Do infrahumanization or affective prejudice drive teacher discrimination against Romani students? A conceptual replication of Bruneau et al. (2020) in Germany

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Abstract

Bruneau's work repeatedly focused on the Roma minority, worldwide, one of the most dehumanized ethnic groups. In a preregistered design, we replicated one of his previous studies (Bruneau et al., 2020) in a different national context (i.e., Germany) in testing the hypotheses that pre-service teachers make biased educational-track recommendations discriminating against Romani students and that infrahumanization drives this behaviour. In line with Bruneau et al.'s work, pre-service teachers judged placing self-identified Romani students into lower educational tracks as more appropriate than self-identified Turkish-origin and German students, despite equal academic performance. Although participants infrahumanized Romani students at greater levels compared to non-Romani students, in contrast to the Bruneau et al.'s study, educational-track recommendations were positively associated with affective prejudice but not with infrahumanization. These findings extend Bruneau's insights on dehumanization, prejudice, and discrimination against people of Romani background, highlighting the role of the social context in which these associations are studied.

Keywords: Dehumanization; Infrahumanization; prejudice; educational recommendation; Romani students; teachers

Public Significance Statement: This study suggests that pre-service teachers in Germany are biased against Romani students because they judged placing self-identified Romani students into lower educational tracks as more appropriate than non-Romani students despite equal competencies. This bias is more common among those pre-service teachers who harbor colder feelings towards Romani students.

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Despite efforts to promote peaceful intergroup relations as an important educational goal after World War II, the German educational system is one of the least inclusive for ethnic minority students in the OECD (Diehl et al., 2016). Germany's selective tracked high school system has been identified as a key structural barrier to school success, with ethnic minority children overrepresented in lower-track schools (Pietsch & Stubbe, 2007). Teacher school track recommendations at the end of elementary school can greatly impact educational opportunities and later life outcomes, foregrounding group hierarchies. Research shows that teachers are ethnically biased in that they are more likely to recommend ethnic minority students to lower-track schools despite equal competencies (Glock et al., 2013, 2015).

While there is research on teacher differential treatments based on ethnicity in Germany, we know little about what drives teacher discrimination against Romani[1] students specifically, one of the most stigmatized ethnic groups, who also attain disproportionally poor educational outcomes across Europe (FRA, 2019). In Germany, there is evidence that anti-Roma prejudice is expressed in public discourse and in the media. For example, data available from the Center for Research on Anti-Semitism (2014) reveal negative perceptions about Romani people in the German population. About one third of the total respondents ($N =$ 14,232) viewed the hypothetical presence of Roma and Sinti in their neighborhood as unpleasant or very unpleasant; compared to other groups like Muslims or asylum seekers, Romani people were ranked as the lowest in terms of likability.

Prior research has focused on stereotypical expectations and prejudice as grounds for recommending ethnic minority students (e.g., pupils of Turkish descent) to lower-track schools (Glock et al., 2015; Sprietsma, 2013). Yet Bruneau and colleagues (2020), building

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[1]In line with recent European Union policy recommendations (European Committee, 2020), we used the term 'individuals with Romani background.' This denomination encompasses different ethnic groups (e.g., Roma, Sinti, Kalè, Manouches, Lovara) who vary in language, religion, and sociocultural characteristics.

on dehumanization insights (Haslam & Loughnan, 2014), theorized that students who are perceived as less human, may be considered less skilled, and thus not able to perform academically. Accordingly, they found that blatant dehumanization but not infrahumanization or affective prejudice predicted discriminatory behaviors (i.e., teacher educational-track bias) against Romani students in Hungary – a country where blatant dehumanization of people with Romani background is commonplace (Kende et al., 2017). In Germany, however, it is non-normative to express overt negative attitudes towards ethnic outgroups (Blinder et al., 2013). This is why we assumed that infrahumanization, a subtler measure of dehumanization, may be associated with teacher differential treatment of Romani students in Germany.

According to Leyens and colleagues (2001), infrahumanization describes the tendency to deny outgroups emotions that distinguish humans from animals (i.e., secondary positive and negative emotions like hope and regret) but not the emotions shared with animals (i.e., primary positive and negative emotions like joy and anger). Hence, infrahumanization reflects people's tendency to reserve full humanness to describe their own group, attributing less complex secondary emotions to the outgroup. Because individuals are largely unaware of the distinction between primary and secondary emotions, infrahumanization may be considered a subtle and indirect expression of dehumanization (Kteily et al., 2016), making it particularly useful to study in cultural contexts where it is non-normative to express overt negative attitudes towards ethnic outgroups. In addition, given that teachers are prone to social desirability distortion, we sought to replicate Bruneau et al.'s work by focusing on infrahumanization instead of blatant dehumanization[2].

