

Secondary Publication



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Intersectional Discrimination in the Transition to Vocational Education and Training : Exploring Gender Differences in Perceived Racial Discrimination

Date of secondary publication: 12.12.2024

Version of Record (Published Version), Article

Persistent identifier: urn:nbn:de:bvb:473-irb-1054163

Primary publication

Hufnagl, Julia (2024): Intersectional Discrimination in the Transition to Vocational Education and Training : Exploring Gender Differences in Perceived Racial Discrimination, in: Zeitschrift für Entwicklungspsychologie und pädagogische Psychologie = German journal of developmental and educational psychology, Göttingen: Hogrefe, Vol. 56, Nr. 1–2, pp. 37–54, doi: 10.1026/0049-8637/a000289.

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Intersectional Discrimination in the Transition to Vocational Education and Training

Exploring Gender Differences in Perceived Racial Discrimination

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Abstract: Racial background and gender are considered relevant social categories in research on transitions to vocational education and training (VET). Given the contradictory empirical results and opposing theoretical expectations regarding their interaction, this study deals with perceived racial discrimination and investigates (1) differences between groups of origin, (2) gender differences in racial discrimination, and (3) gender differences in racial discrimination in various ethnic origin groups. Logistic regression models and marginal effects were calculated using data from the National Educational Panel Study's (NEPS) Starting Cohort 4 ($N = 1,421$). The results show that adolescents with Turkish immigrant backgrounds perceive more personal discrimination in the search for an apprenticeship than those of Polish, ex-Yugoslav, and ex-Soviet origin. Interaction analyses show that individuals' experiences of discrimination may vary based on gender, with women being the disadvantaged group. The article discusses the suitability of the selected quantitative approach for intersectional inquiries compared to other possible study designs for intersectional research.

Keywords: perceived discrimination, transition to VET, ethnic discrimination, intersectionality

Intersektionale Diskriminierung beim Übergang in die Berufsbildung: Untersuchung geschlechtsspezifischer Unterschiede in der Wahrnehmung ethnischer Diskriminierung

Zusammenfassung: Ethnische Herkunft und Geschlecht gelten als relevante soziale Kategorien in der Forschung zu Übergängen in die Berufsbildung. Angesichts widersprüchlicher empirischer Ergebnisse und gegensätzlicher theoretischer Erwartungen hinsichtlich ihrer Interaktion befasst sich diese Studie mit wahrgenommener rassistischer Diskriminierung und untersucht (1) Unterschiede zwischen Herkunftsgruppen, (2) geschlechtsspezifische Unterschiede bei rassistischer Diskriminierung und (3) geschlechtsspezifische Unterschiede bei rassistischer Diskriminierung in verschiedenen Herkunftsgruppen. Logistische Regressionsmodelle und marginale Effekte wurden anhand von Daten aus der Startkohorte 4 ($N = 1.421$) des Nationalen Bildungspanels (NEPS) berechnet. Die Ergebnisse zeigen, dass Jugendliche mit türkischem Migrationshintergrund bei der Suche nach einem Ausbildungsplatz mehr persönliche Diskriminierung wahrnehmen als Jugendliche polnischer, ex-jugoslawischer und ex-sowjetischer Herkunft. Interaktionsanalysen zeigen, dass die individuellen Diskriminierungserfahrungen je nach Geschlecht variieren können, wobei Frauen die benachteiligte Gruppe sind. Der Beitrag diskutiert die Eignung des gewählten quantitativen Ansatzes für intersektionale Studien im Vergleich zu anderen möglichen Studiendesigns für intersektionale Forschung.

Schlüsselwörter: wahrgenommene Diskriminierung, Ausbildungsübergang, ethnische Diskriminierung, Intersektionalität

Despite having the same previous educational achievements or qualifications, adolescents with immigrant backgrounds are disadvantaged during the search for an apprenticeship position (Beicht & Walden, 2017). Discrimination could account for the considerably lower likelihood of some racial groups getting apprenticeship positions, and it can hinder integration in the apprenticeship market (Beicht & Walden, 2019; Tucci et al., 2014). Gender and race are social categories that are relevant to

the research on transitions to vocational education and training (VET) in Germany (Enggruber, 2011; Imdorf, 2017). It is commonly assumed that women face greater challenges in transitioning to VET because of a combination of factors, including stronger competition for female-typical occupations, the hiring practices of companies in certain professions, concerns about a lack of social fit, and the expectation of different physical prerequisites and capacities (Imdorf, 2016). Accordingly, female adoles-

cents with immigrant backgrounds have to contend with specific disadvantages in their educational and employment trajectories (Boos-Nünning, 2020). An intersectional research perspective is necessary to investigate the interplay of different social inequality factors, such as race and gender (e.g., Hadjar & Hupka-Brunner, 2013). There is a lack of intersectional studies, especially in the quantitative field (Else-Quest & Hyde, 2016; Strand, 2014). Concurrently, the prevalent dichotomous categorization of adolescents with immigrant backgrounds into groups with and without an immigrant background has been criticized for simplifying the complexity of immigrant histories, identities, and experiences of discrimination. This categorization is deemed improper, as it homogenizes immigrant groups (El-Mafaalani, 2023; Kemper & Supik, 2020).

For those affected, the individually perceived discrimination experience is highly relevant (Ette et al., 2021). Perceived discrimination has a profound influence on integration outcomes and can influence the decision-making behavior in the search for an apprenticeship (El-Mafaalani & Toprak, 2011; Hunkler, 2014; Lindemann, 2020; Skrobanek, 2007; SVR, 2018). Nevertheless, the issue remains underresearched, with those affected remaining largely unacknowledged (Diehl et al., 2021; Scherr & Breit, 2020; Skrobanek, 2007). This study therefore investigates (1) differences in perceived racial discrimination between groups of origin, (2) differences in perceived racial discrimination between male and female adolescents with an immigrant background, and (3) differences between groups of origin in the extent to which young men and women perceive racial discrimination. The study compares adolescents originating from Turkey, Poland, the former Yugoslavia (YU), and the former Soviet Union (SU), as these origin groups represent the largest number of cases in the dataset under study and are of significant importance in the German context (Geven & Forster, 2021).

