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**A positive bias towards negatively stereotyped students?  
Teacher students' feedback to and judgments of students with  
a Turkish vs. a German name**

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## Summary

In psychological research on stereotypes, a seemingly paradox finding has demonstrated the complexity of their effects: Under specific circumstances, people judge members of negatively stereotyped groups more positively than others, and their communications with them can be overly positive (e.g., Biernat & Vescio, 2002; Crosby & Monin, 2007). Two central theoretical perspectives have been put forward to explain this finding, focusing on a cognitive-perceptual and motivational explanation for positive biases, respectively. The cognitive-perceptual perspective argues that positive biases emerge when members of a negatively stereotyped group are compared to a lower standard than others (*shifting standards*, e.g., Biernat & Manis, 1994). As a result, their work can more easily surpass the standard of a good performance, leading to more positive judgments. Alternatively, positive biases may result from a concern to be or appear to be prejudiced towards members of a negatively stereotyped group (e.g., Harber, 1998). The motivational perspective argues that this concern can lead to an overcorrection in one's behavior so that it becomes overly positive in interactions with members of negatively stereotyped groups (*positive feedback bias*; Harber, 1998; *failure-to-warn phenomenon*; Crosby & Monin, 2007).

The aim of the present dissertation is to focus on positive biases in the German school context and test whether (1) a positive bias in judgments and communications of teacher students exists towards students with Turkish names, and (2) whether either of two major theoretical perspectives could adequately predict under which conditions it occurs. To address these aims, four studies were conducted which focused on only one of the two perspective at a time (Studies 1 and 3) or compared the predictive power of the two perspectives in a single study design (Studies 2 and 4). As part of these studies, we tested for the presence of a positive bias in non-communicated judgments of as well as communications with students (advice, feedback) and required evaluations regarding various characteristics of students

(academic track suitability, different aspects of writing skills, suitability of a proposed course load in upper secondary school).

In Study 1, we used a behavioral checklist design to examine how many positive achievement-related behaviors  $n = 280$  teacher students required in order to recommend a 4<sup>th</sup> grade student to the academic track. In a between-subjects design, we varied the origin (German vs. Turkish) and gender (male vs. female) of the student's name. Moreover, the judgment standard was manipulated between subjects, that is, whether participants were asked to indicate when they would suspect (minimum) vs. be certain of (confirmatory) the student's suitability for the academic track. Based on the Shifting Standards Model (Biernat & Manis, 1994), we expected that participants would require fewer behaviors for the student with a Turkish (vs. German) and male (vs. female) name when a minimum judgment standard was invoked (positive bias), but more behaviors when a confirmatory judgment standard was invoked (negative bias). In line with these predictions, we found that teacher students showed a positive bias towards students with a Turkish name under a minimum judgment standard and tended to show a negative bias under a confirmatory judgment standard. However, no effect of students' gender was observed. Therefore, this study was the first to show that the judgment standard influences the bias in judgments made about Turkish-German students.

In Study 2, we examined the evaluations of supposed student essays by  $n = 132$  teacher students. In a 2 (evaluation condition: non-communicated judgments vs. feedback; between-subjects) x 2 (origin of name: Turkish vs. German; within subjects) design, teacher students read two target essays supposedly written by two male students and either provided feedback or a non-communicated judgment. In line with the predictions of the motivational perspective as well as prior research (e.g., Harber, 1998), teacher students showed a positive feedback bias towards students with a Turkish name when judging aspects of the essay that related to the quality of content, but not those that related to the mechanics of writing. Unexpectedly, the positive bias also extended to non-communicated judgments. This latter

finding is more in line with the cognitive-perceptual perspective, though other patterns of results did not suggest this mechanism. Specifically, participants with higher self-esteem showed the positive bias to a lesser extent in their open-text responses. In sum, this study contributed to existing research by demonstrating a positive bias in feedback given to and judgments of Turkish-German adolescents by teacher students for the first time. Moreover, it demonstrates that further research is needed to understand which mechanism may drive such a positive bias.

Study 3 represented a conceptual replication of two studies originally showing the failure-to-warn phenomenon based on the motivational perspective (Crosby & Monin, 2007). In it, we examined whether  $n = 174$  teacher students would warn a student who proposed an overly ambitious course plan for upper secondary school to a lesser extent when the student had a Turkish vs. German name. In this situation, (rightfully) warning a student may signal low expectations and is therefore expected to be avoided by teacher students due to a concern about prejudice. However, our analyses showed that teacher students' advice was equivalent for students with Turkish and German names, and this finding did not vary depending on participants' self-esteem or contingency of self-esteem on other's approval. Therefore, we did not replicate the failure-to-warn phenomenon in the German school context.

Lastly, Study 4 again examined feedback given by  $n = 319$  teacher students in a 2 (origin of students' name: Turkish vs. German) x 2 (response scale format: objective vs. subjective) x 2 (cognitive load: yes vs. no) between-subjects design. Moreover, we examined both content- and mechanics-related feedback and measured participants' self-esteem. By including multiple factors in the study design for which the two theoretical perspectives imply different predictions, this study was meant to provide a better understanding of the underlying mechanism. However, we did not find evidence of a positive bias in feedback given to students with a Turkish name in this study. Rather, participants' feedback to students with a Turkish vs. German name did not differ, and the moderators included in the design did not

change these results. Overall, Study 4 did not replicate the results from Study 2 and did not provide further indication as to the mechanism underlying positive biases when they do exist.

Overall, the four studies paint an inconsistent picture of positive biases in Germany. Whereas we find support for both the cognitive-perceptual mechanism (Study 1) and the motivational mechanism (Study 2), the pattern of results is not firmly in support of one perspective across studies. Particularly the lack of positive biases in Studies 3 and 4 speak against both a motivational and a cognitive-perceptual mechanism. On the one hand, these inconsistent results could be explained by the absence of necessary, not yet articulated conditions for positive biases that are present in the U.S., but absent in Germany.

Alternatively, differences in the mode and time of data collection may explain why the results diverge between the studies presented in this dissertation. Importantly, the inconsistency of the results highlights the usefulness of further specification of both theoretical perspectives, particularly with regards to the generalizability to sociocultural contexts outside the U.S. and the integration of different theoretical perspectives on the same phenomenon. While the work presented here cannot provide a conclusive answer to the question whether positive biases exist in Germany, its findings can contribute to a better understanding of boundary conditions of positive biases.

## Zusammenfassung

In psychologischer Forschung betont ein scheinbar paradoxer Befund die Komplexität der Effekte von Stereotypen: Unter bestimmten Bedingungen beurteilen Menschen Mitglieder negativ stereotypisierter Gruppen positiver als andere und sind in ihrer Kommunikation mit ihnen übermäßig positiv (z.B. Biernat & Vescio, 2002; Crosby & Monin, 2007). Zwei zentrale theoretische Perspektiven thematisieren diesen Befund und fokussieren dabei zum einen eine kognitiv-wahrnehmungsbasierte Erklärung und zum anderen eine motivationale Erklärung dafür, dass positive Verzerrungen auftreten. Die kognitiv-wahrnehmungsbasierte Perspektive argumentiert, dass eine positive Verzerrung dann auftritt, wenn Mitglieder einer negativ stereotypisierten Gruppe mit einem niedrigeren Standard verglichen werden als andere (*shifting standards*, z.B. Biernat & Manis, 1994). Deswegen kann ihre Leistung schneller den Standard für eine gute Arbeit erreichen, was mit positiveren Beurteilungen einhergeht. Eine alternative Erklärung für positive Verzerrungen dagegen ist die Sorge, vorurteilsbehaftet gegenüber Mitgliedern negativ stereotypisierter Gruppen zu sein oder so zu wirken (z.B. Harber, 1998). Diese motivationale Perspektive argumentiert, dass diese Sorge zu einer Überkorrektur des eigenen Verhaltens in Interaktionen mit Mitgliedern negativ stereotypisierter Gruppen führen kann (*positive feedback bias*; Harber, 1998; *failure-to-warn phenomenon*; Crosby & Monin, 2007).

Das Ziel der vorliegenden Dissertation ist es, sich auf positive Verzerrungen im deutschen Schulkontext zu fokussieren und zu testen, (1) ob eine positive Verzerrung gegenüber Schüler\*innen mit türkischen Namen in den Beurteilungen und der Kommunikation von Lehramtsstudierenden vorkommt und (2) ob die zwei zentralen theoretischen Perspektiven die Bedingungen, unter denen sie vorkommen, präzise vorhersagen können. Um die Forschungsziele zu erreichen, wurden insgesamt vier Studien durchgeführt, die sich auf eine der beiden Perspektiven fokussieren (Studien 1 und 3) oder den Vergleich der Vorhersagekraft der Perspektiven in einem einzelnen Studiendesign



ermöglichen (Studien 2 und 4). Im Rahmen dieser Studien wurde umfangreich getestet, ob positive Verzerrungen in nicht-kommunizierten Beurteilungen sowie in Kommunikationen mit Schüler\*innen (Ratschläge, Feedback) vorkommen und zudem betrachtet, inwiefern sie in Bezug auf verschiedene Charakteristika von Schüler\*innen vorliegen (Eignung für das Gymnasium, verschiedene Aspekte von Schreibfähigkeiten, Angemessenheit eines vorgeschlagenen Stundenplans für die Oberstufe).

In Studie 1 haben wir mithilfe eines *Behavioral-checklist*-Designs untersucht, wie viele positive, leistungsförderliche Verhaltensweisen  $n = 280$  Lehramtsstudierende von einer\*m Schüler\*in der 4. Klasse erwarteten, um eine Gymnasialempfehlung auszusprechen. In einem between-subjects Design variierten wir den Name der\*des Schüler\*in (Geschlecht: männlich vs. Weiblich; Herkunft: deutsch vs. Türkisch). Darüber hinaus wurde der Beurteilungsstandard manipuliert, das heißt, dass Lehramtsstudierende entweder angeben, ab wann sie eine Gymnasialeignung vermuten würden (minimal) oder ab wann sie sich darüber sicher sein würden (konfirmatorisch). Basierend auf dem Shifting Standards Model (Biernat & Manis, 1994) erwarteten wir, dass Teilnehmende eine geringere Anzahl leistungsförderlicher Verhaltensweisen bei einer\*m Schüler\*in mit türkischem (vs. deutschem) und männlichem (vs. weiblichem) Namen erwarten würden, wenn ein minimaler Standard induziert wurde (positive Verzerrung). Dagegen sollten Teilnehmende bei einem konfirmatorischen Standard mehr Beweise für eine Gymnasialeignung dieser Schüler\*innen verlangen (negative Verzerrung). Im Einklang mit diesen Hypothesen wurde deutlich, dass Lehramtsstudierende unter einem minimalen Standard eine positive Verzerrung gegenüber Schüler\*innen mit türkischen Namen zeigten, bei einem konfirmatorischen Standard allerdings eine Tendenz zu einer negativen Verzerrung zeigten. Entgegen den Erwartungen wurde kein Effekt des Geschlechts beobachtet. Damit war dies die erste Studie, die den Einfluss von Beurteilungsstandards auf Verzerrungen in Beurteilungen von deutsch-türkischen Schüler\*innen gezeigt hat.

In Studie 2 untersuchten wir die Bewertungen von vermeintlichen Schüleraufsätzen durch  $n = 132$  Lehramtsstudierende. In einem 2 (Bewertungsbedingung: nicht kommunizierte Beurteilung vs. Feedback; between subjects) x 2 (Herkunft des Namens: deutsch vs. türkisch, within subjects) Design lasen Lehramtsstudierende jeweils zwei vorgebliche Aufsätze von männlichen Schülern und gaben entweder schriftliches Feedback oder eine Beurteilung, die nicht an den Schüler kommuniziert werden sollte. In Übereinstimmung mit den Vorhersagen der motivationalen Perspektive und der bestehenden Forschung (z.B. Harber, 1998) zeigten Lehramtsstudierende einen positiven Feedback-Bias gegenüber dem Schüler mit türkischem Namen bei den Aspekten, die sich auf den Inhalt des Aufsatzes bezogen, und gleichzeitig nicht bei den Aspekten, die sich auf die sprachlich-formelle Qualität bezogen. Entgegen den Erwartungen zeigte sich diese positive Verzerrung auch bei nicht-kommunizierten Beurteilungen. Dieser Befund stimmt stärker mit den Vorhersagen der kognitiv-wahrnehmungsbasierten Perspektive überein, wobei andere Ergebnismuster diesen Mechanismus nicht nahelegen. Gegen einen kognitiv-wahrnehmungsbasierten Mechanismus sprach insbesondere, dass Teilnehmende mit höherem Selbstwert den positiven Bias in ihren Texten in einem geringeren Ausmaß zeigten. Damit zeigt diese Studie zum ersten Mal eine positive Verzerrung in Feedback und Beurteilungen von Lehramtsstudierenden gegenüber türkisch-deutschen Jugendlichen. Darüber hinaus zeigt sie auf, dass weitere Forschung notwendig ist, um zu verstehen, welcher Mechanismus solchen positiven Verzerrungen unterliegt.

Studie 3 stellte eine konzeptuelle Replikation zweier Studien dar, die zuerst das failure-to-warn Phänomen basierend auf der motivationalen Perspektive zeigten (Crosby & Monin, 2007). In dieser Studie untersuchten wir, ob  $n = 174$  Lehramtsstudierende einen Schüler weniger nachdrücklich vor einen übermäßig anspruchsvollen Stundenplan für die Oberstufe warnen würden, wenn dieser Schüler einen türkischen (vs. deutschen) Namen hatte. In einer solchen Situation könnte eine (korrekte) Warnung niedrige Erwartungen

signalisieren, weswegen angenommen wurde, dass Lehramtsstudierende aufgrund der Sorge, vorurteilsbehaftet zu sein oder zu wirken, eine solche Warnung weniger deutlich aussprechen. Allerdings zeigten unsere Analysen, dass Lehramtsstudierende Schülern mit türkischen und deutschen Namen dieselben Ratschläge gaben und dieser Befund sich auch nicht basierend auf dem Selbstwert oder der Selbstwertkontingenz in Bezug auf die Anerkennung durch andere veränderte. Damit konnten wir das failure-to-warn Phänomen im deutschen Schulkontext nicht replizieren.

Abschließend untersuchte Studie 4 wieder das Feedback von  $n = 319$  Lehramtsstudierenden in einem 2 (Herkunft des Namens: deutsch vs. türkisch) x 2 (Art der Antwortskala: objektiv vs. subjektiv) x 2 (kognitiver Load: ja vs. nein) between-subjects Design. Darüber hinaus wurde sowohl inhaltsbezogenes als auch sprachlich-formelles Feedback erfasst und anschließend der Selbstwert der Teilnehmenden gemessen. Indem mehrere Faktoren in das Studiendesign einbezogen wurden, für die die beiden theoretischen Perspektiven unterschiedliche Vorhersagen implizieren, sollte es diese Studie ermöglichen, den zugrundeliegenden Mechanismus besser zu verstehen. Allerdings zeigte sich in den Daten keine positive Verzerrung im Feedback an Schüler mit einem türkischen Namen. Stattdessen unterschied sich das Feedback der Teilnehmenden an Schüler mit türkischem (vs. deutschem) Namen nicht und die untersuchten Moderatoren hatten keinen Einfluss auf dieses Ergebnis. Insgesamt replizierte Studie 4 die Ergebnisse von Studie 2 nicht und konnte keine weitere Indikation für einen zugrundeliegenden Mechanismus nahelegen.

Gemeinsam betrachtet zeichnet sich in den vier Studien kein konsistentes Bild von positiven Verzerrungen in Deutschland ab. Während es Hinweise auf positive Verzerrungen aufgrund eines kognitiv-wahrnehmungsbasierten (Studie 1) und motivationalen (Studie 2) Mechanismus gibt, wird keine der beiden Perspektiven über alle Studien hinweg durch die Ergebnisse unterstützt. Insbesondere die fehlenden positiven Verzerrungen in den Studien 3 und 4 sprechen gegen beide Mechanismen. Diese Ergebnisse könnten zum einem dadurch

erklärt werden, dass in den USA für positive Verzerrungen notwendige, aber noch nicht explizit benannte Bedingungen vorhanden sind, die in Deutschland nicht vorliegen. Zum anderen könnten Unterschiede in dem Medium und dem Zeitpunkt der Datenerhebungen Unterschiede zwischen den vier Studien in dieser Dissertation erklären. Die Inkonsistenz dieser Ergebnisse zeigt auf, wie bedeutsam die weitere Spezifizierung der beiden theoretischen Perspektiven ist und dies insbesondere in Bezug auf die Generalisierbarkeit auf soziokulturelle Kontexte außerhalb der USA und die Integration verschiedener theoretischer Perspektiven auf dasselbe Phänomen. Auch wenn die hier vorgestellte Arbeit keine abschließende Antwort auf die Frage geben kann, ob positive Verzerrungen in Deutschland existieren, können die Befunde zu einem besseren Verständnis von den Rahmenbedingungen für positive Verzerrungen beitragen.

