimination. Indeed, ethnic minorities tend to strive for ambitious educational paths despite objective and subjective experiences of discrimination. The perception of discrimination, similar to the anticipation of discrimination, may prompt immigrants to invest strategically in further education as a means of overcoming discrimination barriers, for example, in the labor market (Heath and Brinbaum 2007; Teney et al. 2013). Earlier research has postulated that in anticipation of discrimination in their professional careers, immigrants may follow more demanding school tracks and strive to obtain higher educational qualifications, compared to their counterparts without an immigrant background once prior achievement is taken into account (Heath and Brinbaum 2007; Jackson 2012; Jonsson and Rudolphi 2011). Experiences of discrimination in school might enhance minority students' anticipation of discrimination at the labor market and potentially encourage them to choose educational and training options which increase their success in the labor market.

Another reason for minority students' persistence in the education system might be the use of effective coping strategies against minority-based discrimination. When discussing individual and family-level coping strategies under adverse conditions, psychological and sociological research has emphasized the role of resilience among discriminated groups (Gabrielli et al. 2021; see also Castaneda and Holmes, this volume, for a discussion of resistance to stigma). The term resilience has been applied to describe a trait observed among individuals or social groups who are able to defy adverse situations and become stronger through their experiences (Sandín Esteban and Sánchez-Martí 2014). Factors responsible for stronger resilience in ethnic minorities include individual attributes (e.g., self-efficacy, self-esteem, self-expectations) and social contexts, including ethnic resources, family cohesion, parental support as well as community factors in which social interactions occur, such as school settings (Marley and Mauki 2018; Motti-Stefanidi 2014). Assuming stronger resilience among minority students against challenges in school, including both actual discrimination experiences and anticipated discrimination at the labor market, one might expect minority students with discrimination experiences to be more likely *to avoid disadvantageous educational pathways* compared to the majority students.

Before the associations between perceived discrimination and educational/training outcomes can be examined, key elements of the German education and training systems must be understood. Below, we outline these as well as the major migrant groups that are currently present in German society.

## Minorities in the German Education System

In the early 2010s, students in the German secondary education system who had a migrant background originated primarily from one of the following migration paths:

1. From 1950 to the 1970s, guest workers migrated from Italy, Spain, Greece, Turkey, Portugal, and the (former) Yugoslavian Republic (FYR) to fill low-skilled jobs in the industrial sector of West Germany (Olczyk et al. 2016). In East Germany, similar guest worker schemes brought migrants from “socialism-friendly” countries (Northern Vietnam, Mozambique, Angola, Cuba, North Korea, China) to work in East Germany (Bade and Oltmer 2007).
2. After World War II and particularly after the breakup of the Soviet Union (Kogan 2011), (*Spät-)*Aussiedler migrated to Germany from the (former) Soviet Union (FSU) and Central and Eastern Europe (CEE) because of their German heritage. Given the recent history of this migration wave, Eastern Europeans comprise both first- and second-generation migrants in today’s education system.
3. Until the end of the 1990s, asylum seekers from Turkey, the African continent, and countries of the FYR, CEE, and FSU, including the so-called Jewish Quota Refugees (Kogan 2011), migrated to Germany. This is a rather heterogeneous group in terms of their generation (both first- and second-generation) and socioeconomic backgrounds (Olczyk et al. 2016).
4. As of the 2000s, EU-internal migration (predominantly from CEE countries) and refugee migration is reflected in the 2010 school population of mainly first-generation migrants (Olczyk et al. 2016).

In the secondary level of education, a student either enters a comprehensive school (*Gesamtschule*) or one of three separate types of schools or tracks: the *Gymnasium*, the *Hauptschule*, or the *Realschule*. The *Gymnasium* prepares students for tertiary education; successful completion opens a wide range of opportunities for high-paying jobs in the future. The *Hauptschule* and *Realschule* represent the lower and upper vocational tracks, respectively, and are designed to prepare students primarily for postsecondary, nontertiary VET. Here, successful completion leads to occupational qualifications, and hence decent jobs, or options with lower economic prospects (e.g., unqualified labor market jobs). Vocational training combines workplace-based training and schooling (a so-called dual system). To participate in dual training, students apply to companies for apprenticeship positions through a procedure that resembles a typical job search. A smaller number of students pursue their qualifications through school-based training programs, which take place primarily at vocational schools and are comparable to vocational degrees attained within the dual system of VET. In addition to these standard trajectories, students without

training positions or enrollment in academic secondary tracks participate in prevocational measures—a fallback option that prepares them for certain occupations and improves their school-leaving qualifications. Finally, the education system does provide a certain level of mobility between tracks or “second chance”: students on a nonacademic track are able to transition to an academic track or to a higher-level vocational track if they fulfill the necessary requirements (Schuchart and Rürup 2017).