The Present Study

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[2] Originally, we also planned to assess blatant dehumanization through the 'Ascent of Man' by Kteiley et al., 2016 as in Bruneau et al.'s study. However, the application for ethic approval was rejected by the ethic committee at our university because this instrument was found to be ethically problematic. As a result, we dropped this measure.

We investigated the extent to which pre-service teachers (i.e., students enrolled in a teacher preparation program) discriminate against Romani students and whether infrahumanization or affective prejudice drives this behaviour using an ecologically valid placement paradigm in our conceptual replication of Bruneau et al.'s (2020). We preregistered our study on aspredicted.org (https://aspredicted.org/LJN_KHQ). Research materials (in German and in English), and data are available on the Open Science framework (OSF), project page (https://osf.io/6k9mr/?view_only=87ccf34af5fb4ef2be837e01c99c7e02). We tested the following predictions:

Hypothesis 1 (H1): Participants recommend self-identified Romani pupils to lower educational tracks more frequently than Turkish-origin and German pupils, despite equal academic performance.

Hypothesis 2 (H2): Infrahumanization is positively associated with recommending self-identified Romani pupils to lower tracks, beyond affective prejudice.

Methods

Participants

Based on statistical power calculations (see preregistration) and due to limited study resources, a stopping rule of 200 participants was applied. Our final sample included 206 pre-service teachers (69% female, 11% self-identified with another ethnic group other than German or mixed identification, e.g., German-Turkish) who studied in the Ruhr Area, Germany. Participants were either enrolled in a primary or secondary teacher education program, and over 90% had previous teaching experience as student teachers in the classroom within the framework of their study program (36% had between 16 to 30 weeks of school experience). We excluded two participants because they filled out the scale too slow (±3 times the median absolute deviation) and two others because they did not provide consent after completing the study. For the remaining participants ($N = 202$), missing values on the main variables were less than one percent.

Measures, Study Design, and Procedure

Infrahumanization was assessed using an emotional attribution task adapted from Kteily et al. (2016), in which participants rated how typical six primary (e.g., happiness, pain) and six secondary emotions (e.g., compassion, optimism) were for the target (i.e., Romani, Turks, and Germans) and three distractor groups (i.e., Dutch, Italians, and Swedes), using a scale from 1 (*not at all typical*) to 10 (*very typical*) scale. Affective Prejudice was assessed using the feeling thermometers (Haddock et al., 1993), which measures how cold/warm participants feel towards the target and the distractor groups, using a 0 (*very cold*) to 10 (*very warm*) scale.

To measure educational-track recommendations, each participant was presented in a randomized order with 22 male student profiles (six self-identified as Romani, six as Turkish-origin and ten for the majority group German), with reported grades in six undefined school subjects and a grand mean of the grades (see Figure 1 for an example). The only difference between the profiles was the name of the student (e.g. Milosh, Serkan, or Tobias) and the ethnic self-identification of the student (as Romani, as Turkish-origin or as German). We added the ethnic self-identification because in Germany it is unlikely to infer a Romani background from the first names. Using a within-subject design, participants rated on a 0 (*not all appropriate*) to 10 (*very appropriate*) scale, how appropriate the three different school tracks (low-, medium-vocational track schools, both allowing an apprenticeship upon graduation, and academic track which ends with a qualification for university entrance) would be for all 22 student profiles.

The experiment was conducted online. Participants were recruited through the university website and on a Facebook page for pre-service teachers attending teacher training in the Ruhr area. Data were collected from November 2020 through January 2021. Each participant consented to the use of their anonymized data and received a ten-Euro voucher.

Ethical approval for this study was obtained from the Ethics Committee at the Institute of Psychology (University of XXX).

Plan of Data Analysis

Before testing H1 and H2, we excluded four extreme German student profiles that were used as distractors (two with very high grades and two very low grades), leaving six student profiles for each ethnic group (see research materials on OSF for the profiles being excluded). To examine H1, we created a composite score by averaging for each of the three different school tracks (i.e., low-, medium-vocational, and academic track schools) participants' recommendations for the six student profiles within each ethnic group (Cronbach's alpha ranged from $\alpha = .89$ to $\alpha = .93$ for low-vocational track; from $\alpha = .66$ to $\alpha = .76$ for medium-vocational; and from $\alpha = .73$ to $\alpha = .79$ for academic track). We then used a 3 (student profiles: self-identified as Romani, Turkish and Germans) x 3 (school-track recommendation: low-, medium-vocational, and academic track) within-subject ANOVA followed by planned comparisons across school tracks with Bonferroni correction (homogeneity of variance (Levene's test) $p = .126$), to establish whether participants overall reported different educational recommendations. To test H2, following Bruneau et al.'s study (2020), we calculated a score which reflects the degree of biased recommendation for each participant, by averaging the tendency to favor placing Romani students over Germans in the low educational track with the tendency to favor placing German over Romani pupils in the high track ($r = .18$, $p < .05$). Infrahumanization was computed as the difference between average ratings for Germans versus people of Romani background on secondary emotions. Similarly, affective prejudice was computed as the difference in warmth felt towards Germans and people of Romani background. We then regressed the degree of biased recommendation on infrahumanization and affective prejudice, controlling for gender and ethnicity.