## **I. Theoretical Background**

## **Introduction**

In a complex world, group-based expectations can be powerful tools to simplify information (Allport, 1954; Macrae & Bodenhausen, 2000; Macrae et al., 1994). Psychological research has consistently unearthed the ways in which such stereotypes are themselves complex and have diverse effects on emotion and behavior. Of course, the exact content of stereotypes varies, that is, whether a group is perceived as smart, greedy, virtuous, or as possessing any other characteristic. But the complexity does not stop there as stereotypes about many groups have been found to combine both positive and negative aspects (Fiske et al., 2002), and that this complexity can lead to a variety of group-based emotions (Cuddy et al., 2007) and behavior (Gaertner & Dovidio, 1986, Trawalter et al., 2009), which can facilitate or hinder cooperation. The work presented in this dissertation highlights this complexity as well by addressing a seemingly paradox finding: Under specific circumstances, negative stereotypes can lead to more positive judgments of and behavior towards members of negatively stereotyped groups. Importantly, such positive biases are not as beneficial as they may seem on the surface: They can mask and maintain existing stereotypes (Biernat, 2012) and interfere with authentic interactions across group lines (Shelton, 2003; Shelton et al., 2006) and thus warrant close consideration.

The first aim of the research presented here was to examine whether positive biases in the judgments of as well as direct communications with members of a negatively stereotyped group (Turkish Germans) would emerge in Germany. The focus of this work is the school context, that is, judgments of and communications to students by prospective teachers. Examining positive biases in this context is especially vital, as children and adolescents spend a large portion of their formative years in classrooms and their educational experience and success have important consequences throughout their lives. Academic success directly determines the choices students in Germany have for further education and is associated with consequences for a person's finances, health, and well-being later in life (Fischbach et al.,

2013). Positive biases may inhibit students' academic development because they may miss out on important challenges, overestimate their own abilities, or trust their teachers to a lesser extent (Kessels & Nishen, in press). Teachers' communications may be particularly influential in this regard as feedback is considered an essential tool for students' learning (Hattie & Timperley, 2007; Müller & Ditton, 2014). Overly positive feedback could deprive students of beneficial aspects of feedback (e.g., conceal gaps in students' competencies), but also be actively detrimental (e.g., communicate low expectations; Kessels & Nishen, in press). If there are persistent differences in teachers' communications to and judgments of students from different ethnic groups, this could maintain existing educational inequalities. Though positive biases in teacher-student relationships may be highly consequential, relatively few studies have deliberately examined them (for an exception, see Harber et al., 2012; Holder & Kessels, 2017). To address this gap, we examined teacher students' judgments regarding students' suitability for the academic track (Study 1), non-communicated judgments of as well as feedback on supposed students' essays (Study 2 and 4), and advice on a student's course load in upper secondary school (Study 3). While all four studies examine positive biases towards Turkish German students, the focus on different dependent variables allows us to test a broader range of conditions under which positive biases occur.

The second aim of this work was to contribute to the further development of theories on the origins of positive biases towards members of negatively stereotyped groups. To this end, the four studies in this dissertation were based on two central theoretical perspectives: One predicting positive biases due to the comparison to a lower standard (cognitive-perceptual mechanism; e.g., Biernat & Manis, 1994) and one predicting these biases due to the concern to be or appear to be prejudiced (motivational mechanism; e.g., Harber, 1998). This distinction is significant because the underlying mechanism indicates, among others, which groups as well as which group members might be exposed to a positive bias and which people are expected to show a positive bias. Together, the four studies can provide an

indication as to which mechanism might be at play in a given situation. In terms of this second aim, Study 1 relates only to the cognitive-perceptual perspective because it does not consider an interaction with the student, whereas Study 3 is focused on positive biases predicted by the motivational perspective. In turn, Studies 2 and 4 provide an opportunity to compare predictions of either perspective with the observed pattern of results. Particularly Study 4 was designed with this comparison in mind, measuring and manipulating multiple potential moderators. Table 1 provides an initial overview over the studies in this dissertation and their relation to the two central theoretical perspectives.

In the following, I will first provide some background information to better understand the situation of ethnic minority (vs. majority) students. Though the present dissertation is

Table 1

*Initial Overview Over the Four Studies*

	Manuscript 1	Manuscript 2	Manuscript 3	
	Study 1	Study 2	Study 3 <sup>a</sup>	Study 4 <sup>a</sup>
Type of evaluation	Non-communicated judgments <sup>b</sup>	Non-communicated judgments <sup>b</sup> , feedback	Advice	Feedback
Object of evaluation	Suitability to the academic track	Writing skills	Proposed course load in 11 <sup>th</sup> and 12 <sup>th</sup> grade level	Writing skills
Test of cognitive-perceptual perspective?	yes	yes	no	yes
Test of motivational perspective?	no	yes	yes	yes

*Note.* <sup>a</sup>The studies referred to as Studies 3 and 4 within the theoretical framework and discussion are referred to as Study 1 and 2, respectively, within the third manuscript. <sup>b</sup> I refer to judgments as *non-communicated* if they are not disclosed to the student to highlight this important difference to feedback and advice.



focused on positive biases, these biases cannot be interpreted without the context of negative stereotypes, performance differences, and negative biases towards members of specific ethnic minorities. After defining the fundamental constructs of stereotypes and biases for this dissertation, I will therefore summarize this context. Because both theoretical perspectives as well as the vast majority of empirical work originated in the United States, I will elaborate on the situation in the U.S. as well as Germany. Subsequently, I will briefly introduce seemingly contradictory research on positive biases towards members of negatively stereotyped groups. I will then discuss both the cognitive-perceptual and the motivational perspective on such biases in detail following Kessels and Nishen (in press), elaborating on important empirical findings. Following this, I will compare the two perspectives, highlighting four key aspects in which their predictions differ. After laying this theoretical groundwork, I will elaborate on differences as well as similarities of the US-American and German sociocultural contexts on those aspects that may be relevant to the two perspectives presented beforehand. I will then close this chapter with an overview over the four studies in this dissertation.

### **The Situation of Negatively Stereotyped Ethnic Minority Students in School**

In many countries, ethnic and cultural minorities are numerous and diverse in their origins. For example, the parents and grandparents of people in Germany come from over 200 different countries (Statistisches Bundesamt, 2022a). As a result, the term ethnic minority encompasses groups with very different past experiences (e.g., of migration) and differing levels of visibility. Educational research shows that this heterogeneity is meaningful, for example, in that the performance of ethnic minority as compared to ethnic majority students oftentimes differs between different ethnic minority groups based on their specific circumstances (e.g., Müller & Stanat, 2006; Stanat & Edele, 2011). I will focus my review of the literature on Black students in the U.S. and students with a Turkish migration background in Germany because biases towards these specific groups are at the center of this dissertation.

As a basis for the work presented here, I follow Hilton and von Hippel (1996) in defining stereotypes as “beliefs about the characteristics, attributes, and behaviors of members of certain groups” (p. 240). Because stereotypes entail expectations about the characteristics of group members (American Psychological Association, 2022; Pendry, 2014), stereotypes can lead to biases in behaviors and judgments. I define biases as differences in the judgments of members of two groups when the object of judgment (e.g., performance) is equivalent for the two targets. For the purposes of this dissertation, I understand negative biases to mean that members of a negatively stereotyped group are judged *more negatively* than members of a societal reference group (e.g., an ethnic majority, middle class; Cuddy et al., 2009; Fiske et al., 2002). I refer to members of societal reference groups as non-stereotyped in this dissertation to highlight that these groups are perceived as a norm from which negatively stereotyped groups deviate<sup>1</sup>. At the center of this dissertation are positive biases, which are observed when a member of a negatively stereotyped group is judged *more positively* than a member of a non-stereotyped group.

In the following, I will briefly summarize research on general differences in academic achievement between ethnic minority and ethnic majority students as well as research pointing specifically to the possibility of a negative bias due to negative stereotypes. I will first describe the situation of Black students in the U.S., before focusing on the situation of students with a Turkish migration background in Germany. Notably, research in other countries shows similar patterns in achievement and biases towards ethnic minority students (e.g., Malouff & Thorsteinsson, 2016; OECD, 2019).

### ***The Situation in the United States***

In the U.S., it is common to differentiate people into racial-ethnic groups based on self-identification. For example, the U.S. Census Bureau currently uses seven options for

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<sup>1</sup> In absolute terms, societal reference groups are positively stereotyped in Western societies (i.e., high on warmth and competence; Cuddy et al., 2009; Fiske et al., 2002).

racial-ethnic self-classification, among them “Black or African American” and “White” (Jensen et al., 2021)<sup>2</sup>. Negative attitudes and stereotypes of White Americans towards Black Americans in particular have been the subject of research (e.g., Fiske et al., 2002; Gaertner & Dovidio, 1986; Starck et al., 2020). Overall, attitudes towards Black Americans have been found to be negative, both when measured implicitly and explicitly, and this finding extends to teachers’ attitudes (Chin et al., 2020; Starck et al., 2020). With regards to the content of stereotypes, Black Americans are stereotyped as low in competence and warmth, especially when they are poor (Fiske et al., 2002). Moreover, Black as compared to White Americans have long been stereotyped as less intelligent and lazier (for an overview, see Bobo, 2001). Overall, Black people in the U.S. are stereotyped as being less competent, though more recent research has focused largely on the negativity of attitudes rather than the content of stereotypes.

**Differences in Academic Achievement.** In the U.S., Black students are consistently found to have lower grades (National Center for Education Statistics, 2020a) and lower competencies in reading and mathematics (Lee, Grigg & Dion, 2007; Lee, Grigg & Donahue, 2007). Though gaps have narrowed since the 1970s (National Center for Education Statistics, 2020b, 2020c), they remain substantial. For example, at ages nine as well as 13, Black students have lower reading and mathematics competencies, and the gap is the same for both male and female students as well as for students of different socioeconomic status (Lee, Grigg & Dion, 2007; Lee, Grigg & Donahue, 2007; National Center for Education Statistics, 2020b, 2020c). In high school, Black students are less likely to take midlevel or rigorous courses preparing for tertiary education, and have lower GPAs (National Center for Education Statistics, 2020a; Triplett & Ford, 2019). This difference also emerges in the ability tests that are part and parcel of college applications in the U.S.: Black students consistently score lower

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<sup>2</sup> In the current US-American context, race is understood as a social construct referring to “physical differences that groups and cultures consider socially significant” (American Psychological Association, 2020, p. 142).

on the two most widely used tests, the SAT and the ACT (College Board, 2021; Triplett & Ford, 2019). These differences are reduced but still substantial once indicators of socioeconomic status and English language learner status are included (Triplett & Ford, 2019). Overall, there exist persistent performance differences between Black and White students in the U.S., which can only in part be explained by socioeconomic differences.

**Negative Biases Against Ethnic Minority Students.** One way to explain persistent differences in the grades of Black students as compared to White students is the influence of negative stereotypes (Jussim & Harber, 2005). This idea has often been tested in experimental and field settings by comparing teachers' judgments of or expectations for Black (vs. White) students based on identical information (Anderson-Clark et al., 2008; McKown & Weinstein, 2008; Parks & Kennedy, 2007; Quinn, 2020; Ready & Wright, 2011; for a meta-analysis, see Tenenbaum & Ruck, 2007). For example, teachers evaluated an essay more negatively when supposedly written by a Black as compared to a White student unless they were provided with clearly defined evaluation criteria (Quinn, 2020). In a field study, elementary school teachers expected Black students to do worse in reading as well as math than their White classmates even after prior achievement was controlled for, a finding that was replicated in a second dataset (McKown & Weinstein, 2008). Moreover, a recent field study found that teachers not only underestimate competencies, but also general executive functions of their Black students (Garcia et al., 2019). Overall, then, Black children have been shown to be underestimated by teachers and teacher students and to be evaluated more negatively than their White peers even when their achievement was controlled for statistically or experimentally.

### ***The Situation in Germany***

In Germany, the construct of "migration background" rather than racial-ethnic identity is used in educational research, though this construct has been criticized for both analytical and normative reasons (Fachkommission Integrationsfähigkeit, 2021; Will, 2019). Most commonly, people are defined as having a migration background when either they themselves

or at least one parent has not been born as a German citizen (Statistisches Bundesamt, 2022b). Next to people from the former USSR, people with a Turkish migration background make up the largest percentage of those with a migration background in Germany (12%; Statistisches Bundesamt, 2022a). Various studies have shown that people with a Turkish migration background are negatively stereotyped in Germany (Asbrock, 2010; Bonefeld & Karst, 2020; Eckes, 2002; Froehlich et al., 2016; Froehlich & Schulte, 2019; Kahraman & Knoblich, 2000; Lorenz, 2021). For example, people in Germany judge Turkish people to be lower in both competence and warmth than German people (Asbrock, 2010; Eckes, 2002). Importantly, teacher students are also aware of these stereotypes. When they were asked to name characteristics or behaviors typical of either German or Turkish people in Germany, teacher students generated more negative as well as fewer positive performance-related characteristics about Turkish as compared to German people (Bonefeld & Karst, 2020). In the following, I summarize research on the current educational situation of students with a migration background in Germany generally and specifically with a Turkish migration background where possible.

**Differences in Academic Achievement.** Large-scale studies have consistently shown that students with a migration background demonstrate lower competencies than students without a migration background (Bonsen et al., 2008; Reiss et al., 2019; Walter & Taskinen, 2008; Wendt & Schwippert, 2017) and that this difference is especially large in Germany as compared to other countries (Bonsen et al., 2008; Reiss et al., 2019; Stanat & Edele, 2011). In fourth grade, students whose parents were born outside of Germany are approximately one school year behind in terms of their reading competencies compared to their peers whose parents were born in Germany (Wendt & Schwippert, 2017), and this effect is of a similar magnitude for competencies in mathematics and natural sciences (Bonsen et al., 2008).

Analyses of data from the Programme for International Student Assessment have demonstrated a similar gap among 15-year-olds in Germany for both reading and mathematics

competencies (Müller & Stanat, 2006; Reiss et al., 2019; Walter & Taskinen, 2008). This gap is especially large between students with a Turkish migration background and students without a migration background (Müller & Stanat, 2006). Moreover, students with a migration background are underrepresented at the highest track of Germany's between-school tracking system (Kristen & Dollmann, 2010; Walter & Taskinen, 2008). Importantly, students with a migration background have the same odds of attending the academic track as students without a migration background when controlling for socioeconomic status (including indicators of parents' education), language spoken at home, and competencies (Ditton et al., 2005; Gresch, 2012; Kristen, 2006; Kristen & Dollmann, 2010; Müller & Stanat, 2006; Schneider, 2011; Tiedemann & Billmann-Mahecha, 2007; Walter & Taskinen, 2008). However, multiple studies have found that differences in reading and mathematics competencies remain substantial even when a combination of factors such as cognitive abilities, socioeconomic status, language spoken at home, age at time of immigration and motivation are controlled for (Bonsen et al., 2008; Müller & Stanat, 2006; Walter & Taskinen, 2008; Wendt & Schwippert, 2017). Overall, students with a migration background, and especially those with a Turkish migration background, consistently underperform in Germany, and demographic differences insufficiently explain the gap between them and students without a migration background.

**Negative Biases Against Ethnic Minority Students.** In addition to differences in students' competencies in field studies, teachers' judgments of students have also been examined in the lab. Here, negative biases in teachers' judgments of students with Turkish (vs. German) names with identical performance have been observed and these findings can be explained by the influence of negative stereotypes (Bonefeld & Dickhäuser, 2018; Bonefeld et al., 2017, 2020, 2022; Glock, 2016; Glock & Krolak-Schwerdt, 2013; Klapproth et al., 2018; Lorenz et al., 2016; Sprietsma, 2013; Tobisch & Dresel, 2017; Wenz & Hoenig, 2020; but see also Glock & Krolak-Schwerdt, 2014; Glock et al., 2015; Kaiser et al., 2017). Indeed, teacher

students have lower expectations for and judge competencies in German to be lower in students with a Turkish as compared to a German name even when all other information is equal (Bonefeld & Dickhäuser, 2018; Glock, 2016; Glock & Krolak-Schwerdt, 2013; Sprietsma, 2013; Tobisch & Dresel, 2017; Wenz et al., 2016; but see also Glock et al., 2015). For example, when teacher students read and graded the dictation of a supposed 3<sup>rd</sup> grade student, they found the same number of mistakes in the dictations but gave a student with a Turkish (vs. German) name a worse grade (Bonefeld & Dickhäuser, 2018). Using vignettes, it has also been found that in-service teachers and teacher students expect the German language proficiency of students with a Turkish as compared to a German name to be lower (Bonefeld et al., 2022; Glock, 2016; Glock & Krolak-Schwerdt, 2013; Tobisch & Dresel, 2017), and there is some, albeit inconsistent, evidence that this may extend to judgments of math competencies (Bonefeld et al., 2020, 2022; Glock, 2016; Lorenz et al., 2016; Tobisch & Dresel, 2017).