## Data and Methods

For our analyses, we relied on the data from the German section of the Children of Immigrants Longitudinal Survey in Four European Countries (CILS4EU-DE) (Kalter et al. 2016; Kalter et al. 2021). Our survey began in the school year 2010/2011 and targeted the ninth grade students who were approximately 14 years old. Students were selected through a three-stage sampling design. The first stage involved schools that had students in the targeted age groups, which were selected to enable the oversampling of schools with large shares of immigrants. The second-stage units were classes within targeted grades in sampled schools, from which two classes were randomly sampled. The third stage involved all students in the classes. As many as 144 schools with 271 school classes agreed to take part in the first wave of CILS4EU-DE, with response rates on school level of 53% before and 99% after replacements of nonresponding schools with equivalent ones (for further information, see Kalter et al. 2019).

To identify the education and training trajectories during the secondary stage of education, we relied on information from a Life History Calendar, which was administered in the survey’s sixth wave and captures all episodes of education, training, work, and other activities since January 2011 (i.e., around the time of the survey’s first wave). We define the time frame of secondary education as 60 months, beginning with grade 9, which in our data is September 2010 to August 2015.

The first dependent variable pertains to the patterns of educational trajectories after grade 9. Based on optimal matching analysis, a commonly used method for analyzing sequential data (see Weißmann et al. 2023), four trajectories within education and VET were identified that captured typical trajectories of the German ninth graders: the *Gymnasium*, VET, ambitious, and ambiguous paths. Whereas the first path captures education trajectories within upper secondary education (ca. 34% of the sample), the classic VET path encompasses transitions to vocational education and training directly after the lower secondary schooling option (ca. 23%). The other two pathways are nonstandard, but different in nature. The ambitious path (ca. 23% of respondents) refers to students who upgrade from nonacademic educational tracks to (vocational) academic secondary schools, with the goal of securing certification to enter tertiary education. The ambiguous path (ca. 19% of all respondents) represents a



cluster of transitions within the nonacademic tracks outside of vocational training: transitions to vocational preparation courses (a fallback option), statuses outside of education or training (largely into the unqualified labor market), or transitions to nonacademic vocational schools.<sup>1</sup>

The second dependent variable captures the outcome of secondary education paths, measured as the educational attainment of respondents at around the age of 21 (i.e., until the time of the survey's seventh wave). These include the academic secondary certificate or *Abitur* (the prerequisite for tertiary education), vocational qualification, vocational qualification with an academic secondary school-leaving certificate, and a residual category which encompasses those who are still in education or have not obtained any vocational qualification or academic secondary degree.

Our key independent variable is reported experience of discrimination or unfair treatment in school, which was collected in wave 1. Based on the question, "How often do you feel discriminated against or treated unfairly in school?" we redivided the original four-category variable into three parts marked by the following responses: (a) "always or often," (b) "sometimes" or (c) "never." Overall, 10% of students reported frequent discrimination or unfair treatment in school: 13.2% among students with a migration background (defined below) and 8.8% among those without any migration background. Many more students reported occasional discrimination or unfair treatment in school: ca. 48.1%. Incidentally, a larger share of ethnic majority students perceived occasional discrimination (49.8%) than students in the ethnic minority (43.4%) (see Table 6.1).

Since the wording of the question does not specify the type of possible discrimination, answers may equally capture ethnic, migration-related, social, age, or gender discrimination as well as instances of being treated unfairly. It may also reflect ambiguities in student interpretations of disadvantages at school, even if these are not related to discrimination in its strict definition and just represent unfair treatment. Therefore, the reporting of discrimination or unfair treatment among native-born students should not come entirely as a surprise and may be related to feeling discriminated based on socioeconomic origin, gender or age. Furthermore, when interpreting results, one should bear

<sup>1</sup> As many as 546 respondents did not participate in the Life History Calendar in the sixth wave and therefore did not contribute to the optimal matching analysis. We assigned these cases to one of the four trajectories using information from repeated cross-sectional interviews since the first wave. The following conditions were defined for the first wave: Students in *Gymnasium* were assigned to the *Gymnasium* path. Students not in the *Gymnasium*, who were predominantly in vocational training after lower secondary education, were assigned to the VET path. Students not in *Gymnasium*, who were predominantly in (vocational) academic secondary schools after lower secondary education, were assigned to the ambitious path. Students not in the *Gymnasium*, who were predominantly in vocational preparation courses or nonacademic vocational schools after lower secondary education, were assigned to the ambiguous path, as were those who never entered (vocational) academic secondary schools or vocational training or who were observed in both statuses equally often.



**Table 6.1** Reporting discrimination by education/VET trajectory, in percent (W1 sample). Source: CILS4EU-DE v6.0.0, own calculations. Results have been design weighted.