Explanation of Origin Group Differences and Their Interaction With Gender

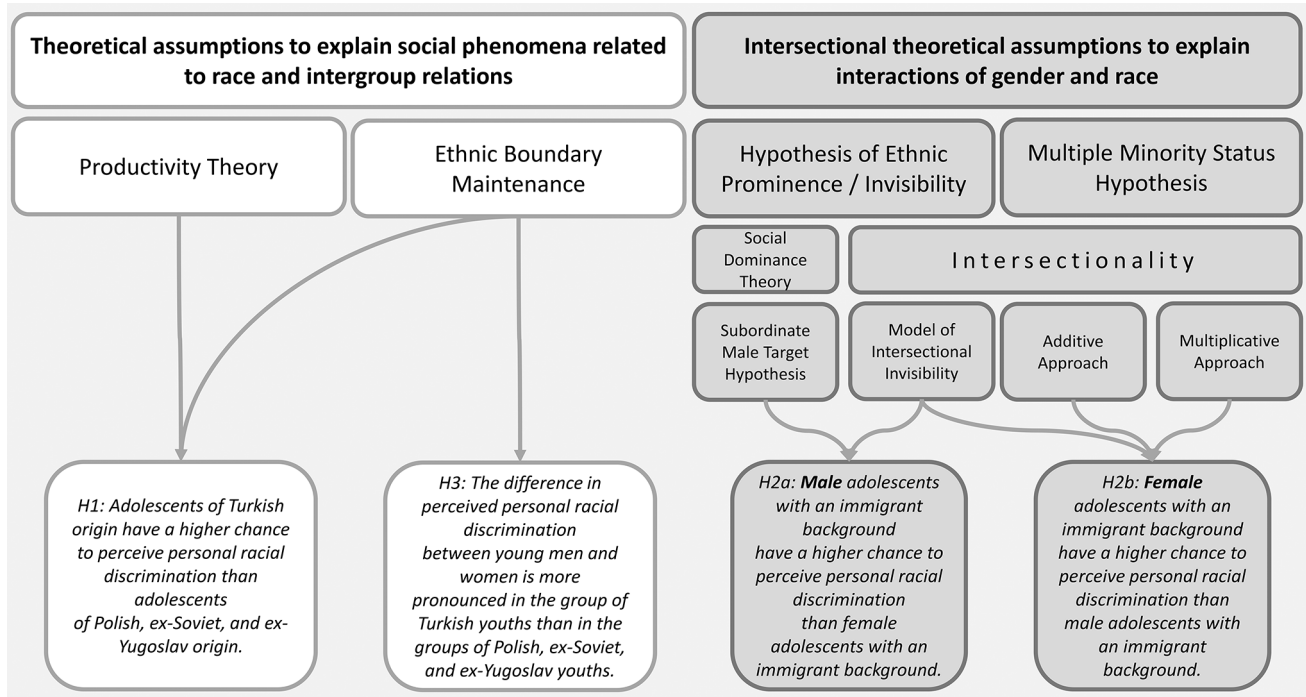
The following sections provide an overview of the theoretical assumptions that attempt to explain racial discrimination in the transition to VET and the interaction of gender and race as well as the empirical findings related to these theories (see Figure 1 for an overview of intersectional theories). Later, the hypotheses are derived from these considerations.

Theoretical Assumptions and Empirical Findings to Explain Social Phenomena Related to Race and Intergroup Relations

Productivity Theory

Discrimination occurs when a group or individual members thereof are disadvantaged or degraded because of social characteristics unrelated to their behavior or performance (Rommelspacher, 1997). A common approach to explaining discrimination in job and apprenticeship allocation is rooted in productivity theory (Imdorf, 2017), which goes back to Arrow's (1973) and Phelps' (1972) theories of statistical discrimination and explains differences in discrimination between different origin groups by the fact that applicants' individual productivity is judged differently regardless of their actual knowledge and skills. Statistical discrimination occurs when employers use observable characteristics (such as race or gender) as proxies for unobservable attributes (such as productivity), thereby leading to group-based disparities and unequal employment opportunities (Arrow, 1973). To reduce the costs associated with assessing individual productivity through adequate selection processes, employers transfer their assumptions about the productivity of certain population groups to individual persons based on beliefs supported by past experience or other forms of evidence because employers lack sufficient knowledge of the statistical distribution of productivity between groups (Phelps, 1972). Similarly, models based on implicit biases emphasize employers' adverse emotional responses (antipathy), which influence the evaluation of members of a specific group, including mistaken beliefs (stereotypes) about productivity-related characteristics (Quillian, 2006).

Statistical discrimination constitutes the primary focus of research on discrimination in transitions to the apprenticeship market (Imdorf, 2016; Skrobanek, 2007). There is substantial evidence that companies have a preference against certain population groups based on names, use of headscarves, and other characteristics perceived as "foreign" (Imdorf, 2017). In the case of perceived discrimination, the individual is responsible for determining whether a given structure, action, or statement is perceived as discriminatory (Scherr & Breit, 2020). Adolescents with an immigrant background from Turkey are most likely to state that their external characteristics indicate a foreign origin (SVR, 2018). Consequently, it is anticipated that Turkish adolescents are more likely to perceive discrimination than adolescents with other immigrant backgrounds. Stereotypes also contribute to this perception, as they vary by origin group and have been empirically linked to discrimination (Talaska et al., 2008).



Note. Figure 1 presents a synthesis of the aforementioned theoretical perspectives, which differ in their expectations regarding perceived discrimination and the interplay of gender and race. Note that not all of these theories are fully developed sociological or psychological models. The white boxes represent variations in origin groups, while the gray boxes depict variations in perceived racial discrimination by gender. These models and hypotheses enhance the understanding of perceived discrimination during the transition to VET.

Figure 1. Overview of intersectional theories to explain the interaction of race and gender in perceived discrimination in transition to VET (own illustration).

Statistical discrimination can result in perceived unfair disadvantages for individuals. As employers evaluate productivity differently depending on the origin group, the perceived discrimination is likely to differ depending on the origin group. In short, productivity evaluations to allocate apprenticeships result in varying levels of perceived discrimination based on origin group membership.

Ethnic Boundary Maintenance

Ethnic and racial discrimination involves unfair treatment based on aspects of a person’s identity related to their cultural or ancestral background. While “ethnicity” is based on shared cultural heritage and social identity, “race” is based on perceived physical differences (Flores, 2015). In contrast to nationality, “race” emphasizes perceived physical characteristics that indicate ethnic origin (Goldberg, 2002) and refers to a classification of people based on physical characteristics such as skin color, facial features, and hair texture. This study focuses on racial discrimination in this sense and explores how it is perceived differently by individuals of different racial and gender backgrounds.

Racial origin is not always visible in the same way: In Germany, there are “bright boundaries” among Turkish

immigrants who can clearly be identified as adolescents with an immigrant background (Alba, 2005; Schulz & Leszczensky, 2016). In contrast, “blurred boundaries” exist among groups less visibly distinct from the German majority society, for example, adolescents with immigrant backgrounds from Poland, the former SU, and the former YU (Diehl et al., 2021; Flores, 2015; Schulz & Leszczensky, 2016; Steinmann, 2019). This approach to bright and blurred boundaries is based on the concept of ethnic boundary maintenance put forth by Barth (1969). This concept posits that fixed cultural traits do not determine ethnicity, but rather, ethnicity is a dynamic social construct. Boundaries remain hidden until there is a dynamic need for them to become active, explicit, and meaningful (Barth, 1969). Discrimination research often defines phenotypical characteristics as one of several ethnic boundaries. Other ethnic boundaries discussed in research include language skills, religious affiliation, and cultural practices (Alba, 2005; Flores, 2015; Schulz & Leszczensky, 2016; Straub et al., 2021). They also indicate origin group membership.

Empirical studies have repeatedly confirmed the importance of ethnic visibility in understanding perceived discrimination: Foreign-sounding names and other bright

https://content.hogrefe.com/doi/pdf/10.1026/0049-8637/a000289 - Thursday, December 12, 2024 12:09:20 AM - Universitätsbibliothek Bamberg IP Address:2001-638:a06:1170:dffb:fab:6c5d:28dc

boundaries correlate with high discrimination perception, whereas blurred boundaries correspond to low discrimination perception (Flores, 2015; Schulz & Leszczensky, 2016; Tuppatt & Gerhards, 2021). Additionally, the proportion of individuals reporting discrimination rises from 17% to 48% when they self-identify with external characteristics that indicate an immigrant background. Turkish adolescents with immigrant backgrounds are the most likely to recognize these indicators of foreign origin (SVR, 2018).