Research has also examined whether negative stereotypes may influence consequential decisions, that is, tracking recommendations, and found that teacher students and in-service teachers were more likely to recommend the highest track for students with a German as compared to a Turkish name (Klapproth et al., 2018; Sprietsma, 2013; Tobisch & Dresel, 2017; but see also Glock et al., 2015). However, this difference has not been found in actual tracking recommendations once achievement and socioeconomic status are controlled for (Ditton et al., 2005; Gresch, 2012; Kristen, 2006; Schneider, 2011; Tiedemann & Billmann-Mahecha, 2007). This highlights the importance of examining whether negative biases regarding expectations and performance evaluation occur outside of the lab as well, as two studies have done in which teachers reported their expectations (Lorenz et al., 2016) and grades (Bonefeld et al., 2017) for their students. At the very beginning of the first grade, that is, before teachers could form comprehensive impressions of the students, teachers already expected students with a migration background to show relatively low performance in

German compared to the average student in the class (Lorenz et al., 2016). When controlling for cognitive abilities in addition to socioeconomic background, this difference was significant for students with a Turkish, but not an Eastern-European migration background. An additional analysis of this data showed that the more teachers endorse negative stereotypes about Turkish students, the lower their expectations for individual students with a Turkish migration background were (Lorenz, 2021). In another study based on field data, students with a migration background had lower math grades in exams and on their report cards than students without a migration background even when objective competence levels, socioeconomic status and language spoken at home were controlled for (Bonfeld et al., 2017). Thus, negative biases are not restricted to the experimental setting, though statistical controls are necessary to better approximate whether it is migration background alone that affects expectations and grades.

### **Positive Biases Towards Members of Negatively Stereotyped Groups**

The research presented above shows that ethnic minority students fare worse in the US-American and German school systems, whether that be due to structural factors (e.g., differences in socioeconomic status) or negative stereotypes leading to negative biases. This information is crucial to understand the context in which the research presented here is embedded and how it relates to existing research on the influence of stereotypes. In parallel to this research, evidence that specific circumstances can lead to positive biases towards members of negatively stereotyped groups has accumulated (e.g., Biernat et al., 1991, 2003, 2012; Biernat & Kobrynowicz, 1997; Biernat & Manis, 1994; Biernat & Vescio, 2002; Croft & Schmader, 2012; Crosby & Monin, 2007; Harber, 1998, 2004; Harber et al., 2010, 2012, 2019; Kobrynowicz & Biernat, 1997). As described above, positive biases occur when a member of a group that is negatively stereotyped on a given attribute (e.g., writing competence) is evaluated more positively than a member of a group that is either positively



stereotyped or perceived as the norm (non-stereotyped). Based on this definition, one can find evidence of a positive bias in judgments of characteristics (e.g., Biernat et al., 2008; Biernat & Ma, 2005; Biernat & Manis, 1994), behaviors (Kobrynowicz & Biernat, 1997), and performance (Croft & Schmader, 2012; Harber, 1998, 2004; Harber et al., 2010, 2012, 2019; Holder & Kessels, 2017). Positive biases have been found in verbal (Harber, 2004) and written feedback (Croft & Schmader, 2012; Harber, 1998, Harber et al., 2010, 2012, 2019) as well as in advice given to university students who planned to take on a highly demanding course load (Crosby & Monin, 2007). For example, when White university students provided a supposed peer with feedback on an essay, their feedback was more positive when the student was supposedly Black (vs. White; Harber et al., 2019).

Overall, judgments on stereotype-relevant traits may sometimes be more positive for the group that is negatively stereotyped on this characteristic. To explain these paradoxical findings, two explanations have been put forward, focusing on slightly different situations (for an overview, see Kessels & Nishen, in press). I summarize these two explanations as general *perspectives* to acknowledge that parts of the theoretical arguments have been present in psychological research for decades before being applied to this topic, and that theoretical as well as empirical contributions often come from different labs. The first perspective on positive biases focuses on cognitive and perceptual mechanisms (Biernat, 2012) and has been described in the Shifting Standards Model (Biernat et al., 1991; Biernat & Manis, 1994). In essence, this perspective sees the origin of positive biases in a shifting of standards between two groups where lower standards are used to judge a member of a negatively stereotyped group. Because of the lower standard, the same performance by a person of a negatively stereotyped group will be judged more positively than the performance by a member of a non-stereotyped group who is compared to a higher standard. If such a shift is prevented, a negative bias in line with the stereotype is expected to emerge. In turn, the second perspective addresses motivational mechanisms in interactions between members of racial-ethnic groups

(Harber, 1998; Richeson & Shelton, 2011; Shelton et al., 2006; Stephan & Stephan, 1985).

Here, it is argued that members of an ethnic majority are motivated to be and/or appear to be unprejudiced due to prevalent anti-prejudice norms. This motivation can lead people to overcompensate when interacting with members of a negatively stereotyped ethnic minority in order to reduce the likelihood of being or being perceived as prejudiced. When such a concern can be alleviated, positive biases should no longer be observed.

In the following sections, I will describe in detail the theoretical arguments brought forward by the cognitive-perceptual and motivational perspectives and further describe the studies mentioned above. The content and structure of these two sections are largely based on the chapter written by Kessels and Nishen (in press), with additions where appropriate. Subsequently, I compare the two perspectives on four key factors: response scale format, feedback dimension, cognitive load, and the role of person-related moderators. I will then elaborate on differences and similarities of the US-American and German sociocultural contexts with a focus on those aspects that are relevant to the two theoretical perspectives.

### **Cognitive-Perceptual Perspective on Positive Biases: The Shifting Standards Model**

One theoretical perspective on positive biases is represented by the Shifting Standards Model (SSM; Biernat et al., 1991; Biernat & Manis, 1994). Essentially, the authors of this model argue that the reference we use to judge a characteristic of different targets shifts under some circumstances, whereas under others, it remains stable (Biernat et al., 1991; Biernat & Manis, 1994). Focusing on characteristics that are considered stereotypical of different genders or racial groups, evidence supporting the predictions of the SSM has come from a variety of research. Standard shifts have been examined on characteristics such as height (Biernat et al., 1991, 2003), weight (Biernat et al., 1991), athleticism (Biernat et al., 2003; Biernat & Manis, 1994; Biernat & Vescio, 2002), aggression (Biernat et al., 2008; Biernat & Manis, 1994), assertiveness and agency (Biernat & Manis, 1994; Bosak et al., 2008), good

mother- and fatherhood (Kobrynowicz & Biernat, 1997), competitiveness (Biernat et al., 2008), emotionality (Biernat et al., 2008), and a whole list of stereotype-relevant traits (Biernat & Ma, 2005). For the research presented in this dissertation, studies related to the judgment of competence and skills are of central importance and are discussed in more detail, but I refer to studies on other characteristics when they make important additional theoretical contributions. In the following, I will explain the central distinction made by the SSM, expand on two important moderators, and end this section with a summary.

### ***Within- vs. Cross-Category Comparisons: A Central Tenet of the SSM***

Within the SSM, stereotypes are thought to influence people's judgment of another person's characteristic in one of two ways depending on the reference group or standard they use (Biernat et al., 1991). This central tenet hinges on the distinction between *cross-* and *within-category comparisons*, which are theorized to lead to different biases (Biernat, 2012; Biernat et al., 1991). When cross-category comparisons are applied, people are hypothesized to apply stereotypes about where a social group stands relative to a fixed point of comparison (e.g., the average person or an external criterion; Biernat et al., 1991). Because this reference point is the same for members of all groups, the comparison remains stable regardless of whether a member of a negatively stereotyped or non-stereotyped group is being evaluated (Biernat et al., 1991). Members of a group that is negatively stereotyped on the attribute in question will be judged negatively because relative to the point of reference, the expectation is that people from their group will be deficient on the attribute. Cross-category comparisons thus lead to judgments in line with the content of stereotypes—people belonging to negatively stereotyped groups will be judged more negatively relative to people belonging to non-stereotyped groups (*assimilative judgments*; Biernat, 2012; Biernat et al., 1991).

When within-category comparisons are applied, people are also theorized to use the stereotype about a given group—but to judge the person's attribute relative to the stereotype about the person's specific group only (Biernat et al., 1991). Here, the reference point changes

depending on who is being evaluated, as a person belonging to one group will be evaluated relative to the expectation for their group whereas another person will be evaluated relative to the expectation for their respective group (Biernat, 2012; Biernat et al., 1991). In short: the comparison is not stable but rather shifts. In this case, a *contrastive* judgment is observed: Members of a negatively stereotyped group will be judged as positively or even more positively than members of a non-stereotyped group (Biernat et al., 1991). Because the expectation is lower for the member of a negatively stereotyped group, a given performance may be seen as exceeding expectations for “people like them,” whereas the same performance may be perceived as only adequate or not meeting expectations for a member of a positively stereotyped group (Biernat et al., 1991; e.g., “His German skills are very good [for a student with a Turkish migration background]” vs. “His German skills are okay [for a student without a migration background]”).

Importantly, stereotype-based expectations guide judgments in both cross- and within-category comparisons, though the pattern of results can be observed as assimilating to (cross-category) or contrasting with (within-category) shared stereotypes (Biernat et al., 1991). This is the “signature pattern” (Biernat, 2012, p. 7) which is typically observed in studies testing the predictions of the SSM (e.g., Biernat & Manis, 1994; Holder & Kessels, 2017). Here, the commonly used paradigm compares judgments of target people belonging to different social categories (e.g., men and women, Black and White people) and manipulates situational cues meant to elicit cross- and within-category comparisons. In the following, I will discuss the two main situational cues that have been tested in research in the SSM: The use of different response scale formats and the standards of certainty to which a judgment is held.

### ***Subjective vs. Objective Response Scale Formats***

The anchors of a response scale play a central role in the observation of shifting standards (Biernat et al., 1991). This is because some anchor points are inherently relative to a standard whereas others are not (Biernat et al., 1991). Generally, an *objective* response scale,

which may also be referred to as a *common rule* scale (e.g., Biernat, 2012), is one whose “units maintain a constant meaning across contexts” (Biernat, 2003, p. 1020). It has also been described as having “some link to external reality” (Biernat & Kobrynowicz, 1997, p. 547). In the past, standardized test scores, grades, percentiles, rank orderings, frequencies, probabilities, and time judgments have all been used to operationalize an objective response scale for psychological constructs without a definite tie to an external frame (e.g., competence, aggression). In turn, Biernat (2003, p. 1020) defines a scale as *subjective* when its “rating points can be differentially defined and adjusted (e.g., within time, within perceivers, and within categories of targets).” Subjective response scales typically come in the form of Likert-type scales with verbal anchors, for example phrased as “very good/bad” or “very few/many.” Biernat et al. (1991) argue that objective scales offer a stable reference point relative to which targets are judged regardless of their group membership (cross-category comparison) so that assimilative judgments are expected. In contrast, subjective scales can be interpreted relative to different standards (within-category comparison), meaning that contrastive judgments should be observed.

Indeed, a host of studies demonstrated that judgments in line with a given stereotype occur on objective scales, whereas judgments inconsistent with stereotypes occur on subjective scales (e.g., Biernat et al., 1991, 2003, 2012; Biernat & Kobrynowicz, 1997; Biernat & Manis, 1994; Biernat & Vescio, 2002; Kobrynowicz & Biernat, 1997; but see also studies on negative stereotypes using subjective scales, e.g., Glock & Krolak-Schwerdt, 2013). Especially earlier work by Biernat and her colleagues has focused on judgments of competence and ability, which are most relevant to the work presented in this dissertation. In one of the first studies, Biernat and Manis (1994) asked undergraduate students to indicate the quality of an essay either on objective (letter grade, worth in USD) or subjective scale (with endpoints such as *terrible* to *excellent* and *very little money* to *lots of money*). For an essay on a topic associated with women, participants judged the essay to be better on an objective scale

when it was supposedly written by a woman as compared to a man. Similarly, for an essay on a male-typed topic, participants judged the man's essays—relative to a woman's—to be better on an objective scale. Thus, stereotype-assimilating judgments emerged on the objective scale. However, no such differences emerged on the subjective scale, indicating that participants in this condition applied different standards to the two targets, which masked the negative expectations for men writing on a female-typed topic and women writing on a male-typed topic. In Study 2 of their article, Biernat and Manis (1994) examined verbal ability ratings based on definitions supposedly written by male and female targets, but they also crossed this manipulation with the race of the supposed author (White vs. Black). While these two factors did not interact, male vs. female and Black vs. White targets were judged differently on objective as compared to subjective scales. Women and White targets were judged as having greater verbal ability on an objective scale than men and Black people, respectively. On the other hand, results on the subjective scale showed either no difference between the judgments of the two groups (for gender) or a reduction of the negative bias (for race). A similar pattern was observed in studies on the impact of racial stereotypes on math ability judgments (Kobrynowicz & Biernat, 1997, Study 2) as well as perceived job competence (Biernat and Kobrynowicz, 1997, Study 2). In Germany, two studies have specifically focused on judgments in the school context. Their results were in line with a shifting standards interpretation, showing more negative judgments on objective scales, but no difference in judgments on subjective scales for 3<sup>rd</sup> grade girls (vs. boys) in math and students with a Turkish (vs. German) name in German (Holder & Kessels, 2017). Thus, initial evidence suggests that shifting standards may also be present in the school context in addition to broader performance-related contexts.

### ***Standards for Judgments: Minimum vs. Confirmatory Standards***

The second main factor that has been examined as part of the SSM is the standard of certainty to which a judgment is held. Biernat et al. (2008) argue that judgments of people's

characteristics can be made on a “*suspicion-certainty* continuum of dispositional inference” (p. 291, italics in original). On the lower end of this continuum, they place *minimum standards*, which are in place when a person simply aims to establish that they have “an ‘inkling,’ or suspicion that a target person possesses an attribute” (Biernat et al., 2008, p. 291). This low-evidentiary standard is expected to play a role especially in low-stakes situations and when giving out non-zero sum resources such as praise or short-listing an applicant (Biernat et al., 2008; Biernat & Vescio, 2002). On the other end of the continuum, *confirmatory standards* are applied when a person aims to be “*certain* that the target has the attribute in question” (Biernat et al., 2008, p. 291, emphasis in original). People may use this high-evidentiary standard whenever they need to make sure to judge a characteristic accurately—for example, when distributing zero-sum rewards such as an award or a job offer (Biernat et al., 2008; Biernat & Vescio, 2002).

Importantly, the standard invoked for a judgment is theorized to influence whether people use a common standard for members of different groups, that is, conduct a cross-category comparison, or shift standards and compare these members to different reference points (Biernat et al., 2008; Biernat & Vescio, 2002). Specific to zero-sum resources, Biernat and Vescio (2002) argue that when they are distributed, one needs to consider all potential candidates on a common scale, essentially ranking them, which necessitates a cross-category comparison. On the contrary, non-zero sum behaviors towards one person would be less dependent on behavior towards another, and are therefore thought to be more susceptible to within-category comparisons. Biernat et al. (2008) posit that confirmatory standards elicit cross-category comparisons, and minimum standards within-category comparisons more generally. Though the exact mechanism was never explicitly spelled out by Biernat and colleagues, Biernat and Vescio’s (2002) proposed mechanism for zero-sum vs. non-zero sum rewards may be generalizable to all judgments made based on confirmatory and minimum standards. That is, people may run cross-category comparisons under confirmatory standards

because they are likely to use an objective, common-rule scale to come to a decision. If confirmatory standards indeed elicit a cross-category comparison, they should lead to a negative bias (e.g., Biernat, 2012; Biernat et al., 2008). For example, women would have to demonstrate more behavioral examples before being *confirmed* as competent in a subject such as physics compared to men, and they would be less likely to receive zero-sum rewards such as a job offer. In turn, if minimum standards evoke a within-category comparison, they would be expected to lead to a positive bias (Biernat, 2012; Biernat et al., 2008; Biernat & Vescio, 2002). In keeping with the example, women would be *suspected* to be competent based on less behavioral evidence than men, and they would receive more non-zero sum rewards such as praise for the same positive behavior. These predictions have also been tested and confirmed empirically, though not as comprehensively as for the response scale format. The typical way to examine the effect of different judgment standards is what Biernat (2012) has termed the *behavioral checklist paradigm*. Participants are presented with a list of behaviors indicative of a characteristic (e.g., behaviors showing moderate to high aggression) and are asked to indicate how many behaviors they would need the target person to show in order to suspect or confirm that they have this characteristic. In this scenario, requiring fewer behaviors means that participants are quicker to suspect/confirm a characteristic, and requiring more behaviors means they are slower to do so.