	Overall	Trajectory			N	
		<i>Gymnasium</i>	VET	Ambitious	Ambiguous	
All						
Never	41.9	44.2	39.2	43.4	39.7	781
Sometimes	48.1	47.0	50.1	47.2	48.5	831
Often/always	10.0	8.9	10.7	9.5	11.8	184
N	1796	571	339	481	405	1796
Without migration background						
Never	41.4	45.1	39.7	39.8	38.3	464
Sometimes	49.8	46.2	51.9	53.0	49.3	528
Often/always	8.8	8.6	8.4	7.1	12.4	112
N	1104	386	230	280	208	1104
With migration background						
Never	43.4	41.1	36.8	52.1	41.9	317
Sometimes	43.4	49.3	41.7	32.7	47.3	303
Often/always	13.2	9.6	21.5	15.2	10.8	72
N	692	185	109	201	197	692

in mind that perceived discrimination or unfair treatment is measured only once in school—when the students were 14—whereas the education and VET trajectories are captured between the ages of 14 and 21 years, with outcomes of secondary education paths measured at 21 years of age. Although experiences of school discrimination are captured at the latest possible time when all students are still at school, the impact of any additional perceptions of discrimination later in adolescence remain elusive in our study.

Our analyses focused on the differences between students with their own migration experience as well as students with at least one immigrant parent and German-born students with two German-born parents (natives). Overall ca. 27% of the sample were students who migrated themselves or had at least one parent who was an immigrant. In additional analyses, we defined students with migration backgrounds by their heritage, differentiating between minority students of Turkish as well as FSU/CEE origin. All other students with a migration background were classified as belonging to the “other” category. In these analyses, we were not able to differentiate students by their racial or ethnic background but could classify them by their parents’ region of origin, defined broadly. Since samples sizes for the fine-grained analyses by origin groups are small, we report only robust findings to illustrate some origin group differences.

Other control variables include respondents’ sex, year of birth (before 1995, 1995, or after 1995), parents’ highest occupation captured by the International Socioeconomic Index of Occupational Status (ISEI) (Ganzeboom et al. 1992),

and parents' highest education (intermediate secondary degree or below, academic secondary degree, university degree). As proxy measures of academic ability in wave 1, we counted a proportion of correct answers in a cognitive and a vocabulary test, instruments that are largely used in a comparable type of research in Germany (Heller and Perleth 2000; Weiß 2006). By considering whether students' background characteristics were potentially associated with discrimination experiences (e.g., discrimination based on gender, age, socioeconomic status as well as academic abilities), we were able empirically to single out the effect of ethnic or migration-related discrimination from related confounders.

To assess the role of discriminatory experiences for educational/VET trajectories as well as differences in outcomes, we applied multinomial logistic regression models. In the multivariate analyses of educational/VET trajectories, we focused on discrimination experience of students transitioning from lower secondary education to one of the following trajectories: VET, ambitious, or ambiguous trajectories. Since at this point, we are interested in the role of discrimination experiences for further educational trajectories, we excluded students who attended the *Gymnasium* from the analyses. After the lower secondary education, such students directly begin with their upper secondary studies and do not face the decision-making process regarding further education. Moreover, our measure of discriminatory experiences was administered during lower secondary education in grade 9—after students enter the *Gymnasium*. In the multivariate analyses of educational/VET outcomes, we focused on discrimination experience of students attaining one of the four outcomes: (a) the *Abitur*, (b) a vocational qualification, (c) vocational qualification with an *Abitur* or its equivalent, or (d) failure to attain any school-leaving certificate, including remaining still at school. All analyses applied design weights corrected for panel attrition until wave 6.

### **Discrimination within the School and VET Settings**

In which educational tracks are students more likely to report discrimination experiences of various kinds, and what characteristics do these students possess? Results from Table 6.1 indicate that overall, immigrants and ethnic minorities are more likely to report frequent discrimination or unfair treatment in German schools and are less likely to report occasional discrimination. Compared to majority students, more minority students report frequent discrimination or unfair treatment both in VET and ambitious trajectories. In contrast, students without migration backgrounds, who are also in the VET and ambitious trajectories, more often report occasional discrimination or unfair treatment. Within the ambiguous pathways, we found that native-born majority students report more frequent discrimination than minority students, but the difference across the groups is negligible. Similarly, there are not many

differences in the perceived discrimination among students with or without migration background in the *Gymnasium*.

Descendants of Turkish immigrants are generally more likely to experience frequent discrimination or unfair treatment. In contrast, descendants of immigrants from FSU, CEE, and other countries who report discrimination are more likely to mention occasional unfair treatment. Results pertaining to specific origin groups are not shown and should be interpreted with caution due to the small sample sizes in each group.

Next, we asked whether minority and majority students who face discrimination also differ systematically from one another on a number of characteristics relevant for school success. Our results show that students who report frequent discrimination experiences are likely to be older (born before 1995), and that this trend is particularly pronounced among students with migration background (Table 6.2). Since our data consist of a school cohort of ninth graders from the school year 2010/2011, variation in frequent discrimination experience by age may indicate that older students who have experienced grade retention perceive this to be a discriminatory action. Students who report frequent discrimination are more often male, and this pattern is similar among minority and majority students. Students with migration background who report occasional discrimination are more likely to be female compared to those without migration background who report occasional discrimination. Further, it is noteworthy that considerably fewer minority students who report frequent discrimination have tertiary-educated parents.