Intersectional Theoretical Assumptions to Explain Interactions of Gender and Race

The Subordinate Male Target Hypothesis (SMTH)

The SMTH is based on social dominance theory, which posits that human societies organize themselves into group-based hierarchies, and that discrimination occurs because members of dominant groups obtain a disproportionate share of favorable things in life, while subordinate groups obtain a disproportionate share of unfavorable things in life (Sidanius & Pratto, 2012). One system of group-based hierarchy is the gender system, in which men have disproportionate social power compared to women (Pratto et al., 2006). Social dominance theory is a broader theoretical framework, whereas the SMTH is a specific hypothesis within evolutionary psychology that focuses on subordinate males. The SMTH states that men from disadvantaged groups typically experience the majority of discrimination targeted toward their demographic (Veenstra, 2013).

Nievers (2010) demonstrated that, when recruiters are asked about adolescents with immigrant backgrounds without specifying their gender, they typically refer to male immigrants. Consequently, men with immigrant backgrounds face a higher risk of discrimination because of their greater prototypicality compared to women. They may face discrimination based not only on their immigrant status but also because of stereotypes, expectations, and biases associated with gender norms. For example, they may be perceived as hypermasculine or dangerous, particularly if they belong to socially stigmatized or marginalized origin groups. This subordinate positioning can make them more vulnerable to various forms of discrimination.

The stereotype of immigrant men as more threatening and dangerous than immigrant women also impacts their prospects in the labor and apprenticeship markets. Several studies show that immigrant women report less discrimination in the work context and are less affected by discrimination in the labor market than immigrant men (Andriessen, 2019; Salentin, 2008; Te Lindert et al.,

2008; Venema & Grimm, 2002). In summary, the SMTH suggests that men from marginalized groups, such as racial minorities, may experience marginalization within the context of dominant masculinity norms. This marginalization arises from the intersection of their social category memberships, which complicates traditional understandings of power dynamics: It is a concern in recruiting that hiring individuals who fit certain stereotypes – such as hypermasculinity or dangerousness – could change the balance of power in a company. This is expected to result in a stronger perception of racial discrimination.

The Model of Intersectional Invisibility (MII)

The MII represents an expansion or refinement of the SMTH. It incorporates intersectionality and includes visibility in its assessment of discrimination. Intersectionality refers to the interaction of different social categories (Collins, 1990; McCall, 2005). According to MII, stereotypes are more likely to be applied to those members of a group who are more visible, which in turn leads to discrimination against them (Purdie-Vaughns & Eibach, 2008). An individual who is a member of more than one inequality category is not considered a prototype of the respective groups (Coles & Pasek, 2020; Purdie-Vaughns & Eibach, 2008). This implies that ethnic minority women are rendered “invisible” compared to ethnic minority men, as they are not perceived as representative of their ethnic minority or as representative of women in general. This “invisibility” can have both positive and negative consequences (Sesko & Biernat, 2010; Veenstra, 2013). When seeking an apprenticeship position, it could result in women with immigrant backgrounds receiving more rejections and consequently feeling more discriminated against because of their applications being overlooked. Conversely, it could also lead to women with immigrant backgrounds attracting less negative attention because of their “invisibility,” which would align with the assumptions of the SMTH and confer an advantage over men with immigrant backgrounds.

In the German context, MII and SMTH remain largely unexplored, particularly in the context of perceived discrimination in labor and apprenticeship markets. Both models have been applied primarily to the American context, with a focus on the differences between Black and White individuals (e.g., Coles & Pasek, 2020; Ifatunji & Harnois, 2016; Livingston et al., 2012; Remedios et al., 2016; Sesko & Biernat, 2010). It is presently unclear which gender is at a disadvantage in the search for an apprenticeship position because it is unclear who is seen as being representative of their ethnic minority in this context. While the SMTH focuses primarily on the “invisibility” experienced by men from marginalized groups

within the context of dominant masculinity norms, the MII assumes that “invisibility” can have both positive and negative consequences.

Additive and Multiplicative Approaches of Intersectionality

The additive approach¹ proposes that individuals with multiple marginalized group identities endure specific forms of oppression linked to each identity, and that the total amount of discrimination they experience equals the sum of the individual discriminatory experiences (e.g., Beal, 2008; Williams, 1999). On the other hand, the multiplicative approach predicts even greater discrimination because the disadvantages for individual groups multiply or take completely new forms rather than add up (King, 1988; Veenstra, 2013). Therefore, not only oppressions as such, but also multiplicative relationships between these oppressions need to be considered (King, 1988). The additive and multiplicative approaches to intersectionality posit that the risk of discrimination against women is higher because the perceived disadvantage of belonging to multiple disadvantaged groups is compounded by the additional disadvantage of being a woman (Purdie-Vaughns & Eibach, 2008; Veenstra, 2013). Although critiques state that intersectional disadvantages cannot simply be considered additively (Del Toro, 2016; Silva & Evans, 2020; Strand, 2014), most empirical tests conducted on intersectionality were based on additive models (e.g., Jang, 2018; Seng et al., 2012). Theories suggesting additive or multiplicative advantages and disadvantages among individual groups diverge from the SMTH argumentation by concluding that women are the most vulnerable to discrimination. Figure 1 provides an overview of the theories explained.

The state of research on gender-related differences in perceived racial discrimination is ambiguous: Gender does not correlate with perceived discrimination on a personal level in Skrobaneck's (2007) study, while it does on the group level (to the disadvantage of women). In other studies, women report less personal discrimination than men (Salentin, 2008; Schaafsma, 2011; Te Lindert et al., 2008; Venema & Grimm, 2002) (see Table A1 in Appendix A for a study overview). The differing results of these studies are due in part to the varying operationalizations as work-related (Chou & Choi, 2011; McWirther, 1997; Salentin, 2008; Veenstra, 2013; Yang, 2021), education-related (Blondé et al., 2022), anticipated (McWirther, 1997), and gender-related (Blondé et al., 2022; McWirther, 1997) perceived discrimination. In addition,

the studies consider different life situations (school, training, and working life).

The Present Study

This study hypothesizes that productivity assumptions, stereotypes, and bright boundaries result in a less favorable productivity evaluation for adolescents with Turkish immigrant backgrounds compared to other origin groups, manifesting in perceived racial discrimination. Based on this expectation, derived from productivity theory and ethnic boundary maintenance, the following hypothesis can be formulated:

H1: Adolescents of Turkish origin have a higher chance to perceive personal racial discrimination than adolescents of Polish, ex-Soviet, and ex-Yugoslav origin.

SMTH and intersectional theoretical assumptions explain gender differences in perceived racial discrimination, resulting in differing expectations. Additionally, the state of research regarding gender-related differences in perceived racial discrimination is ambiguous (see above). Nevertheless, SMTH posits that the pervasive stereotypes of men with an immigrant background as hypermasculine or dangerous have a deleterious impact on their labor and apprenticeship market prospects compared to women with an immigrant background. The following hypothesis can be derived from SMTH:

H2a: Male adolescents with an immigrant background have a higher chance to perceive personal racial discrimination than female adolescents with an immigrant background.

The reasoning behind additive and multiplicative models on intersectionality indicates that women are expected to perceive greater discrimination than men across all groups of origin, because perceived disadvantage is compounded by membership in multiple disadvantaged groups. This leads to the following counterhypothesis to H2a:

H2b: Female adolescents with an immigrant background have a higher chance to perceive personal racial discrimination than male adolescents with an immigrant background.