Two studies used the behavioral checklist paradigm and manipulated the judgment standard by asking participants to indicate whether “the applicant had the ability required to be successful at the position” (confirmatory standard, p. 549) or whether the applicant “met the minimum standard to be successful” (minimum standard, p. 549; Biernat & Kobrynowicz, 1997). Indeed, members of a negatively stereotyped group were more easily *suspected* of being suitable, but were held to the same or higher standards when *confirming* suitability on objective scales. Specifically, women needed to show less behavioral evidence of their suitability for a job than men in the minimum standard condition, but more behavioral



evidence than men in the confirmatory standard condition (Study 1). Similarly, participants indicated that they required the same level of performance to confirm that a Black or White man was suitable for the job, but a lower general level of performance to suspect that a Black man compared to a White man as suitable for the job (Study 2). In two more studies on perceived workplace competence, participants were equally likely to short-list male and female applicants (indicating a minimum standard), but less likely to hire a woman than a man (confirmatory standard; Biernat & Fuegen, 2001). Examining judgments of incompetence within the behavioral checklist paradigm, Biernat et al. (2010) found that men had to show more incompetent behaviors than women for participants to be certain that they were incompetent but were not suspected of being incompetent more easily. In a second study, when incompetence in a male-typed job was judged, participants tended to write down more incompetent behaviors about a man than a woman when a minimum standard was induced, but tended to write down fewer incompetent behaviors of the same male target compared to the female target under a confirmatory standard. When this study was repeated with a Black vs. White male target (Biernat et al., 2010; Study 3), participants noted down the same number of negative behaviors in the minimum standard condition, but more incompetent behaviors for the Black target than the White target when a confirmatory standard was induced. In this case, the effect also held for the decision to fire the target: Participants were equally likely to fire a Black vs. White man in the minimum standards condition, but more likely to fire a Black man in the confirmatory standards condition. Overall, the research on the effect of the judgment standard suggests that the direction of bias towards members of a negatively stereotyped group can depend on the certainty with which people aim to come to a judgment.

### ***Summary***

Overall, the SSM has made important contributions to our understanding of the cognitive-perceptual mechanisms that can be responsible for positive (as well as negative)

biases in judgments. Since the first article on this phenomenon was published, many studies have tested and demonstrated predictions regarding standard shifts, especially related to the factors of the response scale format (subjective vs. objective) and the judgment standard (minimum vs. confirmatory; for an overview, see Biernat, 2012). Though the SSM has been supported by a substantial body of research, it needs to be noted that Biernat and colleagues often prioritized conducting multiple small-scale studies over larger datasets. At times, the power of these studies, especially related to interactions, is uncertain, and may be a reason for the frequent reliance on marginally significant effects (e.g., Biernat et al., 1991, 2003; Biernat & Manis, 1994). In more recent publications, sample sizes are larger and results therefore more reliable, but this does call into question more complex results in earlier studies. Therefore, patterns of results gain reliability through their replication across studies, and I have focused on summarizing those re-emerging results.

On a theoretical level, I would like to highlight two ways in which the generalizability of the SSM's predictions could be tested further. First, there is an important area for which the implications of the SSM have not yet been sufficiently explored: the school setting. While judgments of competence of adults have been researched, this has rarely been the case for children or adolescents (for an exception, see Holder & Kessels, 2017). As I have argued, understanding the presence of positive biases in the school context is vital because of its centrality to students' lives both concurrently and later on (e.g., Fischbach et al., 2013). Biases in teachers' judgments could have negative effects on students learning (Kessels & Nishen, in press) and thus maintain existing inequalities. Moreover, an examination of prospective teachers is also of interest because they, unlike lay people, should be trained in the assessment of competencies as well as giving feedback (Kunter et al., 2011). Examining whether teachers and teacher students exhibit the same liability to stereotype-based cognitive processes is highly important. Indeed, studies on German teacher students' judgments have shown the presence of negative biases on objective scales (e.g., Bonfeld & Dickhäuser,

2018), and two studies have demonstrated that they shift their standards on subjective, but not objective scales (Holder & Kessels, 2017). However, a first examination of the effect of the judgment standards (minimum vs. confirmatory) still needs to be conducted.

Secondly, the SSM has focused on judgments about others—but these judgments were never relayed to the person being judged, as is often the case in real-life settings. For example, hiring decisions would ultimately be known to the interviewee in a real-life setting. This might introduce motivational processes related to a person's social relations, which are important to examine in parallel to cognitive-perceptual mechanisms (Biernat, 2012; Biernat & Fuegen, 2001). So far, results corresponding to the predictions of the SSM have been found in the communications of judgments between people (Biernat & Eidelman, 2007; Biernat & Sesko, 2013; Collins et al., 2009), but have not been examined in communication with the person being evaluated. Thus, research examining whether similar standard shifts occur in settings in which the judgment is communicated could show to which interpersonal interactions the SSM may be generalizable. The next theoretical perspective explaining positive biases focuses on just these situations—how positive biases might occur in interpersonal communication such as feedback and advice.

### **Motivational Perspective on Positive Biases**

In essence, theoretical arguments from a motivational perspective argue that in intergroup interactions, members of an ethnic majority are motivated to demonstrate to themselves or others that they are unprejudiced towards members of an ethnic minority (Bergsieker et al., 2010; Richeson & Shelton, 2011; Shelton et al., 2006). This motivation, in turn, is argued to lead to greater positivity towards these members, as negative behavior (e.g., criticism) is more easily interpreted as being prejudiced. This line of argument also indicates that the interpersonal nature of a situation is central to eliciting positive biases, either because group membership may be highly salient (Ito & Urland, 2003; Mendes & Koslov, 2013;

Shelton et al., 2006) or because the potential for an evaluation by the interaction partner highlights evaluative concerns in general (Harber, 1998; Vorauer, 2006; Vorauer et al., 2000). Indeed, greater positivity towards members of negatively stereotyped groups has been found in ratings of likeability (Blascovitch et al., 2001; Mendes et al., 2002; Mendes & Koslov, 2013), easily controllable nonverbal behavior (e.g., Mendes & Koslov, 2013; Vanman et al., 1997), written and verbal feedback on essays (Croft & Schmader, 2012; Harber, 1998, 2004; Harber et al., 2010, 2012, 2019), and advice about students' workload (Crosby & Monin, 2007). Positive biases in feedback and advice may be most pertinent to the school context, as feedback has long been discussed as an important tool to improve students learning (e.g., Hattie & Timperley, 2007; Narciss, 2014, 2017). Indeed, meta-analyses show that feedback generally has a positive effect on learning, but that its effects can vary widely and also influence performance negatively (Hattie & Timperley, 2007; Kluger & DeNisi, 1996; Wisniewski et al., 2020). Thus, the quality of the feedback as well as situational factors (e.g., timing) can influence the effectiveness of feedback to a great extent. Feedback theories stress that high-quality feedback includes information about where a student stands relative to a goal (Hattie & Timperley, 2007; Narciss, 2014, 2017), and if this information is less accurate for some students, this could affect their performance through cognitive, metacognitive, and motivational channels (for an overview of potential effects of overly positive feedback, see Kessels & Nishen, in press). Seemingly benign but consistent differences in feedback could set students up for different learning trajectories, having lasting consequences for their academic path. In the following, I will first describe the motivational perspective on interracial interactions more generally before focusing in on theoretical work predicting and studies showing positive biases in feedback and advice. I will then discuss task- and person-related factors that are thought to influence positive biases based on the motivational perspective.

***Overcorrection in Interracial Contexts***

The desire to hold a positive view of oneself as well as to be liked and respected by others are both considered to be central motivational factors (Baumeister, 1997; Baumeister & Leary, 1995; Kwang & Swann, 2010; Taylor & Brown, 1988). Importantly, shared values and beliefs—such as egalitarianism—inform what people think of as a good person, including in themselves, as well as what they believe others will like and respect (Aquino & Reed, 2002; Gaertner & Dovidio, 1986; Winslow, 2004). In turn, this impacts how people want to see themselves as well as how they present themselves to others (Baumeister & Leary, 1995; Brown & Levinson, 1987; Gaertner & Dovidio, 1986; Jones & Pittman, 1982; Leary & Kowalski, 1990). Being unprejudiced and fair is one such shared value (Aquino & Reed, 2002; Crandall et al., 2002; Lapsley & Lasky, 2001) which is likely to be of concern for members of an ethnic majority in an interethnic interaction (Gaertner & Dovidio, 1986; Richeson & Shelton, 2011; Shelton et al., 2006; Vorauer, 2006). Indeed, such situations harbor the potential of a threat to one's self-image—for example, if one thinks or does something that is prejudiced—as well as the potential that the interaction partner might perceive one as being prejudiced (Richeson & Shelton, 2011). When the shared and/or personal ideal is to be unprejudiced towards a specific group such as members of racial-ethnic minorities, people are expected to be motivated to demonstrate to themselves and/or others that they are, in fact, unprejudiced. This can lead to overcorrection, that is, exceedingly positive behavior towards the member of a negatively stereotyped group (Harber et al., 2019; Mendes & Koslov, 2013; Trawalter et al., 2009).

In US-American and Canadian empirical work, it has indeed been found that White participants are concerned about prejudice (Bergsieker et al., 2010; Vorauer et al., 2000; Winslow, 2004). Work by Vorauer and colleagues has shown that White Canadians believe that First Nation Canadians hold negative stereotypes about them that include being prejudiced and unfair (Vorauer et al., 1998). These meta-stereotypes were activated when

White participants anticipated an interaction with a member of a First Nation as compared to a White person (Vorauer et al., 2000). In the U.S., Bergsieker et al. (2010) demonstrated that both Black and White participants held the goals to be liked as well as respected in intraracial interactions, but that White people particularly aimed to be liked and seen as moral in interracial interactions, whereas Black people especially aimed to be respected and seen as competent. Moreover, research on White people's reactions to the accusation of racism showed that in both hypothetical and actual interactions with confederates, participants placed great importance on correcting this impression, particularly when the person was Black (Winslow, 2004).

Thus, members of an ethnic majority might feel additional pressure or expectations when interacting with a member of a negatively stereotyped ethnic minority. Indeed, it has often been argued that interracial interactions may be accompanied by negative experiences such as concerns about prejudice, threat, anxiety, and stress (Blascovitch et al., 2001; Richeson & Shelton, 2011; Shelton et al., 2006; Stephan & Stephan, 1985; Trawalter et al., 2009; Vorauer, 2006). Among others, the origin of these negative experiences for ethnic majority members has been attributed to the concern to be judged in light of the negative stereotype of being prejudiced or concern about confirming it (Richeson & Shelton, 2011; Shelton et al., 2006), uncertainty about how out-group members view them (Vorauer, 2006), and the anticipation of negative emotions (e.g., discomfort, guilt; Stephan & Stephan, 1985). Moreover, theoretical models relating interracial interactions to the stress and coping model (Lazarus & Folkman, 1984) have argued that interracial interactions may result in threat (Blascovitch et al., 2001; Trawalter et al., 2009). This is because people may evaluate the situation as having higher demands (e.g., greater uncertainty) while simultaneously perceiving their resources to be lower (e.g., behavioral scripts; Blascovitch et al., 2001; Trawalter et al., 2009). Indeed, numerous studies on physiological reactivity, performance during cooperative tasks, cognitive depletion, and even teaching effectiveness indicate that interracial (vs.

intra-racial) interactions are indeed more stressful for White people (Blascovitch et al., 2001; Jacoby-Senghor et al., 2016; Littleford et al., 2005; Mendes et al., 2002; Mendes & Koslov, 2013; Richeson et al., 2003; Richeson & Shelton, 2003; Richeson & Trawalter, 2005).

These additional stressors in an interracial interaction can be alleviated when the ambiguity of the situation, that is, whether one is being evaluated in light of or confirming stereotypes, is reduced (Shelton et al., 2006; Trawalter et al., 2009). One approach to reduce this ambiguity is to adapt one's own behavior so that it cannot be "misinterpreted" as being prejudiced (Shelton et al., 2006; Trawalter et al., 2009). A simple way to do so is to act more positively towards the interaction partner—a process which has been termed overcorrection (Mendes & Koslov, 2013), overcompensation (Trawalter et al., 2009), or overaccommodation (Harber et al., 2019). This has been observed in easily controllable responses: Participants laughed and nodded more in interactions with Black compared to White confederates (Mendes & Koslov, 2013) and rated them more positively afterwards (Blascovitch et al., 2001; Mendes et al., 2002; Mendes & Koslov, 2013; Vanman et al., 1997). However, people still experience negative states while overcompensating, as has been shown in difficult-to-control responses such as the concurrent activation of facial muscles related to negative affect (Vanman et al., 1997) and the presence of a physiological threat response (Mendes & Koslov, 2013). In summary, empirical work supports the notion that White people are concerned about being or being perceived as prejudiced and that this can lead to more positive responses to members of negatively stereotyped groups.

### ***Positive Biases in Feedback and Advice***

Based on earlier conceptualizations of the argument that concerns about prejudice could lead to increased positivity or preference (Dutton & Lake, 1973; Gaertner & Dovidio, 1986; Hastorf et al., 1979), Harber (1998) argued that such concerns could also influence interracial interactions when giving feedback. Feedback is defined as "information provided by an agent [...] regarding aspects of one's performance or understanding" (Hattie &

Timperley, 2007, p. 81). Next to this informational aspect of feedback, its aim is often to also motivate and guide further learning (Müller & Ditton, 2014). Due to this motivational aspect, politeness norms, and the desire to be liked, the feedback situation is characterized by heightened positivity (Brown & Levinson, 1987; Jones & Pittman, 1982). Therefore, feedback should generally differ from non-communicated judgments, that is, an evaluation that is not disclosed to the person being evaluated. Though evidence from the school context is scarce, research at universities and in an organizational context has shown that those giving feedback often feel hesitation and discomfort when having to criticize someone (Ginsburg et al., 2016; Lupoli et al., 2017; Ramani et al., 2018; Waung & Highhouse, 1997). This may be the reason why communications to others are often adapted by either leaving out negative information (*negativity omission*; Bergsieker et al., 2012; Brown & Levinson, 1987) or by including more positive information (*sugarcoating*; Ginsburg et al., 2016; Lupoli et al., 2017; Qadan et al., 2013; Ramani et al., 2018). Overall, feedback situations are the site of interpersonal considerations even before intergroup interactions are taken into account.

However, the situation in which an ethnic majority group member gives feedback to an ethnic minority group member may introduce additional motivational factors (Harber, 1998). This is because high-quality feedback includes information about where a student stands relative to a goal (Hattie & Timperley, 2007; Narciss, 2014, 2017), and this necessitates criticism (with the potential exception of excellent performance). However, criticism is ambiguous when addressing an ethnic minority student: On the one hand, criticism could be interpreted as warranted due to a low performance. But on the other hand, it could also be a sign that the person giving the feedback is applying stereotypes to the student rather than considering the actual performance (Harber, 1998). To reduce this ambiguity, members of the ethnic majority may give more positive feedback to ethnic minority students as compared to ethnic majority students (*positive feedback bias*; Croft & Schmader, 2012; Harber, 1998, 2004; Harber et al., 2010, 2012, 2019). In the original two studies in this line of



research, Harber (1998) asked White university students to provide peer feedback on an essay that was either attributed to a Black or White student. The essay by the supposed peer was of low quality (e.g., flaws in logical structure and grammar) so that participants would need to criticize the essay to some degree. In both studies, participants' copyediting comments and their ratings revealed a positive bias in favor of the Black writer when it came to the content (e.g., logic) of the essay, but feedback on mechanics (e.g., grammar) did not differ (Harber, 1998). In a later study, this positive feedback bias was replicated in verbal feedback (Harber, 2004). Participants again gave feedback on a low-quality essay, but conveyed it directly to the confederate in conversation. As expected, they gave more positive feedback about the content of the essay to the Black as compared to the White confederate unless the confederate alleviated the concern about prejudice by being very friendly in response to the feedback. Importantly, the original studies found evidence of both sugarcoating (increase in positive content) and negativity omission (decrease in negative content) in feedback (Harber, 1998), though only the negativity omission effect was replicated later on (Croft & Schmader, 2012). Lastly, three studies in Germany on differences in feedback on test performance by students' gender showed that teacher students communicated better grades to boys in German and to girls in math, respectively, though the effects on open-text feedback were less consistent (Schuster et al., 2021). Overall, the original positive feedback bias has been replicated multiple times (Croft & Schmader, 2012; Harber, 2004; Harber et al., 2019), including in samples with teacher students (Harber et al., 2010; Schuster et al., 2021) and in-service teachers (Harber et al., 2012).

Similar to research on feedback, two studies investigated whether the advice given to a Black as compared to a White person would be positively biased (*failure-to-warn phenomenon*; Crosby & Monin, 2007). Crosby and Monin (2007) argue that advice differs from feedback in that it is future-oriented and not related to a specific performance, but that it involves an interpersonal situation in which one person is positioned as an expert and that this

might result in similar interpersonal dynamics. In the case of advice, the concern to be or appear to be prejudiced might prevent members of the ethnic majority from warning a member of an ethnic minority if their plans are too ambitious (failure-to-warn phenomenon). This is indeed what Crosby and Monin (2007) found in two vignette studies with university students, some of whom were specifically trained as peer advisors. White university students warned a Black peer less about an overly ambitious workload for an upcoming semester than a White peer, for example in terms of how difficult the workload would be and how much help the student would need. Such difference in advice might then set students up for unnecessary difficulties down the road (Crosby & Monin, 2007).

As mentioned above, the concern to be or appear to be prejudiced is central to the explanations of positive biases that I have discussed here as representing a motivational perspective. Because of this, factors influencing this concern have been discussed and tested widely. In the following, I will discuss one central task-related moderator, the feedback dimension, as well as person-related moderators that are promising for the translation of positive bias research into the German school context.