Students with and without discriminatory experiences differ from one another in terms of age and gender. Among minority students, parental characteristics also play a role. In addition, students with subpar academic performance often attribute their related frustrations to teacher discrimination. Therefore, we conducted multivariate analyses to predict students' pathways depending on their migration background and discrimination experiences (Model 1) and compare the effects of perceived discrimination across students with and without migration background (Model 2). Once possible confounders (e.g., age, gender, socioeconomic background) are accounted for in the model, differences in reports of experiencing discrimination or unfair treatment between students with and without migration background are no longer related to possible compositional differences between the two groups. Consequently, differences are more likely to capture the effect of perceived discrimination based solely on migration status or ethnic origin. Results are presented in Table 6.3 in the form of marginal effects; that is, differences in the predicted probabilities of an outcome between the analyzed groups. Thus, in Model 1 the marginal effect for the migration background in, for instance, the outcome "VET trajectory" represents an average difference (in percentage points) between students with migration background and those without in the probability of pursuing vocational training, when other control variables in the model are held constant.

**Table 6.2** Sociodemographic characteristics of respondents with and without discrimination experiences. Source: CILS4EU-DE v6.0.0, own calculations. Results have been design weighted.

	Overall	Discrimination experience		
		Never	Sometimes	Often/always
All				
% year of birth				
before 1995	8.6	7.4	8.3	15.1
1995	47.5	48.8	46.4	47.2
after 1995	43.9	43.8	45.3	37.6
% girls	50.7	50.9	52.9	39.0
% tertiary-educated parents	26.2	25.8	27.1	23.4
Mean parental ISEI	51.2	50.8	51.8	50.4
Without migration background				
% year of birth				
before 1995	7.6	6.7	7.6	11.3
1995	47.1	48.9	45.9	45.9
after 1995	45.3	44.4	46.5	42.8
% girls	50.1	50.7	51.3	40.3
% tertiary-educated parents	28.6	28.0	28.9	30.1
Mean parental ISEI	54.7	55.1	54.2	55.1
With migration background				
% year of birth				
before 1995	11.5	9.3	10.4	22.2
1995	48.5	48.5	48.2	49.6
after 1995	40.0	42.2	41.4	28.2
% girls	52.3	51.5	57.8	36.4
% tertiary-educated parents	19.5	20.2	21.4	11.0
Mean parental ISEI	41.8	39.5	44.0	41.8

Results from Model 1, shown in Table 6.3, suggest that compared to the majority native-born students, students with migration background are less likely to be found in VET and are more likely to follow ambiguous trajectories. They are also more likely to take ambitious paths, but results are significant only at the 10% level. On average, reporting discrimination experiences at school is not associated with students’ choice of education or VET trajectories. However, we observed considerable differences across students with and without migration background in the pattern of association between experiences of discrimination and their placement in education/VET trajectories. Model 2, which presents the differences between students with and without migration background in the discrimination effect, suggests that, on average, students with migration background who never experience discrimination are less likely to be found in VET, but are more likely to pursue ambitious pathways than

**Table 6.3** Education/VET trajectories and self-reported discrimination (marginal effects after multinomial logistic regression models), selected results. Based on 1,225 sampling size (source: CILS4EU–DE v6.0.0, own calculations). Results have been design weighted. Control variables include sex, year of birth, parents' highest education and ISEI, vocabulary and cognitive test in Wave 1. <sup>+</sup>  $p < 0.1$ ; \*  $p < 0.05$ ; \*\*  $p < 0.01$ ; \*\*\*  $p < 0.001$ .

	VET trajectory	Ambitious trajectory	Ambiguous trajectory
<b>Model 1</b>			
Migration background (ref.: no)	−0.213***	0.092 <sup>+</sup>	0.121*
Discriminated or treated unfairly in school (ref.: never)			
Sometimes	0.010	−0.028	0.018
Often/always	0.015	−0.034	0.018
<b>Model 2</b>			
Migration background (ref.: no) and discriminated or treated unfairly in school			
Never	−0.260***	0.158*	0.102
Sometimes	−0.197**	−0.009	0.207**
Often/always	−0.123	0.229 <sup>+</sup>	−0.106

comparable majority students. Students with migration background who report occasional discrimination are also less likely to be in VET and are more likely to be found in ambiguous paths compared to the benchmark of the majority native-born, other things being equal. Finally, minority students who report frequent discrimination or unfair treatment are more likely to be found in ambitious trajectories (significant at the 10% level), whereas no differences across students with and without migration background is observed regarding other pathways. Although we already know that students with migration background have lower uptake of vocational training, from our analyses we learn that this is only true for minority students who do not report frequent discrimination. Our analyses further reveal that two distinct groups—minority students who never report discrimination and those who report frequent discrimination—are more likely to follow ambitious pathways. Apparently, students with migration backgrounds who experience frequent discrimination or unfair treatment do not abandon ambitious options to the same extent as majority native-born students who report the same frequency of adverse experiences at school.