Results

Table 1 shows descriptives and bivariate correlations for the main study variables. Of note, there was a positive correlation between infrahumanization and affective prejudice (r = .23, p < .05) towards Romani. Infrahumanization towards Romani was strongly positively correlated to infrahumanization towards Turks (r = .71, p < .01). Similarly, measures of affective prejudice against Romani and Turks were strongly positively correlated (r = .68, p < .01). Next, participants infrahumanized Romani at greater levels compared to other non-Romani (Romani: M = 0.45, SD = 1.02; Turks: M = 0.18, SD = 1.01), and reported higher level of affective prejudice towards this group (M = 1.31, SD = 2.75) in comparison to Turks (M = 0.72, SD = 2.82).

Recommendation ratings by school track are presented in Figure 2. The student profile x school track interaction was statically significant, $F(4, 198)$ = 13.53, p <.001, η_p^2= .22). This indicates that participants recommended pupils of different ethnic groups to different educational tracks, despite having the same grade point averages. Supporting H1, planned paired samples t tests indicated that pre-service teachers judged placing self-identified Romani students into the lowest school track (M = 3.71; SD = 2.00) more suitable than self-identified Turkish-origin (M = 3.51, SD = 2.16), $t(201)$ = 3.21, p < .01, d[3] = 0.22, and German students (M = 3.35, SD = 2.10), $t(201)$ = 5.30, p < .001, d = 0.37. We ran additional t tests for the academic school track (i.e., *Gymnasium*), showing the same results: Romani pupils recommendation placement was lower than self-identified Turkish and German students, p < .01 and p < .001 respectively.

Although participants infrahumanized Romani at greater levels compared to other non-Romani people, H2 was not supported. After controlling for gender and ethnicity, multiple regression analysis showed that pre-service teachers' degree of biased recommendation (R^2 = .13) was significantly predicted by affective prejudice (β = .35, p

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[3] Cohen's d for the paired samples t-tests were calculated using the means, standard deviations and the correlations between the two variables tested.

<.001), but not by infrahumanization ($\beta = .02$, $p = .73$). We repeated the regression analysis separately for the tendency to favor placing Romani students over Germans in the low educational track and for the tendency to favor placing German over Romani pupils in the high track, as well as accounting for primary emotion attribution, and excluding participants that self-identified with another ethnic group other than German or reported mixed identification (i.e., eight with Turkish or German-Turkish), but results did not change. In an exploratory analysis, we ran a moderation analysis with dehumanization x affective prejudice on degree of educational-track biased recommendation. However, the results showed that there was no significant interaction effect.

Discussion

In line with Bruneau et al.'s (2020) study, our data indicate that pre-service teachers judged placing self-identified Romani students into lower educational tracks as more appropriate than non-Romani students. These findings are also congruent with other studies conducted in Germany (Glock et al., 2015; Sprietsma, 2013), demonstrating that teachers make ethnically biased educational recommendations. Moreover, our findings expand these studies, suggesting that the degree of biased tracking recommendation is more severe for Romani students than for other historically marginalized ethnic minorities in Germany (e.g., Turkish-origin individuals). Our study and Bruneau et al.'s work were both conducted with pre-service teachers, thus, future research should continue assessing biased tracking recommendation in the natural setting of the school with teachers who already entered the profession.

Unexpectedly and partially in contrast with Bruneau et al.'s work, affective prejudice was found to be related to discrimination such that pre-service teachers who had colder feelings towards Roma were more likely to discriminate against them in educational-track recommendations. One explanation for this discrepancy concerns the role of the context in which these associations were studied. Despite negative perceptions toward Romani people

are widespread across Europe, arguably, Germany is a less openly Romani-hostile context than Hungary and thus dehumanization insights may be less accurate in describing underlying discriminatory behaviors (Enock et al., 2021). It is important to note that in Bruneau et al.'s work blatant dehumanization (but not infrahumanization) predicted teacher biased educational recommendations. In our conceptual replication we could not directly test this finding because the measure of blatant dehumanization raised ethical concerns. Hence, further research is needed to compare whether blatant dehumanization or infrahumanization lead teachers to perceive Romani students as unable to perform well academically and better fit for low-educational school tracks. Future research should also include measures of the acceptability of negative attitudes toward ethnic outgroups (ideally in cross-cultural comparison) to verify the claim that it is less normative to express overtly negative outgroup attitudes in Germany as compared to Hungary.