**Task-Related Moderator: Feedback Dimension.** Feedback, especially on something as complex as an essay, can focus on many different dimensions of a performance. For example, one can praise or criticize the overall structure of a text and the logic of its arguments, but also punctuation, grammar, and the use of colloquialisms. Harber (1998) distinguishes between what he termed *objective evaluations* (referring to the mechanics of a composition, such as grammar, punctuation, and spelling) and *subjective evaluations* (referring to content-related feedback). In order to avoid overlap with the terms used in the SSM (Biernat et al., 1991), I will refer to these dimensions of feedback as mechanics-related (objective) and content-related (subjective) from here on out. Harber (1998) argues that content-related dimensions may be harder to criticize because “there are few established guidelines for evaluating content, whereas mechanics have standardized referents such as

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dictionaries and stylebooks” (Harber, 1998, p. 623). These referents, in turn, “shield critics from the appearance of partiality” (p. 623). For content-related dimensions, such external referents are not as clear or may not be universal. Moreover, Harber (1998) argues that content-related dimensions of feedback are often more personally relevant (e.g., reflecting own thoughts and opinions) and may therefore be interpreted as criticism of the person rather than the performance. This should make it even more difficult to criticize such aspects.

Essentially, then, a positive feedback bias would not be expected to occur on mechanics-related dimensions because the external referents reduce the threat that a person may be seen as being prejudiced (Harber, 1998). On the other hand, a positive bias should occur on content-related dimensions of feedback because the lack of clear, universal rules makes criticism harder to justify and the higher personal relevance to the writer makes it riskier to criticize. This is in fact what Harber (1998) found in the two studies first establishing the positive feedback bias and what has been observed in the other studies from this lab as well (Harber, 2004; Harber et al., 2010, 2012, 2019). For example, Harber et al. (2010) asked participants to indicate how many hours per week the author of an essay should devote to practicing content- and mechanics-related writing skills. When participants’ self-image as unprejudiced had been threatened, they indicated that a Black author did not need to practice content-related writing skills as much as a White author. However, feedback on mechanics-related writing skills did not differ. Overall, then, the differentiation between content- and mechanics-related feedback is a consistent pattern in studies on the positive feedback bias.

**Person-Related Moderators.** Independent of situational factors, people may differ more generally in their concern to be or appear to be prejudiced. So far, research has focused on people’s internal and external motivation to respond without prejudice. Plant and Devine (1998) differentiate between an internal motivation, which is based on an internalization of norms against being prejudiced, and an external motivation, which is based on the compliance

with perceived social norms. Thus, an internally motivated person might respond without prejudice because they think it is right, whereas an externally motivated person might respond this way because they don't want to be rejected by others (Plant & Devine, 1998).

Importantly, these two motivations are theoretically and empirically independent of one another, that is, a person could be motivated by either, but also by both internal and external factors. In order to better understand which source of motivation might be driving positive biases in feedback, three studies have examined whether internal and external motivation to respond without prejudice are associated with greater positivity (Croft & Schmader, 2012; Crosby & Monin, 2007). In one study, Crosby and Monin (2007) found that students who had a high internal motivation to respond without prejudice warned a Black (vs. White) student less about an overly ambitious workload. Among those low in internal motivation, no differences in their advice were observed. Students' external motivation to respond without prejudice was unrelated to the presence of a failure-to-warn effect. This indicated that those whose concern was not to *be* prejudiced showed a positive bias, whereas those who were unconcerned about this did not treat students differently. However, two later studies additionally took the interaction between internal and external motivation into account. Croft and Schmader (2012) found that only those high in external motivation and simultaneously low in internal motivation displayed a positive bias in feedback. This suggests that those singularly concerned with appearing (but not being) prejudiced demonstrate a positive bias. Overall, further research is needed to establish when and how internal and external motivation to respond without prejudice is related to a positive bias.

Moreover, it may be useful to consider more distal personality-related factors that may influence overly positive responses. Such characteristics may relate to concerns about prejudice towards a variety of negatively stereotyped groups and thus who might be prone to positive biases more generally (e.g., also towards people with disabilities). Specifically, a person's self-esteem and the contingency of their self-esteem on others' approval may be

related to their general tendency to be concerned about their self-image or how they are viewed by others. In parallel, these characteristics may influence the degree to which a person is concerned about being or being perceived as prejudiced. Specifically, those with greater self-esteem by definition see themselves in a positive light (Baumeister, 1997) and may therefore be less likely to question whether their behavior is unprejudiced. Being more secure in their self-image, they may also be less concerned that others view them negatively and adapt their behavior less as a result (Leary et al., 1995). Thus, greater self-esteem may buffer against showing a positive bias regardless of whether it originates in concerns about one's self-image or reputational concerns. A related construct is that of the contingency of self-esteem on others' approval, reflecting the degree to which a person's self-esteem varies depending on others' positive opinions of oneself (Crocker et al., 2003; Crocker & Wolfe, 2001; Schwinger et al., 2017). Those for whom others' opinions are more essential may be more concerned about being perceived as being prejudiced. If reputational concerns are at the heart of positive biases, those with greater contingency of self-esteem on others' approval may be more likely to demonstrate them. However, these predictions have not yet been empirically tested.

### ***Summary***

Overall, the motivational perspective can explain positive biases in interpersonal interactions well and has been consistently applied in a situation common to the educational setting: giving feedback. A central argument of this perspective has been that the feedback situation may be more susceptible to positive biases because of its interpersonal nature. Indeed, those studies finding negative biases against members of ethnic minorities focused on judgments that were relayed to the research team rather than the person being judged (e.g., Bonefeld & Dickhäuser, 2018; Sprietsma, 2013), whereas studies on feedback situations reveal positive biases (e.g., Croft & Schmader, 2012; Harber, 1998). In the following, I will highlight three ways in which this research could be extended: focusing on communications

of prospective teachers, continuing to differentiate between sugarcoating and negativity omission, and examining distal in addition to more proximal person-related moderators.

With its focus on feedback and advice, the research clearly demonstrates that positive biases can be observed in communications that often occur between teachers and students. So far, research has focused on peer feedback with the exception of the studies by Harber et al. (2012) and Schuster and colleagues (2021). These studies provided a first indication that teachers are similarly influenced by societal norms to not be or act prejudiced, and therefore will show a positive bias (see also Starck et al., 2020). In this, teachers do not differ from the general population, yet it is especially pertinent to examine their biases because of the role they have in students' learning. Differences in academic success can set students up for very different educational and occupational trajectories (Fischbach et al., 2013), and different treatment that accumulates across a students' years in school could thus contribute to racial-ethnic differences later on. Therefore, it is valuable to better discern whether a motivational mechanism may lead to a positive bias in educational settings.

Importantly, research has examined not only whether feedback is more positive towards Black (vs. White) students, but also whether this greater positivity is due to more positive content (sugarcoating), less negative content (negativity omission), or both. This distinction is quite important because it changes the informational value and potential effects of the feedback. If people increase the amount of positive content, such as highlighting aspects done well, this could motivate the student, but praise can also depress motivation (Brummelman & Dweck, 2021; Lipnevich & Smith, 2009; Meyer, 1992). Moreover, additional comments may simply divert the student's attention away from those comments relating to things they can still improve. However, less criticism may have clearly detrimental consequences: If people decrease the amount of negative content, for example by removing critical comments, students are not given the opportunity to engage with criticism and understand how they can improve (Kessels & Nishen, in press). Thus, understanding how

greater positivity in feedback comes about is useful to understanding which effects it may have down the road. So far, initial findings suggest that both sugarcoating and negativity omission might occur (Croft & Schmader, 2012; Harber, 1998). Overall, additional research could clarify whether sugar coating, negativity omission, or both drive greater positivity.

Lastly, person-related characteristics have been considered in addition to situational moderators, particularly the internal and external motivation to respond without prejudice (Croft & Schmader, 2012; Crosby & Monin, 2007). Importantly, research on this characteristic could indicate whether the concern to be (internal) vs. appear to be (external) prejudiced are driving the positive bias in communications. The results for these two dimensions of the motivation to respond without prejudice have been inconsistent, indicating that additional research is needed. Moreover, it may be valuable to consider more distal characteristics that may influence how prone a person is to overcorrect in interactions with members of negatively stereotyped groups more generally. Examining person-related characteristics could thus provide indirect insight into the underlying psychological mechanisms of positive biases.

### **Comparison of the two Theoretical Perspectives**

At first, it may seem that both the cognitive-perceptual and motivational perspective come to similar conclusions and explain the same phenomena. Indeed, both perspectives argue that a highly automated process or need, which in and of itself is adaptive in information processing and social interaction, can be “seized” to elicit positive biases towards members of negatively stereotyped groups. While the process or need itself cannot (and should not) be avoided altogether, it could be realigned (e.g., using a students’ age as a reference point) or rendered non-applicable in a given situation (e.g., by reducing self-image or reputational threat). Given these similarities, one might wonder whether it is necessary to distinguish between the two pathways to a positive bias as they are visualized in Figure 1.

However, the two perspectives have various different implications regarding when positive biases occur, how much individual variation between people and targets influences the bias, and which point might be best suited for an intervention. In the following, I compare the predictions of the two perspectives on four central factors, that is, constructs that are proposed by either perspective as a moderator of positive biases (see Figure 1)<sup>3</sup>. Based on the cognitive-perceptual perspective, the response scale format is discussed, whereas the feedback dimension as well as person-related factors are proposed by the motivational perspective. Additionally, I introduce a factor that has not yet been discussed in this dissertation, but is considered as a moderator by both perspectives: cognitive load. The two perspectives imply explicitly diverging predictions for the effect of cognitive load, making it an especially useful construct to consider as a moderator. Next, I will briefly describe each potential moderator and highlight the difference between the two theoretical perspectives.

### ***Response Scale Format***

The role of the response scale format—that is, whether a scale with objective or subjective anchors is used—is a central tenet of the SSM and its effect has been extensively replicated (e.g., Biernat et al., 1991, 2003, 2012; Holder & Kessels, 2017). Because only subjective response scales allow for a shift in meaning of the end points, it is only on these scales that a positive bias is expected to occur (Biernat, 2012). Therefore, if judgments on a subjective scale are more positive relative to judgments on an objective scale, such a finding would be in support of a cognitive-perceptual mechanism. However, the presence of a positive bias on an objective scale or no difference between judgments on the subjective as compared to the objective scale would be evidence against this mechanism.

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<sup>3</sup> Even though the judgment standard is also a central moderator within the cognitive-perceptual perspective that is tested within this dissertation (Study 1), the design of Study 1 does not include an interaction between teacher students and students. As a result, its findings are not relevant to the motivational perspective, which means that this moderator does not lend itself to testing the two theoretical perspectives against one another, and will not be discussed further in this section.

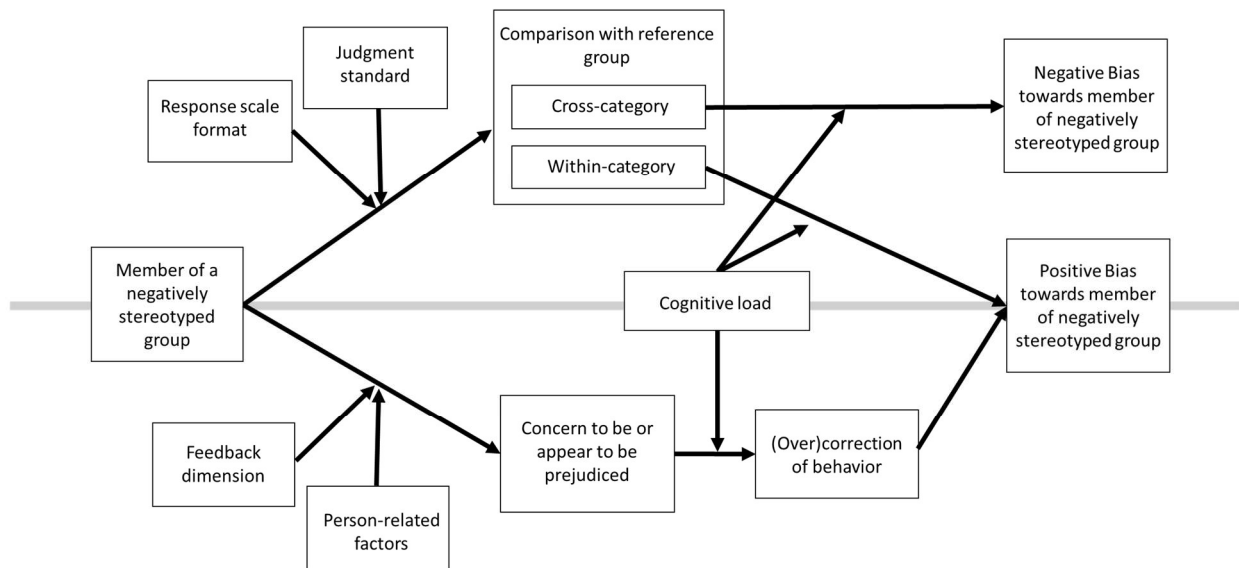


In contrast, the motivational perspective does not predict differences in positive biases based on the response scale format—all else being equal, the anchors of a question should not increase or decrease the concern to be or appear to be prejudiced (Harber, 1998). Indeed, positive biases in feedback have been found on scales that would be considered objective within the SSM (hours of practice needed, Harber et al., 2012; grade, Croft & Schmader, 2012). Therefore, if the response scale format influences the extent of a positive bias, this would provide evidence against the motivational perspective.

**Figure 1**

*Overview Over two Proposed Mechanisms for Positive Biases Including Central Moderators*

**Cognitive-Perceptual Perspective**



**Motivational Perspective**

*Note.* The motivational perspective additionally assumes that people need to either anticipate to or actually interact with the member of the negatively stereotyped group in order for a positive bias to occur.

***Feedback Dimension***

The motivational perspective considers the distinction between content- and mechanics-related feedback very important whereas the cognitive-perceptual perspective does not discuss it. For both accounts, it is important that the dimension feedback is given on is relevant to the stereotype, but the motivational perspective makes a further distinction. On any feedback dimension on which clear rules exist as to how a judgment came about, no positive bias is expected. This is because people may “safely” criticize a member of a negatively stereotyped group and their criticism would be attributed to the application of the rules rather than prejudice. Moreover, Harber (1998) argues that criticism on this dimension may be less personal, as it is not related to the person’s ideas and thoughts. Thus, if a positive bias emerges even on feedback dimensions that can be “safely” criticized (mechanics-related), this speaks against a motivational mechanism. On the contrary, if the dimension plays a role in the size of the positive bias, especially if all dimensions are assessed on subjective scales, this provides evidence for the motivational and against the cognitive-perceptual perspective.

**Comparison of the US-American and German Sociocultural Contexts**

The two theoretical perspectives presented above have been developed in the United States and the majority of research on these perspectives has been conducted there as well. In their past, Germany and the United States (and their predecessor states) have encountered different kinds of racial, ethnic, and cultural diversity, and this has a continuing influence on the present-day sociocultural context. Before applying theory created in one context to another, it is worthwhile to consider in which ways the two contexts differ. In the following, I will first summarize important differences between the United States and Germany. I will then discuss why the main psychological mechanisms proposed by both the cognitive-perceptual and the motivational perspective may also be at work in Germany, indicating that researching these phenomena in this context is worthwhile.

In historical terms, the two countries came in contact with racial-ethnic diversity at different times. The United States has had a long history of a racial-ethnic diversity on its own territory because of its history as a former colony being settled on land that was already occupied by indigenous peoples as well as of the concurrent enslavement of Black people that continued until the Civil War in the mid-19<sup>th</sup> century. Here, relations between Black and White Americans date back to the colonial era. The Federal Republic of Germany and its predecessor states have also long been the destination of immigrants (Oltmer, 2020), but Germany has not been a country of immigrants in the sense that nearly the entire population had migrated. In the period after the Second World War, migration to both West and East Germany increased rapidly, in part due to the so-called guest worker programs (Oltmer, 2010, 2020). Only more recently, decades after the end of the guest worker programs, has Germany started to understand and define itself as an ethnically and culturally diverse country, beginning with the declaration that Germany is an immigration country (Unabhängige Kommission “Zuwanderung”, 2001). Thus, the history of the relationships between the groups that were at the center of research on positive biases (Black and White Americans) and the groups focused on in this dissertation (Germans and Turkish-Germans) differs in time span in addition to the evident historical differences.