A look at origin group differences suggests that avoidance of VET by immigrant students who report no or only occasional discrimination experiences is characteristic to all three origin groups. Descendants of Turkish immigrants with frequent discrimination experiences are also more likely to avoid VET. Further, these students are significantly more likely to be found in ambitious pathways once they report no or frequent discrimination.

To summarize, our results show that although students with migration backgrounds largely avoid VET, those who experience frequent discrimination are no different from the majority native-born with similar characteristics

in the VET uptake.<sup>2</sup> In addition, minorities who experience frequent discrimination manage to enter ambitious pathways at somewhat higher odds than their majority, native-born counterparts. Although this effect is marginally significant once minorities are considered altogether, it is rather pronounced among descendants of Turkish immigrants, one of the stigmatized minorities in Germany. Finally, we observe that students with migration backgrounds who report occasional discrimination experiences are more likely to be found in ambiguous trajectories. Altogether we observe a somewhat stronger tendency on the part of minorities who experience discrimination to withstand this adversity (compared to students without migration background), which we attribute to the development of resiliency and successful coping strategies among ethnic minorities.

### Discrimination Experiences and Outcomes

How do outcomes of educational and VET trajectories among immigrants and ethnic minorities differ from those of the majority native-born students? Before presenting results of our multivariate analyses, it is worthwhile to visualize the pathways and respective outcomes.

Figures 6.1 and 6.2, so-called Sankey charts, illustrate the trajectories (left) and outcomes (right) of native-born (Figure 6.1) and minority (Figure 6.2) students in the different education and VET pathways: (a) for students who never experienced discrimination; (b) for students who had occasional experiences of discrimination; (c) for students who reported frequent discrimination. For native-born students, regardless whether they experienced discrimination in school or not, educational and VET pathways are more similar than comparable trajectories among minority students. The largest difference among native-born majority students is that a higher proportion of students who report frequent discrimination end up in ambiguous pathways; a lower proportion are found in ambitious pathways. Among minorities, greater differences are observed between students who reporting occasional and frequent discrimination and those without discrimination experiences. Minority students who report frequent discrimination are less likely to progress into the *Gymnasium* and are more likely to be found in the VET trajectory. A comparison of minority students with occasional and frequent discrimination experiences reveals pronounced differences in their representation in ambitious and ambiguous pathways: students who report occasional discrimination are more often found in the ambiguous track, and less in the ambitious track.

These two figures suggest similarities in outcomes for native-born majority and minority groups without and with occasional experiences of discrimination. Greater differences are found in the outcomes of students who

<sup>2</sup> Among students with Turkish origin, lower odds of VET participation are pronounced irrespective of discrimination experience.

reported frequent discrimination. Students without a migration background, who reported frequent discrimination in the ninth grade, are less likely to attain vocational qualification or vocational qualification with a certificate that qualifies them for tertiary education. These students are also more likely to fail to attain any qualification compared to their counterparts who did not report frequent discrimination. Among students with migration backgrounds, patterns are similar. Those who reported frequent discrimination, however, are as likely to attain their vocational qualification as the rest. This pattern is not observed among majority students. Overall, descriptive findings indicate a clear disadvantage to experiencing discrimination in school, which seems to be more pronounced among students with migration background.

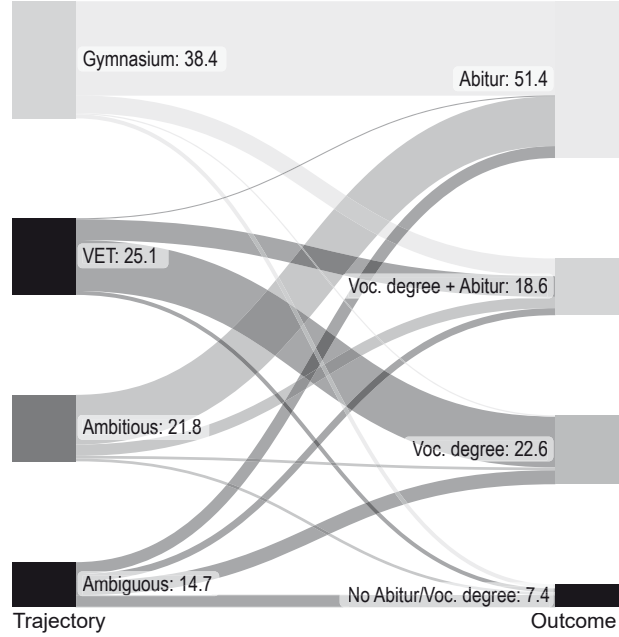
Next, we examine whether these conclusions hold in a multivariate framework (see Table 6.4, constructed similarly to Table 6.3). Model 1 reports the marginal effects for migration background as well as for the experiences of discrimination or unfair treatment at school. Model 2 reports marginal effects for experiences of discrimination among students with migration backgrounds compared to students without migration backgrounds. In addition, we present coefficients for the effects of educational pathways to shed light on the path dependencies between the educational and VET trajectories and the resulting outcomes.