At the same time, our findings highlight that, although teachers may be perceived as holding overtly egalitarian attitudes towards ethnic minority students, there remains a great deal of variation in prejudicial evaluations of different social groups. Therefore, measuring affective prejudice can be of value for education research. In other words, teacher training institutions need to ensure from the very beginning that teachers acknowledge and reject anti-Roma prejudice. Furthermore, training curricula should include information about the Romani group, their origin, and their persecution in Nazi Germany. Teacher educators should showcase variability and heterogeneity of this group (Matache & Mark, 2014) and challenge common stereotypes about innate deficiencies by presenting counter-stereotypical successful examples of Romani individuals in various fields (Johnson et al., 2013). Finally, it needs to be stressed that strategies for challenging pre-service teachers' prejudicial views are most effective if they are paired with phases of experiential learning and not just theoretical input (Civitillo et al., 2018). Thus, it would be most fruitful if teaching internships that are mandatory during teacher training involve teaching in classes with Romani pupils while close

care needs to be taken in supervising the pre-service teachers before, during, and after their teaching experiences.

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Name of the student: Milosh

Report card class 4 (1st half-year)

Subject A	3		Subject D	2
Subject B	2		Subject E	1
Subject C	2		Subject F	1

Further information regarding the student:

Milosh identifies as Roma. He is very committed to his classmates and always works very well with them.

Grade point average: 1,8

Figure 1. Example profile of a pupil with Romani background. Schools in Germany apply a 1 to 5 point grading system, varying from 1 (excellent) to 5 (insufficient).

Table 1

Descriptives and bivariate correlations between study variables

	1	2	3	4	5
1. Infrahumanization (Romani)	-				
2. Affective prejudice (Romani)	.23*	-			
3. Infrahumanization (Turks)	.71**	.14*	-		
4. Affective prejudice (Turks)	.17*	.68**	.27*	-	
5. Education-track recommendation	.11	.36**	.05	.26**	-
M	0.45	1.31	0.18	0.72	0.37
SD	1.02	2.75	1.01	2.82	0.72
Skewness	0.35	0.39	0.22	0.31	0.71

Note. $N = 202$. All measures represent relative values. Educational-track recommendation refers to Romani students in the low-vocational track. $^*p < .05$, $^{**}p < .01$.
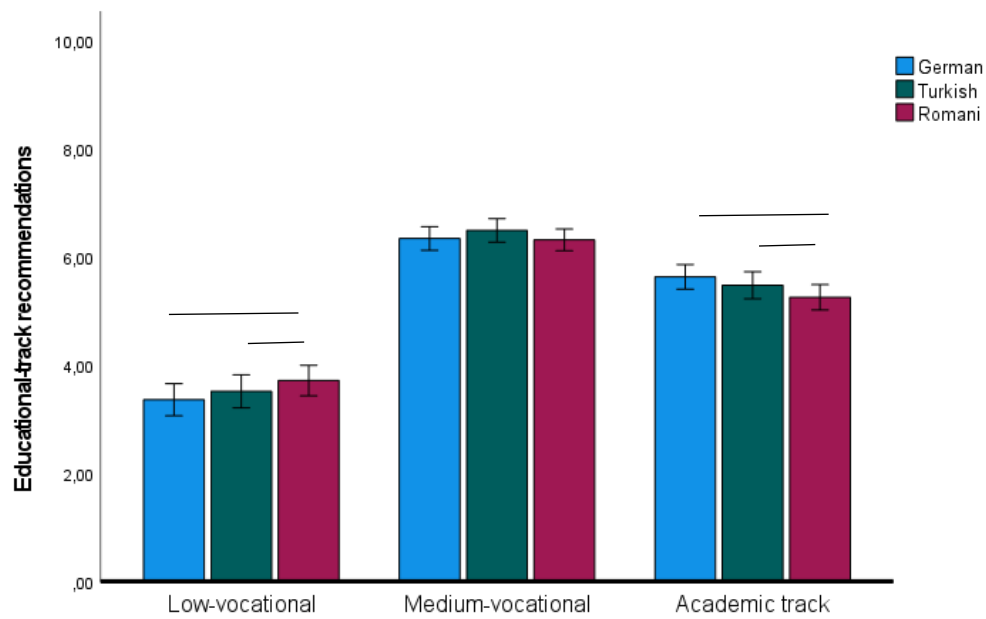
Figure 2. Recommendation ratings by school track for self-identified Romani, Turkish-origin, and German pupils. Vertical bars represent standard errors of the means. Horizontal bars represent planned paired t test. $^{**}p < .01$, $^{***}p < .001$