The historical differences may explain an important difference in the two cultural contexts in the present day: How and how much diversity in ethnicities, races, and cultures is talked about. In the U.S., racial-ethnic groups are commonly used to classify people (e.g., Jensen et al., 2021), whereas in Germany people have been classified based on their migration background from the 1990s onwards (Will, 2019). Social, legal, and political scientists argue that the meaning of the term *Rasse* in Germany and wider continental Europe has been frozen in time, continuing to imply a biological reality of different “races” of humans (Kelly, 2021; Möschel, 2011; Roig, 2017). They argue that this is because the term ceased to be used after the crimes against humanity committed during the Third Reich out of a concern that using the

term might reinscribe the false notion that biological races exist (Möschel, 2011; Roig, 2017). In contrast, race continued to be used in US-American public discourse, indeed was pushed to the forefront during the civil rights movement. As a result, race has shifted its meaning over time (*racial turn*; Kelly, 2021) and is now defined as a social construct referring to “physical differences that groups and cultures consider socially significant” (American Psychological Association, 2020, p. 142). Relatedly, conversations about race and ethnicity are more established in the cultural landscape of the U.S.. For example, there exist national cultural elements dedicated to discussions about racial-ethnic identity and past injustices (e.g., Black History month, Martin Luther King Day, Juneteenth National Independence Day). Moreover, discussions on how to deal with the history of Black people’s enslavement are frequently held in major liberal and conservative news outlets (e.g., on statues dedicated to confederate soldiers). In governmental proceedings, race is consistently included, for example in the U.S. Census (Jensen et al., 2021) and in the requirement for juries to be representative of the population in their racial-ethnic make-up (though this is often not achieved in practice; Equal Justice Initiative, 2021). Thus, talking about race, ethnicity, and related constructs may be more common in the U.S. than Germany, and people may find it more natural that the topic is brought up. Moreover, the U.S. and Germany differ in which markers of difference they consider meaningful in conversations surrounding race, ethnicity, and cultural background (e.g., race vs. migration background), and therefore refer to different groups as ethnic minorities. Overall, the racial-ethnic diversity in the U.S. can be considered higher since the proportion of people of color in the U.S. (42.2%; U.S. Census Bureau, 2021) is considerably larger than the percent of people with a migration background in Germany (26%; Bundesamt für Migration und Flüchtlinge, 2020), though of course these groups do not overlap perfectly. Recently, this difference between the two cultural contexts has been discussed as psychologically meaningful as well, for example for its role in youth identity development in the two countries (e.g., Juang, Moffitt, et al., 2021; Jugert et al., 2022).

Lastly, one major difference between the situation of Black Americans in the U.S. and people with a Turkish migration background in Germany may be the degree to which they are perceived as foreign. For the U.S. context, Zou and Cheryan (2017) developed the Racial Position Model, arguing that different racial-ethnic groups could be positioned not only along an axis of superiority/inferiority, but also one of Americanness/foreignness. They found that though Black Americans were perceived as relatively inferior in terms of competence, but still perceived as American, which was not the case for other ethnic minority groups (Asian and Hispanic Americans; Zou & Cheryan, 2017). In Germany, this model has not yet been applied, but people with a migration background do experience being perceived as foreign (Juang, Schwarzenthal, et al., 2021; Moffitt et al., 2019), especially those with a Turkish or Arabic migration background (Juang, Schwarzenthal, et al., 2021). Moreover, Germans as compared to Americans are more likely to define what it means to be German [American] as including ancestry and specific cultural traditions (61% vs. 18%; Ditlmann et al., 2011), which may make it more difficult for people with a migration background to be perceived as German. Overall, the perceived foreignness of people with a Turkish migration background may add a layer of complexity to interactions with people without a migration background that is not present between Black and White Americans.

However, there are also important similarities in the two cultural contexts which might be central for the emergence of a positive bias. First and foremost, negative stereotypes about the lack of academic ability and effort prevail for both Black people in the U.S. and people with a Turkish migration background in Germany. In the U.S., Black people, especially when they are poor, are perceived as low in competence (Fiske et al., 2002). Multiple studies using large-scale datasets demonstrated that teachers also hold negative attitudes towards Black (as compared to White) people on both explicit and implicit measures (Chin et al., 2020; Starck et al., 2020), and that their attitudes were comparable to people in other occupations (Starck et al., 2020). In Germany, negative stereotypes about Turkish people in Germany include the

perception of lower competence (Asbrock, 2010; Eckes, 2002). Such negative stereotypes about intelligence, effort, and competence are disconcerting, especially in contexts in which these characteristics are central to success, such as the classroom. Importantly, teacher students are aware of these negative stereotypes—in one study, they produced less positive and more negative characteristics related to ability and effort when thinking of “typical Turkish” characteristics as compared to “typical German” characteristics (Bonefeld & Karst, 2020). Both the cognitive-perceptual and the motivational perspective consider the presence of these stereotypes to be central to the emergence of a positive bias. That is, positive biases do not indicate the absence of negative stereotypes or even a preferential treatment of members of negatively stereotyped groups, but rather the continuing presence and influence of these stereotypes. Because negative stereotypes about academic abilities of Turkish-Germans exist, positive biases based on either a cognitive-perceptual or motivational mechanism may occur in Germany.

In addition to the presence of negative biases, the motivational perspective also presumes that people be motivated (internally or externally) to avoid showing prejudice towards the group in question. In the U.S., research has established that racists are highly socially sanctioned and that prejudice against them is considered highly acceptable (Crandall et al., 2002), signaling strong social norms against racial prejudice in the U.S.. To date, no comparable study has directly tested judgments of racists in the German context. However, given the cultural climate of remembrance of the Holocaust and international crimes committed during the time of the Nazi regime, it is reasonable to assume that a strong social norm exists against using race or related constructs to judge others. Though not directly examining this research question, additional research supports the notion that prejudice against ethnic minority groups is not socially desirable, e.g., the divergence between implicit and explicit measures of attitudes (Glock et al., 2020; Hachfeld et al., 2011). Overall, teachers and teacher students in Germany might also be motivated to avoid being or being perceived as

prejudiced against ethnic minority students, and these motivational processes might lead to a positive bias in interactions with them. Because of these central underlying similarities between the U.S. and Germany—the existence of negative competence-related stereotypes and a norm to be unprejudiced—testing the presence of and mechanisms behind positive biases is worthwhile.

### **Summary and Overview of the Studies**

When discussing positive biases and two central theoretical explanations for them, it becomes clear that there is still much to be added to this line of research. Though both lines of research have acknowledged the relevance of the other (Biernat, 2012; Harber, 1998; Harber et al., 2012), they have not yet been considered in tandem within one line of research. Moreover, research has largely focused on the Anglo-American context, and it is an important test of the generalizability of both theories whether positive biases occur elsewhere. The present dissertation aims to address this by (1) examining whether positive biases occur in Germany while (2) testing whether one of two central theoretical perspectives could adequately predict under which conditions a positive bias would emerge. Thus, this dissertation aims to establish both empirical observations and make a contribution to theory development. To this end, four studies were conducted which addressed predictions of only the cognitive-perceptual perspective (Study 1), only the motivational perspective (Study 3), or both (Studies 2 and 4). While Study 1 focused on teacher students' judgments of vignettes, the other studies focused on communication. Studies 2 and 4 created a feedback-situation in which teacher students believed that their ratings and feedback texts would be communicated to a student. In Study 3, teacher students gave advice to a 10<sup>th</sup> grade student about his course plan for upper secondary school. In the following, each study's aim and methodology are briefly summarized (see Table 2 for a methodological overview). In addition to questions of generalizability to a different sociocultural context, the research presented here together

Table 2

*Methodological Overview Over the Four Studies*

	Manuscript 1	Manuscript 2	Manuscript 3	
	Study 1	Study 2	Study 3 <sup>a</sup>	Study 4 <sup>a</sup>
Participants	280 teacher students	132 teacher students	174 teacher students	319 teacher students
Type of evaluation	Non-communicated judgments	Non-communicated judgments, feedback	Advice	Feedback
Basis for evaluation	Vignette	Essay	Proposed timetable for 11 <sup>th</sup> grade	Essay
Target students' grade level	4 <sup>th</sup> grade	11 <sup>th</sup> grade	10 <sup>th</sup> grade	10 <sup>th</sup> grade
Target students' group membership	Origin of name (Turkish vs. German), gender (male vs. female)	Origin of name (Turkish vs. German)	Origin of name (Turkish vs. German)	Origin of name (Turkish vs. German)
Manipulation of target characteristics	Between subjects	Within subjects	Between subjects	Between subjects
Potential moderators: manipulated	Judgment standard	Feedback dimension	-	Response scale format, feedback dimension
Potential moderators: measured	-	Self-esteem, contingency of self-esteem, internal/external motivation to respond without prejudice	Self-esteem, contingency of self-esteem	Cognitive load, self-esteem

*Note.* <sup>a</sup>The studies referred to as Studies 3 and 4 within the theoretical framework and discussion are referred to as Study 1 and 2, respectively, within the third manuscript.



addresses gaps specific to each perspective, such as the examination of shifting standards in the school context and the differentiation between sugarcoating and negativity omission.

The first study (*When ethnic minority students are judged as more suitable for the highest school track: A shifting standards experiment*) was set up to examine whether the predictions of the cognitive-perceptual perspective regarding judgment standards (minimum vs. confirmatory) could be applied to the German school context, and to tracking recommendations in particular. Because two prior studies showed a standard shift based on the response scale format in this context (Holder & Kessels, 2017), we examined whether the same would be observed regarding the second main factor in SSM: judgment standard. In a 2 (target student: Turkish vs. German name) x 2 (target student: female vs. male) x 2 (judgment standard: minimum vs. confirmatory) design, teacher students ( $n = 280$ ) all read a vignette about an average-performing student online and indicated how many positive learning-related behaviors they wanted to see before recommending him or her to the highest school track. Based on prior research, we expected a positive bias in favor of students with a Turkish name and boys in the minimum standards condition, but a negative bias towards them in the confirmatory standards condition. Using the well-established behavioral checklist paradigm, Study 1 can replicate existing findings, but tests their generalizability to a different culture and to the school context. By focusing on tracking recommendations, Study 1 tests whether standard shifts may influence highly consequential decisions early on in children's lives.

Following this direct test of the cognitive-perceptual perspective, Study 2 (*Non-communicated judgements of, vs. feedback on, students' essays: Is feedback inflation larger for students with a migration background?*) aimed to test whether a positive feedback bias would be found in Germany under those circumstances described by the motivational perspective. Though this was not the explicit aim of this study, its design also allows for a test of the predictions of the cognitive-perceptual perspective. Because the conditions for a positive feedback bias—presence of negative stereotypes and a (potentially internalized)

social norm prohibiting their expression—are likely to be present in the German school context, we tested whether a positive bias towards students with a Turkish name would emerge in a feedback situation. In a 2 (evaluation condition: non-communicated judgment vs. feedback; between subjects) x 2 (target student: Turkish vs. German name; within-subjects) design, 132 teacher students read two target essays by a supposed student and either gave feedback on them or provided a judgment with the knowledge that it would not be communicated to the student. We expected that teacher students would judge the student with a Turkish name more negatively than the student with a German name in the non-communicated judgment condition, but more positively in the feedback condition. Our design enabled us to test whether a positive feedback bias would occur in Germany and also made important additions to the existing studies. First, the non-communicated judgment condition provided a control to examine whether there was, in fact, a positive bias in feedback or a positive bias more generally. Secondly, the coding of both positive and negative comments in open-text responses allowed us to examine whether the more positive valence was driven by more positive comments (sugarcoating), fewer negative comments (negative omission), or both. Lastly, by including self-esteem and contingency of self-esteem on others' approval in addition to internal/external motivation to respond without prejudice, we examined both proximal and distal moderators. This latter addition in particular allowed us to contribute to the discussion whether a positive self-image or reputational concerns may lead to a positive bias, and could provide indication as to whether a motivational or cognitive-perceptual mechanism may drive a positive bias.

Subsequently, we conducted Studies 3 and 4 online due to the COVID-19 pandemic (*Failure to warn and the positive feedback bias: Are teacher students' communications with ethnic minority students positively biased in Germany?*). Based on the motivational perspective, Study 3 aimed to replicate the failure-to-warn phenomenon (Crosby & Monin, 2007) in the German educational context and tested the role of self-esteem as well as

contingency of self-esteem on others' approval. We examined whether teacher students would give different advice to a supposed student with a Turkish as opposed to a German name. To this end, 174 teacher students read the highly ambitious course plan of a supposed 10<sup>th</sup> grade student and provided feedback on both rating scales, in part based on the original scales by Crosby and Monin (2007), and in an open text-format. We expected that teacher students would communicate a more positive assessment to the student with a Turkish as compared to a German name, give more encouraging advice and propose less extensive changes to the course load. Moreover, we expected participants with lower self-esteem and higher contingency to show a greater positive bias. Thus, this study examines the generalizability of the failure-to-warn phenomenon to a different cultural context and to teacher-student communication while also considering distal person-related moderators.

Lastly, Study 4 was designed for the expressed purpose to test the predictions of the cognitive-perceptual and motivational perspectives against one another. This way, we aimed to examine which perspective may better explain positive biases in a feedback situation. We identified four areas in which the two perspectives differ in their predictions (the role of response scale format, feedback dimension, cognitive load, and self-esteem). We manipulated two of these factors between subjects in a 2 (target student: Turkish vs. German name) x 2 (response scale format: subjective vs. objective) x 2 (cognitive load: yes vs. no) design and assessed feedback on content- and mechanics-related dimensions within subjects. Lastly, we measured participants' self-esteem. Teacher students ( $n = 319$ ) gave feedback on a supposed student's essay on rating scales and in an open-text format. Based on the cognitive-perceptual perspective, a positive bias towards students with a Turkish name was expected on a subjective, but not objective response scale for all feedback dimensions, and that this pattern would be more extreme under cognitive load. On the contrary, the motivational perspective predicts that a positive bias would occur regardless of the response scale format, but only on content-related feedback dimensions. Moreover, the bias was expected to be reduced or

disappear under cognitive load. Only the motivational perspective predicted an effect of self-esteem, such that greater self-esteem was expected to lead to less of a positive bias. To our knowledge, this study is the first to directly compare the two perspectives and thus makes an important theoretical contribution.

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## **II. Empirical Work**

**Manuscript 1**

**When ethnic minority students are judged as more suitable for the highest school track:  
A shifting standards experiment**

Nishen, A. K., Corcoran, K., Holder, K. & Kessels, U. (2022). When ethnic minority students are judged as more suitable for the highest school track: A shifting standards experiment. *European Journal of Psychology of Education*. Advance online publication. <http://doi.org/10.1007/s10212-021-00595-5>

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**Manuscript 2**

**Non-communicated judgements of, vs. feedback on, students' essays: Is feedback inflation larger for students with a migration background?**

Nishen, A. K. & Kessels, U. (2022). Non-communicated judgements of, vs. feedback on, students' essays: Is feedback inflation larger for students with a migration background? *Social Psychology of Education, 25*, 1–31. <https://doi.org/10.1007/s11218-021-09674-3>

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**Manuscript 3**

**Failure to warn and the positive feedback bias: Are teacher students' communications with ethnic minority students positively biased in Germany?**

Nishen, A. K. & Kessels, U. (not published). *Failure to warn and the positive feedback bias: Are teacher students' communications with ethnic minority students positively biased in Germany?* Department of Education and Psychology, Freie Universität Berlin.

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**Abstract**

US-American research suggests positive biases towards members of negatively stereotyped groups in direct communications, which might result from cognitive-perceptual and/or motivational causes. Two experiments in Germany tested whether positive biases in communications emerge towards students with a Turkish name. In Study 1, 174 teacher students gave advice to a student with a Turkish (vs. German) name about his very demanding course load, testing the *failure-to-warn phenomenon*. In Study 2, 319 teacher students gave performance feedback to a student with a Turkish (vs. German) name, testing for the *positive feedback bias*. Both studies measured or manipulated central potential moderators to examine possible underlying causes. Contrary to findings from the US, no evidence for overly encouraging advice or overly positive feedback to ethnic minority students emerged. The discussion points to the role of cultural context for positive biases towards negatively stereotyped groups and reflects on specifics of online study designs.

**Keywords:**

Ethnic minority, positive feedback bias, failure to warn, shifting standards, teacher students



## 1. Introduction

Stereotypes and their effects on judgment and interactions have been the topic of comprehensive research for many decades, and its results demonstrated the complexity of this topic (Dovidio et al., 2010; Fiske et al., 2002; Gaertner & Dovidio, 1986; Steele, 1997; Trawalter et al., 2009). One such aspect adding complexity is the finding that negative stereotypes about groups may lead to both negative and positive biases towards them (Biernat & Manis, 1994; Gaertner & Dovidio, 1986; Harber, 1998). Considerable evidence of negative biases towards ethnic minority students has accumulated (Bonefeld & Dickhäuser, 2018; Glock & Krolak-Schwerdt, 2013; Malouff & Thorsteinsson, 2016; but see also Jansen et al., 2019). In contrast, seemingly paradoxical positive biases towards members of negatively stereotyped groups have also been established in various studies. For example, the expected job performance of a Black (vs. White) applicant was judged as higher (*shifting standards phenomenon*; Biernat & Kobrynowicz, 1997), Black compared to White university students received more positive feedback by their White peers (*positive feedback bias*; Harber, 1998), and a Black (vs. White) student was less likely to be warned about taking on a too-challenging workload (*failure-to-warn phenomenon*; Crosby & Monin, 2007). To date, two theoretical perspectives and research programs have examined such positive biases (Kessels & Nishen, in press): One perspective focusing on cognitive-perceptual mechanisms based on the Shifting Standards Model (SSM; Biernat et al., 1991; Biernat & Manis, 1994) and another focusing on the motivational dynamics of intergroup interactions (e.g., Harber, 1998, 2004; Shelton et al., 2006). Understanding the underlying mechanism for positive biases is necessary to prevent these biases and thus reduce their likely negative effects on students' learning and motivation (Kessels & Nishen, in press). Importantly, there is a need to consider the effects of stereotypes in the school context in particular, as differences in teachers' judgments and behaviors can have a lasting impact on children's educational paths and, therefore, their lives. In particular, feedback and advice communicated to students is important for their learning, as it informs

and instructs the student, but also fulfills a motivational role in students' improvement of their work (Hattie & Timperley, 2007; Müller & Ditton, 2014). Thus, not only may overly positive feedback and advice lead to a less accurate self-concept for ethnic minority students, it may also negatively affect their motivation, for example by communicating low expectations (Kessels & Nishen, in press). Because communicating feedback and advice well is a crucial competency in teachers, it is important to understand how stereotypes may affect the feedback that students receive, and whether inequalities may be mirrored by as well as maintained through differences in communications.