**Table 6.4** Education/VET outcomes and self-reported discrimination (marginal effects after multinomial logistic regression models). Selected results based on 1,796 sampling size. Source: CILS4EU–DE v6.0.0, own calculations. Results have been design weighted. Control variables include sex, year of birth, parents' highest education and ISEI, vocabulary and cognitive test in Wave 1. <sup>+</sup>  $p < 0.1$ , \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$ .

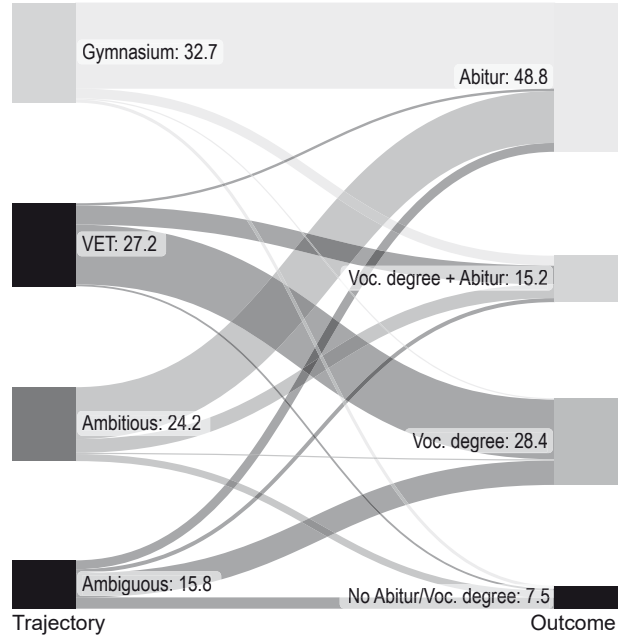
	<i>Abitur</i>	Vocational degree	Vocational degree and <i>Abitur</i>	No <i>Abitur</i> , no vocational degree
<b>Model 1</b>				
Migration background (ref.: no)	0.041	0.028	−0.082***	0.013
Discriminated or treated unfairly in school (ref.: never)				
Sometimes	0.002	0.046 <sup>+</sup>	−0.031	−0.017
Often/always	0.040	−0.048	−0.089**	0.097*
<b>Model 2</b>				
Migration background (ref.: no) and discriminated or treated unfairly in school				
Never	0.062	0.009	−0.102*	0.031
Sometimes	0.040	0.032	−0.067*	−0.005
Often/always	−0.040	0.077	−0.066 <sup>+</sup>	0.028
Trajectory (ref.: <i>Gymnasium</i> trajectory)				
VET trajectory	−0.740***	0.646***	0.096*	−0.002
Ambitious trajectory	−0.078*	0.003	0.007	0.068**
Ambiguous trajectory	−0.488***	0.343***	−0.025	0.171***