Like SMTH, MII implies that ethnic minority women are rendered “invisible” compared to ethnic minority men because they are not perceived as representative of their ethnic minority or as representative of women. However, when they seek an apprenticeship position, both positive

¹ Alternative terms are “double jeopardy model” (considering racism and sexism), “third jeopardy model” (additionally including class), “fourth jeopardy model” (additionally including sexual orientation), or “cumulative nature of disadvantage” (Purdie-Vaughns & Eibach, 2008).

and negative consequences of this “invisibility” may occur (see above). Accordingly, MII posits that both H2a and H2b are possible outcomes.

Ethnic boundary maintenance considers the varying racial visibility among groups and facilitates a more comprehensive understanding of the interaction between race and gender. As H2b states, discrimination may be more pronounced for young women who experience both gender- and race-based biases. Because of bright boundaries, this phenomenon is particularly likely to be observed in young people with a Turkish immigrant background. In contrast, young people from countries of origin with blurred boundaries experience less visibility of their origins, which may result in a reduced degree of intersectional overlap in the search for an apprenticeship place. Adolescents with Turkish immigrant backgrounds, having brighter boundaries with the majority population, exhibit a clearer overlap of discrimination factors. Conversely, the racial origin of Polish, ex-Yugoslav, and ex-Soviet youth is often not immediately recognized. In apprenticeship search, they are frequently perceived solely as men or women – without an immigrant background, which leads to less racial discrimination. The fact that there is less racial discrimination also means that the intersection of racial discrimination with discrimination resulting from gender is perceived differently by adolescents.

The hypothesis therefore says that intersectional interactions between different factors of social inequality should be less pronounced when one of the factors of social inequality (origin group) is less visible. This is particularly relevant to perceived discrimination, as visibility plays a significant role in this phenomenon (see above). Given their visibility, I posit that greater variations exist within the Turkish group, and that immigrant background may remain less visible for other groups with blurred boundaries. The differences in discrimination between genders within Turkish adolescents with bright boundaries should differ from the differences in discrimination between genders within adolescents of other groups of origin. The following hypothesis can be formulated:

H3: The difference in perceived personal racial discrimination between young men and women is more pronounced in the group of Turkish youths than in the groups of Polish, ex-Soviet, and ex-Yugoslav youths.

Methods

Study and Sample Design

The empirical analysis is based on data from Starting Cohort (SC) 4 of the National Educational Panel Study (NEPS)², a panel survey stemming from the Leibniz Institute for Educational Trajectories (LIfBi) in Bamberg, Germany, in which six cohorts have been surveyed about their educational careers at various points in time since 2008 (Blossfeld et al., 2011). It randomly selected schools from all over Germany. Data on competency development, educational processes, decisions, and returns are available from early childhood to adulthood. The SC4 started in 2010 with a sample of 9th-grade students (Blossfeld et al., 2011). In total, 16,425 students were surveyed in the first wave in the fall of 2010. Additionally, the study collected data on contextual persons of the respondents (parents, teachers, and school management).

The analyses refer to wave five, the only wave in which the dependent variable was collected through computer-assisted telephone interviews (CATI) (LIfBi, 2016). This included filtering based on the mode of data collection: All adolescents who had left school after the first survey (either because they no longer attended school or had switched to a school not participating in the NEPS) were further interviewed via CATI in subsequent waves.

The NEPS only considers respondents as immigrants if the subjects themselves, at least one parent, or at least two grandparents had been born abroad (Olczyk et al., 2016). The analysis sample includes adolescents with immigrant backgrounds born between 1990 and 2000, the majority being 16 years old at the time of the survey (mean age: 15.86 years; *SD*: 0.77). These students had left the general school system and were in transition to VET. They have an immigrant background of the 1st, 2nd, or 3rd generation and stem from Turkey ($n = 307$), the former SU ($n = 296$), Poland ($n = 131$), the former YU ($n = 141$), or other origin groups ($n = 546$; consisting of Italy, Romania, Central and South America, the Caribbean, Northern and Western Europe, North America, Oceania/Polynesia, other Middle East and North Africa, other Africa, other Asia, other Central and Eastern Europe, other South America, as well as groups that cannot be assigned to an origin group). Late repatriates were considered within the newer immigrant groups and are not shown separately.

² This paper uses data from the NEPS (see Blossfeld & Roßbach, 2019), which is carried out by the Leibniz Institute for Educational Trajectories (LIfBi, Germany) in cooperation with a nationwide network.

I removed the data from respondents who answered “don’t know” ($n = 49$) and “does not apply, never looked for a training place” ($n = 188$) or refused to provide information ($n = 2$) on the question on perceived racial³ discrimination when looking for an apprenticeship position (dependent variable). Moreover, design-related missing data⁴ reduced the sample. To deal with missing data, I employed listwise deletion, which excludes cases with incomplete information on any of the variables included in the study⁵. The proportion of missing values ranged from no missings (gender, origin group, school type, generation status) to 6.6 % missings (maths grade). The above-described procedure led to the analysis sample size of 1,421 immigrants.

Instruments

Perceived Discrimination in Transition to VET

The dependent variable in this study is *perceived racial discrimination* in the search for an apprenticeship place, which was measured by the question: “Have you ever been refused an apprenticeship simply because of your origin?” (LifBi, 2016, p. 211). This was intended only for adolescents with immigrant backgrounds. This self-reported assessment did not take the actual state of job deprivation into account. For the logistic regression analysis, I generated a dummy variable with the characteristics “no” (“no, never”) and “yes” (“rarely,” “sometimes,” “often,” and “always”).

Independent and Control Variables

The central independent variables are *origin group* and *gender*. The origin group variable is constructed using the respondents’ countries of birth and their parents’ and grandparents’ countries of birth (Olczyk et al., 2016). This study adheres to the binary division of gender in the NEPS because of the lack of other data.

The control variables are *German and mathematics grades* (centered and recoded to associate better school performance with a higher scale value), *type of school* (lower vs. higher secondary school, whereby the first

includes students from “Hauptschule/Volksschule” and “Förderschule,” and the second includes students from schools with several educational programs, “Realschule,” “Integrierte Gesamtschule,” and “Gymnasium”), *generation status* (“born abroad” vs. “born in Germany,” see Olczyk et al., 2016)⁶, and *parental school-leaving qualification* including the educational attainment of the father or, if no information on the father is available, the educational attainment of the mother.

Conducted Analyses

I calculated logistic regression models to test the hypotheses. As a starting point, I tested H1 as well as the opposing hypotheses, H2a and H2b, in a first model that considered origin group and gender as central independent variables. The second model sought to determine whether gender moderates origin correlations to answer H3. One approach to addressing intersectional questions quantitatively lies in accounting for interaction effects (Else-Quest & Hyde, 2016). I employed this approach here to test whether the strength of the relationship of origin group membership and perceived racial discrimination varies by gender. I carried out the analyses using STATA/MP 17.0.

Because H3 investigates whether the difference in perceived discrimination between young men and women is more pronounced in the group of Turkish youths than in the other origin groups, the gender difference within the origin groups should be considered. Since effect sizes (such as the logit coefficients or odds ratios) are not comparable across models (Best & Wolf, 2012), I estimated marginal effects at representative values (MERs) in the posterior. That is a popular method to better explain the effect of one variable while controlling for the other variables in the model (Williams, 2012). Instead of mapping an average effect, where all respondents are treated first as men and then as women, MERs calculate the average effect of the origin group for both men and women and indicate how the gender effect varies by origin group for testing H3⁷. MERs allow for a more nuanced interpretation of the effect of each variable

³ Although the NEPS designates this construct as “ethnic” discrimination, this study employs the term “racial” discrimination (see rationale above).