In the two studies presented here, our first aim was to test whether previous research on positive biases in feedback and advice from the US (e.g., Biernat et al., 1991; Harber, 1998, 2004) and initial findings from Germany (Nishen & Kessels, 2021) were replicable and whether the failure-to-warn phenomenon would occur in the German school context as well. In addition, we aimed to compare the predictions made by the cognitive-perceptual (SSM; Biernat et al., 1991; Biernat & Manis, 1994) and the motivational perspective (e.g., Harber, 1998, 2004; Shelton et al., 2006) for the first time. In the following, we first summarize research showing positive biases related to competence in achievement-related contexts. We then describe each perspective on these positive biases in more detail and discuss four main differences in their predictions.

### **1.1. Positive Biases in Achievement-Related Settings**

Independently of one another, the cognitive-perceptual and motivational perspectives have accumulated evidence of positive biases in judgments of as well as feedback and advice given to members of negatively stereotyped groups in the context of competence and academic achievement (Biernat et al., 2010, 2012; Biernat & Fuegen, 2001; Biernat & Kobrynowicz, 1997; Biernat & Manis, 1994; Bonefeld et al., 2021; Croft & Schmader, 2012; Crosby & Monin, 2007; Harber et al., 2010, 2012, 2019; Harber, 1998, 2004; Holder & Kessels, 2017; Jampol & Zayas, 2021; Nishen et al., 2022; Nishen & Kessels, 2021; but see also Jansen et

al., 2019). For example, research from Germany focusing on judgments has shown that under specific circumstances a student with a Turkish (vs. German) name was judged as having better German competencies, and that a girl was judged as having better Math competencies than a boy, both domains in which the target group is negatively stereotyped (Holder & Kessels, 2017). In the US, research considering the interpersonal nature of the feedback situation has demonstrated that feedback given to Black and Hispanic (vs. White) students is more positive overall and contains less criticism (Croft & Schmader, 2012; Harber, 1998, 2004; Harber et al., 2010, 2012, 2019), which has also been found in Germany for students with a Turkish name ( $\eta^2_{\text{partial}} = .025-.058$ ; Nishen & Kessels, 2021). Similarly, the failure to warn-phenomenon was established by the finding that participants give more encouraging advice to Black as compared to White students even though a word of caution would be warranted (Crosby & Monin, 2007). In two vignette studies, Crosby and Monin (2007) showed that university students warned a Black (vs. White) student less strongly of the negative consequences of an overly ambitious workload ( $\eta^2 = .22-.90$ ; own calculation). In the following, we explain the two main theoretical explanations for such positive biases towards members of negatively stereotyped ethnic minority groups despite, and in fact dependent on, the presence of negative stereotypes.

## 1.2. The Cognitive-Perceptual Perspective

The SSM (Biernat et al., 1991; Biernat & Manis, 1994) argues that people use stereotypes to guide judgments about members of negatively stereotyped group, and that this can lead to a negative or positive bias depending on the reference group used in the comparison. For example, the same performance by a student with a German name will be judged as indicative of greater ability than that of a student with a Turkish name if participants simply base their judgment on the stereotype that Turkish-German students generally perform worse than German students (termed *cross-category comparison*; Biernat, 2012). In this case, the expectation is thought to become the judgment, producing a negative bias against students

with a Turkish name. If, however, the students are compared to the expectation for their relative group (*within-category comparison*; Biernat, 2012), this could result in a judgment where the student with a Turkish name is considered relatively good (“Very good for a student with a Turkish migration background!”), but the student with a German name mediocre (“Okay for a student without a migration background.”). As a result, the student with a Turkish name would be evaluated more positively than the student with a German name. Whenever such within-category comparisons are facilitated by contextual features, positive biases in favor of members of negatively stereotyped groups are expected to occur (Biernat, 2012; Biernat et al., 1991; Biernat & Manis, 1994). Importantly, in both within- and cross-category comparisons, stereotypes guide judgments, though this basis is either masked (*within-category comparison*) or revealed (*cross-category comparison*; Biernat, 2012). Indeed, various studies following the predictions made by the SSM for both gender and race/ethnicity have already found evidence of this differentiation in the US (Biernat et al., 2010; Biernat & Kobrynowicz, 1997; Biernat & Manis, 1994; Kobrynowicz & Biernat, 1997) and Germany (Holder & Kessels, 2017; Nishen et al., 2022; Schuster et al., 2021).

### **1.3. The Motivational Perspective**

The motivational perspective theorized that due to widespread egalitarian norms, members of an ethnic majority experience feelings of threat, anxiety and concern that they might be or appear to be prejudiced in personal interactions with members of negatively stereotyped ethnic minorities (Blascovich et al., 2001; Richeson & Shelton, 2011; Shelton et al., 2006; Stephan & Stephan, 1985; Trawalter et al., 2009). These theories, mainly developed for and tested in the context of interactions between White and Black Americans, posit that interracial interactions may be experienced as stressful because White people want to be liked and unprejudiced (Bergsieker et al., 2010), but concerned that they will be stereotyped as racist (Richeson & Shelton, 2011; Shelton et al., 2006; Trawalter et al., 2009). Interpersonal interactions may be especially likely to elicit such concerns due to the salience of the

respective group memberships (Mendes & Koslov, 2013; Shelton et al., 2006). For example, people can regulate their own behavior to reduce the uncertainty that their behavior may be prejudiced (Shelton et al., 2006; Trawalter et al., 2009) which can lead to overly positive, affiliative interactions due to overcompensation (also termed overcorrection/-accommodation; Harber et al., 2019; Mendes & Koslov, 2013; Trawalter et al., 2009). Harber (1998) argued that overcorrection could impact the feedback ethnic minority students receive from their (predominantly ethnic majority) teachers. This is because feedback given to students should clarify the discrepancy between the current performance and a desired goal so that future performance can be improved (Hattie & Timperley, 2007). However, such criticism could be construed as being due to prejudice rather than being warranted when communicated to an ethnic minority student (Harber, 1998). The resulting concern about prejudice could be alleviated by regulating one's own behavior, that is, by reducing criticism and increasing positive feedback which in turn would lead to more positive feedback vis-à-vis members of negatively stereotyped groups (Harber, 1998). A number of studies in the US have already shown such a positive feedback bias to exist in written (Croft & Schmader, 2012; Harber, 1998; Harber et al., 2010, 2012, 2019) and verbal (Harber, 2004) feedback, as has an initial study in Germany (Nishen & Kessels, 2021). Similarly, motivational influences on advice have also been considered. Specifically, Crosby and Monin (2007) argue that the concern to be or appear to be prejudice can result in “approving nods, or worse, silence, where alarm and concern would be warranted” (p. 663). Again, a situation in which it would be necessary to discourage someone from moving forward as planned—i.e., to criticize someone's plans—is considered to elicit concerns about prejudice if the recipient is from a negatively stereotyped group (Crosby & Monin, 2007).

#### **1.4. Comparison of the Predictions of the two Perspectives**

The cognitive-perceptual and the motivational perspective theorize different constructs as important to the emergence of a positive bias (person-related factors, response scale format,

feedback dimension, cognitive load). These differences highlight that understanding which mechanism may drive a positive bias is crucial to better understand when ethnic minority students' learning may be negatively affected. For example, these proposed moderators provide insight into who may be more likely to display a positive bias and which solutions may be effective. Because feedback is central for students to reach their learning goals (e.g., Hattie & Timperley, 2007), and differences in feedback may (further) disadvantage ethnic minority students (Kessels & Nishen, in press), we consider central differences between the two perspectives.

#### ***1.4.1. Person-Related Factors: Self-Esteem and Contingency of Self-Esteem***

When considering the motivational perspective, it becomes clear that factors that influence the degree to which a person is concerned about prejudice should influence the degree of the positive bias that person exhibits (e.g., Harber, 2004). Therefore, person-level moderators have been examined, for example, internal and external motivation to respond without prejudice (Plant & Devine, 1998), but the results have been inconsistent (Croft & Schmader, 2012; Crosby & Monin, 2007; Nishen & Kessels, 2021). Another study argued that people with higher global self-esteem and whose self-esteem is less contingent on other's approval might be less tempted to give overly positive feedback, as they have a stable and positive self-image (Nishen & Kessels, 2021). Greater global self-esteem was associated with a lessened positive bias, though contingency of self-esteem was unrelated to the positive bias (Nishen & Kessels, 2021). In our studies, we therefore test whether self-esteem and contingency of self-esteem on approval by others had an effect on the failure-to-warn phenomenon and the positive feedback bias. These factors' association with a positive bias would support a motivational mechanism, as they should not affect the use of reference groups as described in the cognitive-perceptual perspective.

### 1.4.2. *Response Scale Format*

When studying judgments or feedback, rating scales with different anchor points have been used. The response scale format is theorized to be a major factor in facilitating or hindering positive biases based on the SSM (Biernat, 2012; Biernat et al., 1991; Biernat & Manis, 1994). Biernat and Manis (1994) differentiate between *objective* and *subjective response scale formats* that are thought to differ in the extent to which they allow for the use of within-category comparisons, i.e., standard shifts. Objective scales are defined as referring to “units [that] maintain a constant meaning across contexts“ (Biernat, 2003, p. 1020), for example when estimating the height of a person in centimeters, their assumed income in dollars, or their achievement in test scores or grades. Judgments on an objective scale cannot be defined relative to a specific group, for example, a low score on a standardized test is low regardless of who received it. However, people may judge a performance differently on so-called subjective scales. On such scales, “rating points can be differentially defined and adjusted (e.g., within time, within perceivers, and within categories of targets)” (Biernat, 2003, p. 1020). A prominent example are Likert-scales ranging from “very bad” to “very good”—here, the reference point remains undefined and can therefore be adjusted (e.g., “very good [for a student with a Turkish migration background]”). As a result, positive biases are expected on subjective, but not objective scales (Biernat & Manis, 1994). This difference between objective and subjective response scales is a pattern found by numerous studies in judgment contexts (Biernat et al., 1991, 2003, 2012; Biernat & Kobrynowicz, 1997; Biernat & Manis, 1994; Biernat & Vescio, 2002; Holder & Kessels, 2017; Kobrynowicz & Biernat, 1997). On the contrary, the motivational perspective does not consider the response scale format to be impactful. Here, feedback has often been given on Likert-scales and in open texts that have then been coded (e.g., how many positive comments were made), both of which Biernat and colleagues might classify as subjective response scale formats. However, a positive bias has also been found on feedback regarding scales that could be considered

objective (grades: Croft & Schmader, 2012; Nishen & Kessels, 2021; number of hours needed to practice writing skills: Harber et al., 2010). In summary, response scales' impact on positive biases would indicate a cognitive-perceptual mechanism.

### **1.4.3. Feedback Dimension**

The motivational perspective has argued that a positive feedback bias should only occur on those dimensions of feedback that might elicit the concern to be or appear to be prejudiced (Harber, 1998). The essential differentiation proposed by Harber (1998) relates to the degree to which clear and universal external criteria are available on which feedback can be based. This is the case for *mechanics-related* feedback: There exists an accepted set of rules governing aspects such as spelling, punctuation, and the type of phrasing appropriate for an essay (e.g., no colloquialisms). This assures those giving feedback that their feedback will be understood as referring to these rules; criticism should not be attributed to prejudice. On the contrary, other feedback-related aspects such as logic, the truth of an argument and the best structure might be subject to debate or preference and criticizing them might also be more personal to the writer (Harber, 1998). As a result, criticizing *content-related* aspects as well as the overarching quality could be understood as either warranted or as influenced by prejudice; and this uncertainty could increase the concern about prejudice (Harber, 1998). Indeed, research has repeatedly found a positive feedback bias on content-related, but not mechanics-related feedback dimensions (Harber, 1998; Harber et al., 2010; Nishen & Kessels, 2021). Importantly, the cognitive-perceptual perspective does not differentiate between different aspects of feedback in such a way. Because the general negative stereotype about the academic abilities of Turkish-Germans (e.g., Bonefeld & Karst, 2020; Froehlich et al., 2016) also extends to their mastery of the German language (Glock & Krolak-Schwerdt, 2013; Sprietsma, 2013), a standard shift should occur as well (i.e., on both content- and mechanics-related dimensions). In summary, an effect of the feedback dimension would underline that a motivational cause is at the root of positive biases.



#### ***1.4.4. Cognitive Load***

When it comes to cognitive load (also referred to as cognitive busyness), which can be defined as being “simultaneously involved in several resource-consuming tasks” (Gilbert & Hixon, 1991, p. 510), the implications of the two perspectives explicitly diverge. This is because cognitive resources are limited and when they are already utilized by a task, another process involving effortful processes cannot be carried out to the same extent (Diamond, 2013). However, the cognitive-perceptual and motivational perspectives cast different processes as effortful and therefore, imply different effects of cognitive load on positive biases. The cognitive-perceptual perspective argues that as stereotypes are energy-saving mechanisms (Allport, 1954; Macrae et al., 1994), they should be applied to a greater degree whenever cognitive resources are low (Biernat et al., 2003; Fiske et al., 1999; Gilbert & Hixon, 1991; Macrae & Bodenhausen, 2000; Pendry & Macrae, 1994). Because both within- and cross-category comparisons are based on stereotypes, cognitive load should exacerbate the differences observed in each case (i.e., a negative bias in cross-category and a positive bias in within-category comparisons; Biernat et al., 2003). Indeed, a series of four experiments found that when participants had abundant cognitive resources, the typical shifting standards pattern emerged and this effect was exacerbated under cognitive load (Biernat et al., 2003). On the other hand, theories on interracial interactions which are central to the motivational perspective, have highlighted that these interactions require cognitive resources (Richeson & Trawalter, 2005; Trawalter et al., 2009). This is because self-regulation during such interactions—for example, inhibiting negative stereotypes, regulating behavioral responses such as smiling—demands cognitive resources. Therefore, these processes may be impaired if not enough cognitive resources are available (e.g., Mendes & Koslov, 2013). Thus, the positive bias in feedback should be attenuated or even eliminated under cognitive load. Taken together, if cognitive load enhances the positive bias, this would

suggest a cognitive-perceptual mechanism, while a smaller or nonexistent positive bias under cognitive load suggests a motivational mechanism.