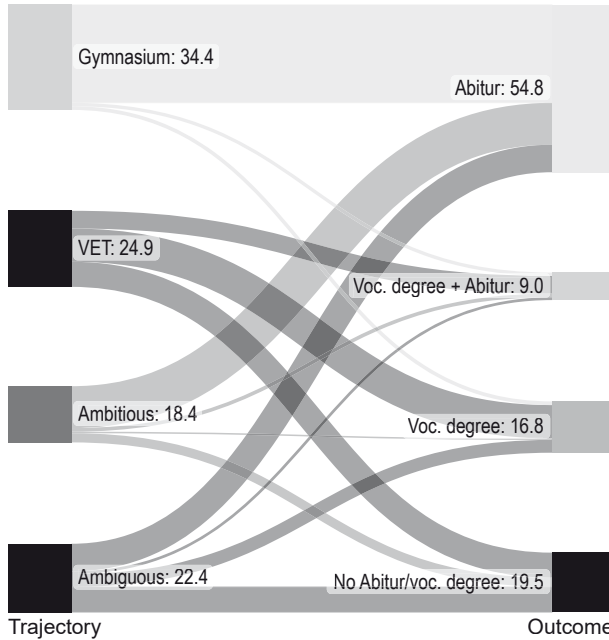
(a) Unfair treatment reported: never



(b) Unfair treatment reported: sometimes



(c) Unfair treatment reported: often or always



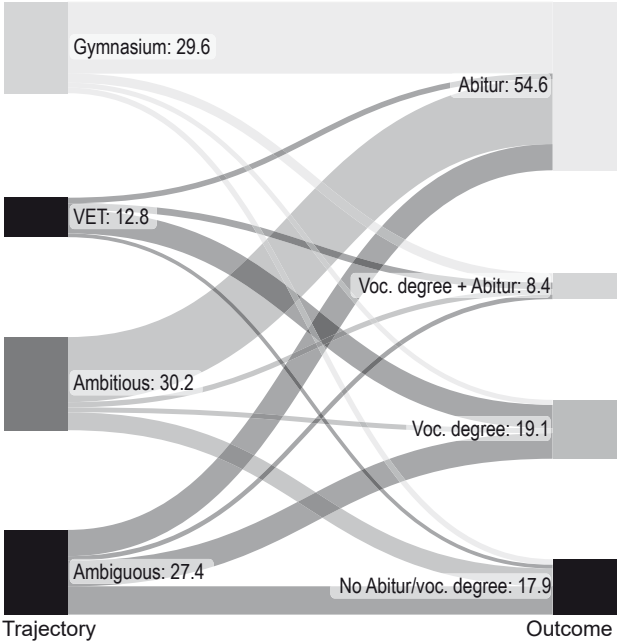
**Figure 6.1** Educational and VET pathways, Sankey charts, that depict the trajectories and outcomes for native-born majority students: (a) no reports of unfair treatment, (b) occasional reports of unfair treatment, and (c) frequent reports of unfair treatment. Results are design weighted. Diagram created using SankeyMATIC. Source: CILS4EU and CILS4EU-DE, own calculations.

Results of Model 1 reveal that students with migration backgrounds are significantly less likely to attain a vocational degree and an *Abitur* than students without migration backgrounds. No other significant differences could be detected in the outcomes of education and VET transitions. Frequent discrimination and unfair treatment at school, on average, are associated with significantly lower probabilities of attaining a vocational degree and an *Abitur* and, at the same time, higher probabilities of failing to attain any degree whatsoever.

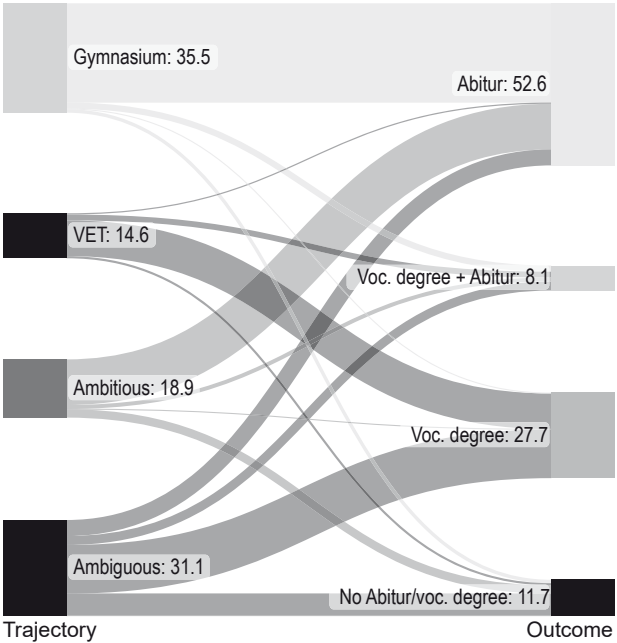
Model 2 demonstrates hardly any difference between students with and without migration background irrespective of their discrimination experiences at school. Ethnic majority and minority groups seem to differ only in the outcome “vocational degree and *Abitur*,” albeit to a similar degree regardless of the extent of discrimination experiences at school.

Our results clearly demonstrate that educational and VET outcomes are very much path dependent. Students who pursue VET trajectories are more likely to attain a vocational qualification or vocational qualification with a certificate that qualifies them tertiary education and less likely to attain an academic certificate, the *Abitur*. Students in ambitious trajectories are somewhat

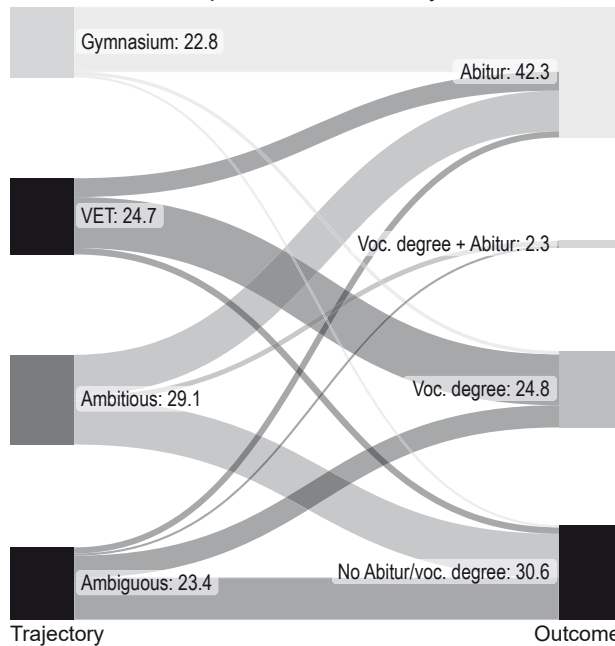
(a) Unfair treatment reported: never



(b) Unfair treatment reported: sometimes



(c) Unfair treatment reported: often or always



**Figure 6.2** Educational and VET pathways, Sankey charts, that depict the trajectories and outcomes for minority students: (a) no reports of unfair treatment, (b) occasional reports of unfair treatment, and (c) frequent reports of unfair treatment. Results are design weighted. Diagram created using SankeyMATIC. Source: CILS4EU and CILS4EU-DE, own calculations.