⁴ In these cases, the variable was not collected because of a different survey context in the study ($n = 1,289$). For more information on missing data in SC4, see Skopek et al. (2013).

⁵ One exception is the variable on parental school-leaving qualifications, where a category labeled “no answer” was included; this category included missing values. Prior to this, the information on the parental school-leaving qualifications of two parents and the target persons (four variables in total) were combined in order to minimize the number of missing values.

⁶ It is not feasible to present immigrants from the 3rd generation as a distinct group, given the limited number of respondents in this category ($n = 5$).

⁷ One limitation of average marginal effects (AMEs) – which are more commonly used to interpret logistic regression results – is that averages can obscure differences in effects (Williams, 2012). For each gender category, MERs show how the predicted probability of perceived discrim-

Table 1. Characteristics of the dependent variable by gender and origin group

Origin group	Perceived personal discrimination in the search for an apprenticeship position											
	Female				Male				Total			
	Yes		No		Yes		No		Yes		No	
	<i>n</i>	% ¹	<i>n</i>	% ¹	<i>n</i>	% ²	<i>n</i>	% ²	<i>n</i>	% ³	<i>n</i>	% ³
Poland	3	4.29	67	95.71	2	3.28	59	96.72	5	3.82	126	96.18
Turkey	31	22.30	108	77.70	26	15.48	142	84.52	57	18.57	250	81.43
Former YU	7	9.09	70	90.91	9	14.06	55	85.94	16	11.35	125	88.65
Former SU	9	6.25	135	93.75	11	7.24	141	92.76	20	6.76	276	93.24
Other	16	6.08	247	93.92	19	6.71	264	93.29	35	6.41	511	93.59
Total	66	9.52	627	90.48	67	9.20	661	90.80	133	9.36	1,288	90.64

Notes. *N* = 1,421; Yes if answer options "rarely", "sometimes", "often" or "always" selected in item on perceived discrimination; No if answer option "no, never" selected in item on perceived discrimination; ¹Percentage of female respondents of the respective origin group; ²Percentage of male respondents of the respective origin group; ³Percentage in relation to the respective origin group; Poland: *n* = 131, Turkey: *n* = 307, former YU: *n* = 141, former SU: *n* = 296, other: *n* = 546. Source: NEPS, SC4:12.0.0

within the context of the entire model and to understand how the correlation between origin group and perceived discrimination varies across genders. They show the average effect of the origin group for both men and women and quantify the gender difference within the origin group.

Empirical Results

Descriptive Statistics

To provide an initial overview of the data, I present the characteristics of the variables considered univariately in the following (see also Electronic Supplementary Material, ESM 1). Girls and boys are represented in almost equal proportions in the dataset. The individual origin groups each represent between 9 % and 22 % of the total sample. Lower secondary schools are the most represented school types in the dataset, since wave five exclusively surveyed individuals who had already completed the general education school system (LIfBi, 2016). A lower secondary school degree is the most common among the parental school-leaving qualifications at approximately 38 %. Three-quarters of the respondents were born in Germany. Table 1 provides a descriptive overview of how the perception of personal racial discrimination among ado-

lescents seeking an apprenticeship varies according to their origin group and gender.

Less than 10 % of all respondents stated having experienced discrimination in their apprenticeship search⁸. The highest percentage, at 18.57 %, was reported by Turkish adolescents, followed by those from the former YU at 11.35 %. Among ex-Soviet youth, 6.76 % reported having perceived personal discrimination, thus approximately merely a third of the value for Turkish adolescents. Among Polish adolescents, the proportion who had perceived discrimination was 3.82 %, approximately 3 % lower than the figure for ex-Soviet adolescents. There are no gender differences in racial discrimination when no distinction is made between origin groups. However, regarding adolescents of Turkish origin, perceived racial discrimination occurs more often among female immigrants, while for adolescents originating from the former YU, it occurs more often among male immigrants. The correlations between most of the predictors runs from barely present to weak, so that I could perform logistic regression analyses.

Regression Analyses

The following section reports the results from two logistic regression models that estimate perceived racial discrimination in apprenticeship search as the dependent vari-

ination changes for different origin groups. This allows examination of intersectional effects, where the impact of the origin group may differ depending on gender. AMEs, in contrast, represent the change in the predicted probability of perceived discrimination associated with a shift from one origin group to another, holding gender constant. In addition, MERs are less affected by outliers or extreme values in the data than AMEs.

⁸ For all origin groups, the reliability of the perceived discrimination scale was acceptable, as measured by Cronbach's alpha (Horr et al., 2020).

Table 2. Results from logistic regression models with perceived personal discrimination in apprenticeship search as dependent variable (0=no, 1=yes)

Predictors	Model 1 (basic model)			Model 2 (interaction model)		
	<i>b</i>	<i>z</i>	<i>e^b</i>	<i>b</i>	<i>z</i>	<i>e^b</i>
Origin group (Ref. Turkey)						
Poland	-1.722***	-3.52	0.179***	-1.630*	-2.14	0.196*
Former YU	-0.529	-1.70	0.589	-0.002	-0.00	0.998
Former SU	-1.252***	-4.13	0.286***	-0.958*	-2.38	0.384*
Other	-1.108***	-4.68	0.330***	-0.805*	-2.42	0.447*
Gender (Ref. male)						
Female	0.241	1.23	1.273	0.647*	2.16	1.910*
Interaction effects (Ref. Turkey x female)						
Poland x female				-0.212	-0.22	0.809
Former YU x female				-1.043	-1.66	0.352
Former SU x female				-0.604	-1.08	0.547
Other x female				-0.611	-1.33	0.543
Control variables						
Grades						
German ¹	-0.193	-1.47	0.824	-0.195	-1.44	0.823
Mathematics ¹	0.253*	2.42	1.288*	0.255*	2.36	1.290*
School type (Ref. lower secondary)						
Higher secondary	-0.118	-0.58	0.889	-0.113	-0.57	0.893
Generation status (Ref. born abroad)						
Born in Germany	-0.414	-1.84	0.661	-0.428*	-1.96	0.652*
Parental school-leaving certificate (Ref. no degree)						
Lower secondary	-0.300	-0.97	0.741	-0.319	-1.02	0.727
Higher secondary	-0.572	-1.68	0.564	-0.613	-1.76	0.542
N/A	-0.209	-0.63	0.812	-0.243	-0.73	0.784
<i>Pseudo R²</i>		.063 (<i>p</i> = .000)			.067 (<i>p</i> = .000)	

Notes. **p* < .05; ***p* < .01; ****p* < .001; *N* = 1,421; ¹centered and recoded; *b* = coefficient; *z* = *z*-value; *e^b* = odds ratio. Source: NEPS, SC4:12.0.0.

able. Table 2 reports the coefficients (*b*), *z*-values (*z*), and odds ratios (*e^b*) for both models.

Model 1 (Basic Model)

The basic model estimates the difference in perceived discrimination by origin group and gender as independent variables, considering German and mathematics grades, type of school, generation status, and parental school-leaving qualification as control variables (Table 2). The results show that adolescents of Turkish origin, included as a reference group, are more likely to perceive racial discrimination in the search for an apprenticeship position than respondents of Polish, ex-Soviet, or other origin. This confirms H1 for all but one origin group.

Neither hypothesis 2a nor 2b on the relationship between gender and perceived discrimination can be confirmed based on the first model. As previously stated, the observed gender differences in perceived discrimination are small; however, there are also clear descriptive differ-

ences in the characteristics depending on the origin group, which suggests that it might not be sufficient to consider gender as a whole. Rather, a distinction should be made according to origin group – this distinction is made in the following interaction model.

Model 2 (Interaction Model)

The second model, testing hypothesis 3, took interaction effects into account to determine whether the strength of the relationship of origin group membership varies by gender (Table 2). If the same control variables are used, the results for adolescents of Polish and ex-Soviet origin remain similar. However, there is a significant correlation between gender and perceived discrimination among Turkish adolescents, which indicates that the interaction effect captures a unique relationship between origin group and gender that is not evident in the basic model.

I calculated effect estimators (marginal effects) after the regression analysis. MERs show the average effect of

Table 3. Coefficients of model 2 in Tab.2

	Marginal Effects at Representative Values (MERs) (Model 2)		
	dy/dx	p	z
Origin group (female)			
Poland	.016	.641	0.47
Turkey	.094*	.033	2.13
Former YU	.040	.468	-0.73
Former SU	.002	.928	0.09
Other	.002	.921	0.10

Notes. * $p < .05$; ** $p < .01$; *** $p < .001$; $N = 1,421$; dy/dx = marginal effect; p = p-value ; z = z-value. Source: NEPS, SC4:12.0.0.

the origin group for both men and women and quantify the gender difference within the origin groups (Table 3; Figure A1 in Appendix A). They range from 0.2 (former SU) to 9.4 percentage points (Turkey). Turkish females are 9% more likely to experience discrimination than Turkish males. The marginal effects of the origin group membership on perceived discrimination correspond to females within each origin group.

Discussion

The goal of this study was to investigate (1) differences in perceived racial discrimination between origin groups, (2) differences in perceived racial discrimination between male and female adolescents with an immigrant background, and (3) differences between groups of origin in the extent to which young men and women perceive racial discrimination. The study tested assumptions of productivity theory, social dominance theory, intersectional models, and the model of ethnic boundary maintenance. The results show that adolescents with an immigrant background from Turkey perceive more racial discrimination in the search for an apprenticeship than adolescents of Polish, ex-Yugoslav, and ex-Soviet origin. The descriptive level of perceived discrimination is lower than in other studies, which arrived at values between 30% and 58% for Turkish respondents (Skrobanek, 2009; SVR, 2018; Tucci et al., 2014; Venema & Grimm, 2002; von Gostomski, 2022; von Wilamowitz-Moellendorff, 2001). This discrepancy may be attributed to the fact that this study explicitly addresses perceived discrimination in the search for an apprenticeship position, a relatively narrow context compared to other studies that inquire about perceived discrimination in more everyday situations. H1, which assumed that adolescents of Turkish origin have a higher chance of perceiving personal racial discrimination than adolescents of Polish, ex-Soviet, and ex-Yugoslav origin, can be confirmed for all but one origin group with the regression model: If the adolescents

are of Turkish origin, they perceive more personal racial discrimination than adolescents from Poland, the former SU, and other origin groups. This finding is consistent with numerous studies that demonstrated a higher prevalence of perceived discrimination among Turkish adolescents with immigrant backgrounds in Germany than other immigrant groups (e.g., Diehl et al., 2021; Salentin, 2007, 2008; Skrobanek, 2009).

Furthermore, the study provides insights into gender differences in perceived racial discrimination, which have rarely been studied before. Neither H2a nor H2b on gender differences in perceived racial discrimination of adolescents with an immigrant background could be confirmed in the basic model. However, taking adolescents' different origins in an interaction model into account, personal racial discrimination and gender significantly correlate for adolescents with Turkish immigrant backgrounds. This implies that the combined effect of the predictors is different from what would be expected based on their individual effects, and that categories of social inequality interact.

H3 assumed that the difference in perceived discrimination between young men and women is more pronounced in the group of adolescents with a Turkish immigrant background than in the other origin groups. The interaction model shows that there are significant gender differences in the group of Turkish origin as racial discrimination and gender significantly correlate in the model. In other words, the correlation of individuals' experiences of discrimination and being of Turkish origin varies depending on gender. Turkish females are 9% more likely to experience discrimination than Turkish males. Only for the Turkish group are there significant gender differences, which could indicate that the gender differences are more pronounced in the Turkish group. This would mean that H3 can be confirmed, and that bright boundaries possibly would lead to more pronounced differences in discrimination between genders within Turkish adolescents than in other origin groups with more blurred boundaries. However, the interaction terms do not provide statistical evidence of differences in the perception of discrimination between females from Polish,

ex-Yugoslav, and ex-Soviet backgrounds and Turkish females. Therefore, these results must be considered as initial indications that need verification in further studies. Venema and Grimm (2002), for example, showed that gender differences are higher among Turkish adolescents with immigrant backgrounds than among immigrants from other EU countries. The study investigated whether respondents had experienced situations in the past 12 months in which they were subjectively treated worse than Germans. Items related to the job, but not apprenticeship search, were included (see Table A1 in Appendix A).

Limitations and Research Desiderata

Only discrimination that is interpreted as such was recorded, while discriminatory structures, actions and statements in the search for an apprenticeship place that are not perceived as such cannot be recorded via the construct of perceived discrimination. The extent to which perceived and actual discrimination are related in reality is unclear (Andriessen, 2019; Quillian, 2006; Scherr & Breit, 2020). Similarly, an event may be assessed as discriminatory even though, from a sociological or legal perspective, there is no discrimination⁹. In the case of a rejection received when looking for an apprenticeship position, perceived discrimination can be a cognitive coping strategy (Diehl et al., 2021). Nevertheless, perceived discrimination affects integration outcomes, identification processes, equal opportunities, mental and physical health, and may lead to feelings of exclusion and re-ethnicization (El-Mafaalani & Toprak, 2011; Lee et al., 2016; Lindemann, 2020; Schmengler et al., 2017; Schulz & Leszczensky, 2016; Skrobanek, 2007; SVR, 2018; Verkuyten, 2016; Volpone & Avery, 2013). It should therefore be investigated further.

This study did not investigate the sources or mechanisms of discrimination, and it only regarded discrimination reported by individuals. Moreover, it considered race and gender as the only grounds for discrimination, while other potential discrimination factors such as religion, sexual orientation, health status, or disability were not considered (Andriessen, 2019; Steinmann, 2019). Analyzing racial and gender discrimination separately would allow for testing the ethnic prominence hypothesis, which underscores the important role of ethnicity in discrimination, both historically and in contemporary contexts. It posits that ethnicity is more closely linked to perceptions of threat than gender; as a result, ethnicity is the more dominant characteristic influencing decision-making in hiring evalu-

ations (Levin et al., 2002). However, to test the assumption that female adolescents with immigrant backgrounds prioritize their ethnicity over their gender when evaluating potential discrimination, it is essential to explicitly inquire about gender-based perceived discrimination, which is not included in the NEPS. In addition, the dichotomous categorization of gender is viewed critically in intersectionality research (Kalev & Deutsch, 2017), yet I applied it here because of the lack of other data.