more likely to obtain neither a vocational qualification nor an *Abitur* and less likely to attain the *Abitur*. Students in ambiguous tracks are considerably less likely to attain an *Abitur* but are more likely to get a vocational degree. In addition, they are more likely to end up without any qualifications, vocational or *Abitur*. It is interesting to learn that both ambitious and ambiguous trajectories carry risks, as students entering these paths are more likely to end up without appropriate certification.

## Summary and Discussion

With the aim of understanding the longer-term consequences of discrimination experiences for ethnic minority students, this chapter has examined whether those who report occasional or frequent discrimination in school pursue different trajectories and attain different outcomes in the German education and training system than those without such experiences. Three important conclusions emerged from the analyses of the role of perceived discrimination in determining students' educational and vocational pathways:

1. With the exception of students of Turkish origin, minority students who experience frequent discrimination pursue vocational tracks on par with majority native-born students with similar discrimination experiences, even though minority students tend to avoid this option.
2. We observe a higher propensity of students with migration backgrounds, particularly Turkish, to pursue ambitious pathways, both for students who do not experience discrimination as well as for those who have experienced it frequently.
3. Ambiguous pathways are pursued primarily by minority students who have experienced discrimination occasionally.

Based on these results we can conclude that many immigrants and ethnic minorities who report discrimination experiences at school are likely to pursue precarious pathways. Others either pursue pathways comparable to those of the majority native-born students or ostensibly defy discrimination by pursuing ambitious pathways. This has been observed particularly with Turkish minority students.

Another important finding is that experiences of frequent discrimination in school are associated with a higher probability of failing to finish schooling or vocational training with a degree as well as a lower probability of attaining vocational degree and *Abitur*. Yet, discrimination experiences have practically uniform effects on native-born students and minority students, with the following exception: the attainment of a vocational degree with an *Abitur*. Here, majority students (particularly those who never report discrimination) perform better than students with migration backgrounds. Taken together, results suggest that experiences of discrimination at school in adolescence are associated with poorer education and VET outcomes in early adulthood, with little variation across majority and minority students in the discrimination effect. Education and VET outcomes are also strongly dependent on the paths chosen by students during the course of their education. The latter are also strongly determined by discrimination experiences.

Overall, discrimination and unfair treatment experienced by immigrants and minority groups at school is reflected in their overrepresentation in educational and training paths marked by a larger uncertainty. Yet minority students who report frequent discrimination, particularly Turkish students, are often found in ambitious pathways. This might indicate that these students have stronger resilience and ample coping strategies to combat adverse experiences at school. Whether such coping strategies operate at the family or community level could not be established in our study. Further, on the individual level, personality traits, such as locus of control or the big five (e.g., agreeableness and extraversion), could be associated with perceptions of discrimination (Sutin et al. 2016). This, however, remains a topic to be explored in future research.

Reports of occasional and frequent discrimination are likely to mean different things for native-born and minority students. Since our models control

for a set of ascriptive characteristics (e.g., age, social origin, gender), the differences in reported discrimination between native-born and minority students are likely to capture instances of discrimination related to a student's migration background. Obviously, we cannot control for unobservable characteristics (e.g., emotional state, dyslexia, attention deficit hyperactivity disorder), which affect learning outcomes and discrimination perceptions. Still, there is no reason to suspect that such conditions are not equally distributed among students from German or non-German backgrounds. Due to the different patterns of representation between native-born and minority students who experience occasional and frequent discrimination in their educational pathways, we cautiously conclude that minority students who report discrimination experiences probably differ in their coping strategies and interpretation of the situation.

This study focused on the role that perceived discrimination in school plays in the educational success of a student, measured in terms of education and VET pathways and respective outcomes. Studying the impact of discrimination experience on anxiety, feelings of depression, and the sense of belonging to a school or the society at large (or lack thereof) among young adults would be an important extension of this research. Unfortunately, our analyses could not capture instances of objective discrimination. To what extent objective and subjective discrimination overlap, and whether discrepancies reflect cases of either underreporting (due to the ambiguity of the situation) or overreporting (based on anticipated discrimination) are questions that await further research. Indeed, the relationships among anticipated, perceived, and actual discrimination and students' educational outcomes is worthy of in-depth investigation.