In addition, the origin group was formed based on the statements of the adolescents and their parents about their country of birth. Instead, it would be conceivable to record the influence of ethnic or gender identity on perceived discrimination, which is also not possible with the NEPS. Furthermore, future studies should consider religious markers as stereotypes are associated with headscarves, and the veiling of women is controversially discussed in various contexts (Al-Hassan Diaw, 2021; von Gostomski, 2022). Increased social and media attention for women wearing headscarves could result in increased visibility and more significant potential for discrimination (Karagedik, 2021). Flores (2015) proposes a distinction between race, nationality, and religion for further studies, whereby race refers to the visibility of ethnic origin, while nationality and religion refer more to cultural aspects.

Compared to the United States, where intersectionality models have been extensively researched (see above), there is still a shortage of such studies in the German context. Germany's immigrant history differs significantly from that of North America, and the self-perception of these countries as immigrant societies also varies. Therefore, the transferability of hypotheses and models often developed in the United States is limited, and there is still a lack of theory-building in intersectionality. It is also noteworthy that the distribution of countries of origin has undergone a shift in recent years, with an increased arrival of immigrants in Germany from nations other than those included in the present study (e.g., Syria, Ukraine). The ongoing conflict in Ukraine has the potential to contribute to an increase in discriminatory attitudes toward immigrants from the former Soviet Union in Germany. Both of these phenomena warrant further investigation.

Furthermore, empirical proof for discrimination in the transition to VET is challenging because of the need to consider numerous alternative explanations. For instance, one can attribute gender disparities to differing training preferences (Autor:innengruppe Bildungsberichterstattung, 2020). Specifically, male adolescents with immigrant backgrounds tend to concentrate on sectors that are losing

⁹ For a more in-depth problematization of the measurement of discrimination in the allocation of apprenticeship positions as well as an overview of other measurement methods besides the survey of adolescents on their experiences of discrimination, see Imdorf (2017).

importance, whereas some occupations have a higher concentration of foreign workers (BIBB, 2021; Hunkler, 2016). In addition, differences in recruiter prototypes, which are especially relevant for productivity theory, ethnic boundary maintenance, SMTH, and MII, could vary significantly by sector and occupation. Additionally, the interest among adolescents with immigrant backgrounds in pursuing apprenticeships is comparatively low, particularly among adolescents from Turkey and Arab nations (Beicht & Walden, 2019). Future studies could potentially incorporate items related to the supply-demand relationship, occupational aspirations, preferred training occupation, occupation practices, and knowledge about the school and apprenticeship system to consider these aspects. Such items are available in the NEPS, for example.

Further, it must be taken into account that work- and apprenticeship-related discrimination goes beyond the job search and manifests itself also in job assignments, hiring after training, and supervision during training (Chou & Choi, 2011). It would be valuable to determine whether adolescents with immigrant backgrounds place less significance on discriminatory behaviours from other immigrants, and whether women are less affected by discrimination from other women (Steinmann, 2019). The findings indicate that intersectional theoretical assumptions are relevant to our understanding of perceived discrimination in the search for an apprenticeship position. Further experimental and longitudinal studies are necessary to control for unobserved confounding variables and to investigate the development of perceived discrimination.

The research design of this study can be linked to the discourse around appropriate statistical methods for capturing intersectional disadvantages. The regression analysis methodology is sometimes criticized for underrepresenting intersectional theories (Bowleg, 2008; 2012; Evans et al., 2018). Regression analyses can examine interactions between social categories and assess their significance in predicting the outcome variable. When testing additive or multiplicative models of intersectionality statistically, it is assumed that the interaction of social categories acts in the same way across all trait combinations. This limits potential insights and may be too narrow. Intersectional approaches, however, emphasize that different dimensions of social identity can operate simultaneously and multidirectionally (Bowleg, 2008). Stratified or subgroup analyses are other possible statistical tests that can assess intersectionality by analyzing discrimination separately for different origin groups and then comparing the effects of gender within each origin group. Multilevel analysis of individual heterogeneity and discriminatory accuracy (MAIHDA) allows for examining such effects by grouping social identities into intersectional strata (Evans et al., 2018; 2020; Keller et al., 2023; Silva & Evans, 2020). The MAIHDA approach is

considered promising for quantitative intersectionality research because one can use it to simultaneously model the interactions of various social identities. Other advantages are better scalability for higher dimensions, model parsimony, and precision-weighted estimates of strata with small sample sizes (Keller et al., 2023). At the same time, however, there are some critical perspectives regarding the approach (e.g., Lizotte et al., 2020; Wilkes & Karimi, 2024); but see also Evans et al. (2024).

Conclusion

This study makes several noteworthy contributions to the field of discrimination research in VET. First, it contributes to the limited academic literature on the intersectional interaction of social inequality categories. Second, it differentiates between different origin groups, a significant advantage over previous studies. Third, it looks at the transition to VET, which differs from the transition to the labor market in many ways, including expectations and timing.

Perceptions of discrimination are an important indicator of societal imbalances or racial educational inequality and are considered a central basis for planning antidiscrimination measures (Horr et al., 2020; SVR, 2018). After investigating how the perception of personal racial discrimination differs among adolescents with immigrant backgrounds who are looking for an apprenticeship position, some practical implications can be drawn from the results. The study indicates that one-fifth of Turkish immigrants perceive racial discrimination when seeking an apprenticeship position. Adolescents with a Turkish immigrant background perceive discrimination more often than adolescents with an immigrant background from other countries. Consequently, targeted interventions and policies are necessary to prevent or reduce racial discrimination in the apprenticeship search process. Policymakers and program developers may want to consider the results to design initiatives aimed at reducing discrimination and promoting equal opportunities for adolescents from different immigrant backgrounds.

At the same time, the respective leaders in business and politics can contribute to reducing discrimination in the search for apprenticeship positions by recognizing the value of foreign qualifications, acknowledging the strengths of applicants, and advancing training on antidiscriminatory behavior as well as intercultural competence (Tucci et al., 2014). Training programs and awareness campaigns would be possible starting points to educate stakeholders in VET about the prevalence and impact of intersectional discrimination, considering the simultaneous and multidirectional

operation of social dimensions. In addition to increased sensitivity to the potential of adolescents with an immigrant background, positive experiences should be made public and outsourcing in the selection process should be considered (Imdorf, 2017). These measures can contribute to reducing perceived experiences of racial discrimination and thus improve equality of opportunity in the search for apprenticeship positions.

Furthermore, the study highlights the need for developing gender-sensitive interventions, for which, however, a better understanding of gender differences in perceived racial discrimination would be crucial. This study can provide only first assumptions on the interplay of origin group and gender. Overall, we need theoretical and methodological advancements of the concept of intersectionality if we are to better understand discrimination processes. It is still open to discussion how quantitative analyses do justice to definitions of intersectionality and how they can sufficiently reflect the interplay of different interdependent dimensions of social inequality. Yet, such advancements only address one of the two key elements of intersectionality: Besides the empirical basis, there also exists an *activist* component to intersectionality, which can be achieved only by building coalitions between different groups that strive to resist and change the status quo (Gillborn, 2015).

Electronic Supplementary Material

The electronic supplementary material is available with the online version of the article at <https://doi.org/10.1026/0049-8637/a000289>

ESM 1. Distribution of variables.

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Published online July 31, 2024

Acknowledgments

I want to thank PD Dr. Brigitte Schels for her valuable support and expert advice in preparing this study.

Funding

Open access publication was enabled by University of Bamberg, Leibniz Institute for Educational Trajectories (LIfBi).

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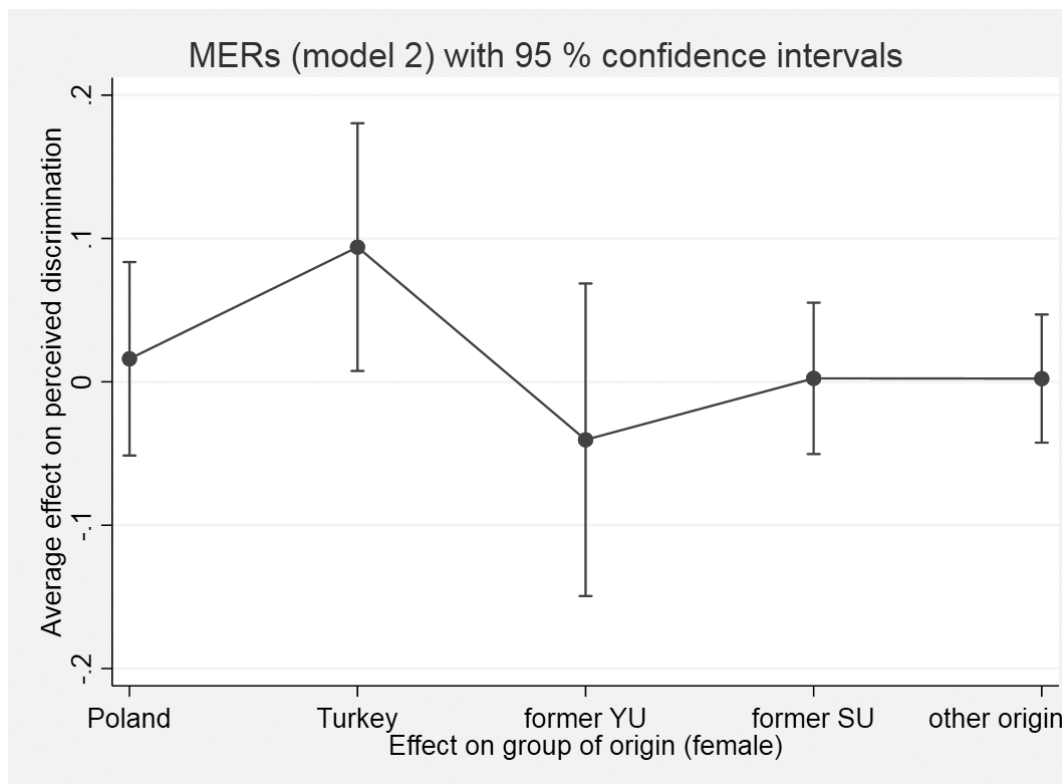
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Appendix A



Notes. N = 1,421. Source: NEPS, SC4:12.0.0.

Figure A1. MERs with 95% confidence intervals.

Table A1. Overview of the literature on perceived gender-based or racial discrimination in work/apprenticeship contexts

Study	Item	Reference of perceived discrimination			
		Work	Apprenticeship	Gender	Race
Beigang et al. (2017)	"In your opinion, on the basis of which actual or ascribed characteristic did this specific discrimination take place? Please check all that apply (multiple answers possible)" (p. 125; translated by author)	X ^a	X ^a	X	X
Blondé et al. (2022)	"Have you personally been a victim of discrimination in the context of your apprenticeship because of your sex?" (n.p.).		X	X	
Chou & Choi (2011)	"The respondent was asked how often he or she had experienced the following: (a) unfairly given jobs no one else wanted, (b) watched more closely at the job than others, (c) boss uses ethnic/racial/sexual slurs, (d) coworkers use ethnic/racial/sexual slurs, (e) ignored/not taken seriously by the boss, and (f) coworker with less experience and qualifications promoted before you" (p. 1,057).	X		X	X
McWirther (1997)	"In my future job, I will probably: a) be treated differently because of my sex, b) experience negative comments about my sex (such as insults or rude jokes), c) have a harder time getting hired than people of the opposite sex, d) experience discrimination because of my sex" (p. 130) (Summary index).	X		X	

Table A1. Overview of the literature on perceived gender-based or racial discrimination in work/apprenticeship contexts (Continued)

Study	Item	Reference of perceived discrimination			
		Work	Apprenticeship	Gender	Race
Salentin (2008)	"Here you can see a list of unpleasant experiences. We would like to know whether these things have happened to you in the last 12 months. We are also interested to know whether you had the impression that this only happened to you because of your origin and that Germans with otherwise equal conditions were not affected" (p. 517; translated by author) (e.g., "Was rejected by an employer when looking for work", "I was refused entry to a disco or restaurant"); for item overview see p. 517.	X ^a			X
Schaafsma (2011)	"To measure perceptions of discrimination, two sets of items were used. One set of items (eight in total) examined experiences with subtle discrimination (e.g., How often do you have the feeling that you have to prove yourself more than usual because of your ethnic background?). Another set of items (five in total) measured people's experiences with blatant discrimination (e.g., How often in your life have people been rude or offensive to you because of your ethnic background?)" (p. 788) (for item overview see p. 795 in Appendix).				X
Skrobanek (2007)	"To record perceived individual discrimination, four variables were taken into account that measure young people's own experiences of discrimination in the areas of school, leisure and institutions", "The construct of perceived fraternal discrimination was recorded via three questions aimed at discrimination against Turks/foreigners as a group as a whole compared to Germans and in the areas of school and the labor market. These indicators were also combined into one scale" (p. 20; translated by author).	X ^a			X
Te Lindert et al. (2008)	"The scale, consisting of 18 items, assesses feelings of not being accepted because of one's ethnicity in the Dutch society in general and in job-related situations (Van Praag, 2003; e.g., 'I am ignored or excluded because I am a foreigner', 'My work experience in Iran is not recognized in the Netherlands', and 'My colleagues treat me unfairly or negatively because I am a foreigner')" (p. 582).	X ^a			X
Traavik (2018)	"The scale, consisting of 18 items, assesses feelings of not being accepted because of one's ethnicity in the Dutch society in general and in job-related situations (Van Praag, 2003; e.g., 'I am ignored or excluded because I am a foreigner', 'My work experience in Iran is not recognized in The Netherlands,' and 'My colleagues treat me unfairly or negatively because I am a foreigner')" (p. 582).	X		X	
Veenstra (2013)	"(1) For unfair reasons, have you ever not been hired for a job? (2) Have you ever been unfairly denied a promotion at work? (3) Do you feel you have been unfairly fired or let go from a job?" (p. 650) ('major experiences of discrimination' index according to Williams et al., 1997).	X ^a			
Venema & Grimm (2002)	Survey on "whether the respondents had experienced situations in the past twelve months in which they were subjectively treated worse than Germans" (p. 72; translated by author) (admission to a restaurant or discotheque, looking for accommodation, transportation or further training, service in shops).	X ^a			X
Yang (2021)	"Over the past 5 years, have you been discriminated against with regard to work-related things, for instance when applying for a job or when being considered for a pay increase or promotion?" (p. 514) (according to the NORC1, 2017).	X			

Notes. ^a Reference to work or apprenticeship only given for some items, ¹ National Opinion Research Center.