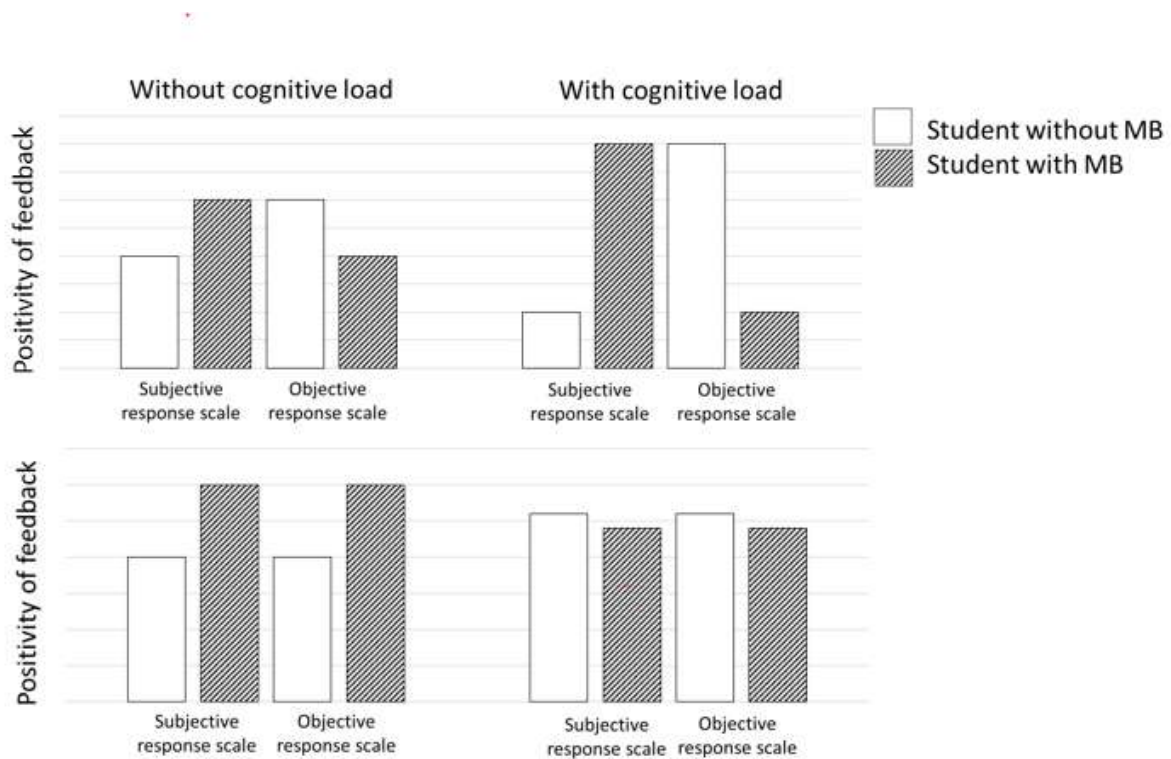
### **1.5. The Present Research**

All in all, research has accumulated both from North America as well as Germany demonstrating that under specific circumstances, positive biases towards negatively stereotyped groups can emerge (e.g., Biernat & Kobrynowicz, 1997; Harber et al., 2012; Holder & Kessels, 2017; Nishen & Kessels, 2021; Schuster et al., 2021). It is important to understand whether a positive bias occurs in the German school context, as it may have lasting consequences for students' self-concept, motivation, and learning (Kessels & Nishen, in press). For example, praise and overly positive feedback can negatively impact performance and may encourage self-handicapping (Hattie & Timperley, 2007; Kim et al., 2010; Kluger & DeNisi, 1996). Moreover, if students do not take overly positive feedback at face-value, but rather attribute it to low expectations, their relationship with their teacher may be undermined and they may simply discard the feedback (Finn et al., 2009). Positive biases may have lasting consequences for students' learning and motivation over time, and may contribute to the performance differences between ethnic minority and majority students. Therefore, as a first aim, the present research examines whether existing findings on both the failure-to-warn phenomenon (Study 1) and the positive feedback bias (Study 2) can be replicated in the German context regarding students of Turkish origin, who form a large, negatively stereotyped ethnic minority group (e.g., Bonefeld & Karst, 2020). In Study 1, teacher students reviewed the overly ambitious timetable that a supposed 10<sup>th</sup> grade student with either a German- or Turkish-origin name planned to pursue in the following term, and provided an assessment of and advice about the timetable to the student online (parallel to Crosby and Monin, 2007). To our knowledge, this is the first study to examine the failure-to-warn phenomenon in the German school context. In Study 2, teacher students gave feedback online on an essay supposedly written by either a student with a Turkish- or German-origin

name. We hypothesized that a positive bias towards students with a Turkish name would emerge in both studies.

Our second aim in Study 2 was to better differentiate between the cognitive-perceptual and the motivational perspectives. This is especially important because of the differing implications of the two perspectives regarding, for example, which solutions might best address biases in teachers. While both perspectives predict positive biases, they differ in the kinds of moderators they theorize and clearly imply divergent predictions regarding the effects of cognitive load. Therefore, we manipulated and measured relevant factors (response scale format, feedback dimension, cognitive load) in Study 2. If the cognitive mechanism was responsible for the positive bias, we would expect a positive bias on subjective, but a negative bias on objective response scales, regardless of the feedback dimension. Both effects would be expected to be greater under cognitive load. However, if a motivation-based overcorrection was responsible for the positive feedback bias, we would expect a positive bias regardless of the response scale (subjective or objective), but the bias should only occur on feedback dimensions without clear external criteria (i.e., content but not mechanics). This effect would be expected to disappear or even reverse under cognitive load if motivational concerns are at the root of the positive bias (see Figure 1 for an idealized visualization of the hypotheses).

Lastly, we also examined the effect of self-esteem (Study 1 and 2) and contingency of self-esteem on others' approval (Study 1) on the extent of a positive bias. The motivational perspective suggests that people who are more concerned about prejudice are more likely to exhibit a positive bias (Harber et al., 2010). Therefore, we expected that a lower self-esteem would increase the positivity displayed towards the student with a Turkish name (as had been found for some feedback dimensions in Nishen and Kessels, 2021). We did not make specific predictions for the effect of participants' contingency of self-esteem on others' approval, as this might be associated with greater concern with being perceived as prejudiced but had been found to be unrelated to positive bias in prior research (Nishen & Kessels, 2021).

**Figure 1***Idealized Visualization of Hypotheses for Study 2*

*Note.* The upper panel displays the idealized hypothesized pattern based on the cognitive-perceptual perspective. The lower panel displays the idealized hypothesized pattern based on the motivational perspective for a content-related feedback dimension (no effects expected for mechanics/style-related feedback dimensions).

## 2. Study 1

In this study, we aimed to replicate the results found by Crosby and Monin (2007) in a school context. While we also focus on advice given regarding an overly ambitious workload, this study examined teacher students' advice to a supposed 10<sup>th</sup>-grade student rather than peer-to-peer advice at the university level. In parallel to Crosby and Monin (2007), we expected that communications to a student with a Turkish name would be more positive and contain less strong warnings about the expected workload than to a student with a German name.

## 2.1. Method

### 2.1.1. Participants

All in all, 220 participants completed the online experiment, of which we excluded those who questioned the cover story ( $n = 2$ ), filled in the questionnaire in a careless manner ( $n = 1$ ), or failed to type in the student's name before giving advice ( $n = 9$ ). Due to the specificity of our hypotheses to those participants whose ethnic group is not negatively stereotyped, we excluded teacher students who were likely the target of similar stereotypes (e.g., Turkish or Arabic migration background,  $n = 20$ ), and those whose migration background was from the Global South (e.g., India,  $n = 5$ ) or unknown ( $n = 9$ ). Of the remaining 174 participants, 79.3% were women, which is roughly representative of teachers in Germany (73.4% women; Statistisches Bundesamt, 2021).

### 2.1.2. Development of Materials

In German High Schools, students from the 11<sup>th</sup> grade on have some freedom to choose their basic and advanced courses. In a pilot study, we developed a timetable that was in accordance with the regulations while also perceived as being very difficult and time-consuming. This was necessary so that it would be reasonable to warn the student about his plans. Four timetables were developed that varied in the subjects chosen for advanced placement courses and whether non-required courses had been chosen. In the pilot study, 40 teacher students (72.5% women) indicated how difficult and how time-consuming they considered each of the timetables on two scales from 1 to 10. The timetable perceived as most difficult ( $M = 8.80$ ,  $SD = 1.74$ ) and most time-consuming ( $M = 9.23$ ,  $SD = 1.42$ ) was chosen. This timetable included mathematics and physics as the advanced placement courses as well as voluntary lessons in four subjects in addition to the required workload. All in all, if a student followed this timetable, they would have very long and demanding school days (all days had at least eight 45-minute classes). In addition, we chose a German and a Turkish-origin name based on the dataset compiled by Nett et al. (2020), in which German participants

rated 2000 names on multiple characteristics. First, we identified those German and Turkish or Arabic-origin names that had competence and warmth ratings near the theoretical mean of the scale (3.5-4.5). Two names (Dominik, Kerem) were chosen that did not differ in the ratings of competence ( $t(39) < 0.01, p = .999$ ) and warmth ( $t(39) = -0.28, p = .783$ ).

### **2.1.3. Design and Procedure**

Participants accessed the study via a link that they received through course instructors. Following the guidelines of the department, participants were informed that their participation was anonymous and voluntary and provided active consent; at the time of the data collection no formal approval by an institutional review board was required. On the first page, they read that they would provide advice to a student who was participating in a study on how students choose their course load for the last two years of school. As they proceeded to the next page, they were randomly assigned either a student with a German-origin (Dominik B.;  $n = 85$ ) or a Turkish-origin name (Kerem Y.;  $n = 89$ ). First, participants saw an excerpt of the student's supposed grades which indicated mediocre performance (GPA = 2.5 on the German grades scale from 1 to 6, where lower values indicate better grades). Subsequently, they could examine the timetable the student supposedly planned to take. Believing that their answers would be forwarded to the target student, participants provided their assessment of his plans and their advice on rating scales. They then had the option to write a text addressed to the student. After submitting their advice, they answered two control variables (student's perceived ambitiousness and giftedness) and provided demographic information. Next, they filled in several scales, among them the assessed moderators self-esteem and contingency of self-esteem. At the end of the data collection period, participants were informed that this was a cover story and told about the aims of the study as well as the reason for this deception.

### **2.1.4. Measures**

**Rating-Scale Measures.** Participants answered the following scales believing that the answers would be forwarded to the target student. In parallel to Crosby and Monin (2007),

participants answered items related to a) their assessment of the student's plans, and b) their advice. Expanding on prior research, we also assessed c) the anticipated achievement-related positive and negative emotions the target student might experience when putting his plans into action, which were combined into separate mean scores. For their assessment of the course load (a), participants answered six items related to the amount of free time the student would have, how time-consuming, difficult and demanding the course load would be, how easily the student would manage the course load and to what extent he may feel overwhelmed. All items were assessed on 7-Likert scales for which 1 represented a very positive assessment (e.g., not time-consuming) and 7 a very negative assessment (e.g., no free time). This scale had high reliability (Cronbach's  $\alpha = .853$ ; see Table 1 for descriptives on all dependent variables). Three items reflected the advice participants gave (b). Participants indicated the degree to which the student should change the course work on a scale from 1 = *not at all* to 5 = *very much*. Moreover, they indicated on two items whether they thought the student should seek out further advice related to his course work and to the general demands of the final years of high school (1 = *no further advice needed*, 5 = *a lot of further advice needed*). This scale also had high reliability (Cronbach's  $\alpha = .807$ ). Regarding the anticipated achievement-related emotions (c), participants indicated how often they expected the student to experience certain positive and negative emotions on a scale from 1 = *never or very seldom* to 7 = *always or very often*. We used the eight achievement emotions identified by Pekrun et al. (2011), of which three are positive (pride, joy, hopefulness) and five are negative (anger, hopelessness, sadness, boredom, shame). We added two further emotions, frustration and disappointment, that could be experienced by students with an overly ambitious workload. We averaged the ratings for the positive emotions (Cronbach's  $\alpha = .805$ ) and for negative emotions (Cronbach's  $\alpha = .881$ ; boredom was excluded because it may imply high ability).

**Table 1***Descriptive Parameters of the Dependent Variables in Study 1*

Dependent variables	Full dataset		Students with German name		Students with Turkish name	
	<i>M (SD)</i>	<i>min-max</i>	<i>M (SD)</i>	<i>min-max</i>	<i>M (SD)</i>	<i>min-max</i>
Rating-scale measures	<i>n</i> = 174		<i>n</i> = 85		<i>n</i> = 89	
Assessment of student's plans <sup>1</sup>	5.18 (0.55)	3.33-6.67	5.19 (0.55)	3.33-6.33	5.17 (0.56)	4.00-6.67
Advice <sup>2</sup>	2.76 (0.67)	1.00-4.33	2.81 (0.71)	1.00-4.33	2.71 (0.63)	1.33-4.00
Positive achievement-related emotions <sup>3</sup>	4.20 (0.97)	2.00-7.00	4.05 (0.95)	2.00-6.33	4.33 (0.97)	2.00-7.00
Negative achievement-related emotions <sup>3</sup>	3.91 (1.00)	1.17-6.17	3.98 (0.96)	1.67-6.17	3.86 (1.03)	1.17-6.00
Open-text responses	<i>n</i> = 145		<i>n</i> = 72		<i>n</i> = 73	
Need-to-change messaging strength <sup>3</sup>	3.83 (1.44)	1.00-7.00	3.97 (1.49)	1.00-7.00	3.69 (1.39)	1.00-7.00
Consequences for mental health <sup>3</sup>	2.48 (1.57)	1.00-6.00	2.45 (1.59)	1.00-6.00	2.51 (1.56)	1.00-6.00
Consequences for time/relationships <sup>3</sup>	2.14 (1.48)	1.00-6.50	2.19 (1.53)	1.00-6.50	2.10 (1.45)	1.00-5.50
Comprehensiveness suggested changes <sup>3</sup>	3.41 (1.01)	1.00-6.00	3.56 (1.14)	1.00-6.00	3.26 (0.85)	1.00-5.00

*Note.* <sup>1</sup>Assessed on a scale from 1 to 7 (lower numbers represent more positive assessments). <sup>2</sup>Assessed on a scale from 1 to 5 (lower numbers represent less change advised). <sup>3</sup>Assessed on a scale from 1 to 7 (lower numbers represent lower indication).



**Open-Text Responses and Coding.** Participants were also able to write notes addressed to the student, which 83.3% of our sample did ( $n = 145$ ). On average, the notes were 103 words long ( $SD = 68.5$ ), and this length did not differ by target student's name ( $t(141.2) = 0.13, p = .896$ ). Two coders independently rated the notes on how strongly the note conveyed that the timetable needed to be changed on a scale from 1 = *not at all* to 7 = *very strongly*. On the same scale, coders rated how strongly students were warned about negative consequences for their mental health (e.g., stress) and negative consequences for their free time or relationships. Lastly, two additional raters indicated how extensive the suggestions for changes in the texts were (1 = *none at all*, 4 = *some*, e.g., *dropping two voluntary subjects*, and 7 = *very high*, e.g., *dropping voluntary subjects and changing the advanced placement courses*). After discussions, interrater-reliability on all four variables was moderate to good ( $ICC(2, 2) = .698-.878$ ). All raters were blind regarding the condition.

**Self-esteem and Contingency of Self-Esteem.** As potential moderators, participants' self-esteem and contingency of self-esteem on approval of others were assessed based on the scales developed by Rosenberg (1979; translation into German by Ferring & Filipp, 1996b) and Schwinger et al. (2017), respectively. Participants answered ten items on self-esteem (e.g., "I have a number of good characteristics"; 1 = *disagree strongly* to 4 = *agree strongly*) and five items on contingency of self-esteem on approval of others (e.g., "I cannot respect myself if others do not respect me"; 1 = *disagree strongly* to 5 = *agree strongly*). The scales had very good reliability (Cronbach's  $\alpha_{\text{Self-esteem}} = .871$  and Cronbach's  $\alpha_{\text{Contingency}} = .779$ ).

## 2.2.Results

To examine whether there was evidence of the failure-to-warn phenomenon, we conducted independent-sample Welch's  $t$ -tests in which the dependent variables were predicted by the name of the student (Turkish vs. German). Post-hoc sensitivity analyses using GPower (Faul et al., 2007) indicated that our analyses would be able to detect a small effect ( $d = 0.38$ ) with a power of .80. To examine whether self-esteem and self-esteem of

contingency moderated this effect, additional regression analyses including their interactions with student name were conducted. A full correlation table with all dependent variables can be found in the supplementary material (Table S1).

### 2.2.1. Preliminary Analyses

Before further analyses were conducted, we tested whether the students with the German and Turkish names were perceived differently regarding their ambition and giftedness, which could explain potentially varying advice (Crosby & Monin, 2007). Participants rated both students as equally ambitious ( $M_{\text{Turkish}} = 82.56$ ,  $SD = 12.74$ ;  $M_{\text{German}} = 80.25$ ,  $SD = 16.17$ ,  $t(155.8) = -1.03$ ,  $p = .304$ ) and equally gifted ( $M_{\text{Turkish}} = 65.63$ ,  $SD = 11.38$ ,  $M_{\text{German}} = 64.77$ ,  $SD = 11.37$ ,  $t(169.7) = -0.49$ ,  $p = .624$ ).

### 2.2.2. Main Analyses

**Rating-Scale Measures.** The Welch's  $t$ -tests indicated that teacher students did not communicate a different assessment of the timetable to the student with a Turkish name ( $t(171.9) = 0.19$ ,  $p = .850$ ) and did not give him different advice on the rating scales ( $t(167.7) = 1.00$ ,  $p = .319$ ; for descriptives see Table 1). Participants also did not differentiate between the two students when indicating the negative achievement-related emotions (e.g., frustration) they would have if they followed through with their plan ( $t(171.9) = 0.79$ ,  $p = .431$ ). Lastly, participants tended to convey to a marginally significantly greater degree to the student with a Turkish name that he would experience positive achievement-related emotions (e.g. pride) when choosing this timetable ( $t(171.8) = -1.94$ ,  $p = .054$ , Cohen's  $d = 0.30$ ).

**Open-Text Responses.** Participants' open-text advice did not differ between the student with a Turkish as compared to a German name with regards to how strongly their messages conveyed the need to change the plan ( $t(142.1) = 1.17$ ,  $p = .244$ ) and neither regarding the consequences for mental health ( $t(141.7) = -0.21$ ,  $p = .831$ ) or time and relationships ( $t(141) = 0.34$ ,  $p = .705$ ). In tendency, the suggestions for change that

participants made in the text were less comprehensive for the student with a Turkish compared to a German name ( $t(131.2) = 1.81, p = .073$ ; Cohen's  $d = -0.30$ ).

### **2.2.3. Moderator Analyses: Self-esteem and Contingency of Self-Esteem on Others'**

#### ***Approval***

The moderator analyses did not show the expected interaction effects between self-esteem or self-esteem contingency on other's approval and the target student's name (all  $p > .134$ , for all results including main effects, see Table S2).

### **2.3. Discussion Study 1**

Overall, the results of this study did not support the hypothesis that advice given to a student with a Turkish as compared to a German name would be more encouraging. Participants did not differ in the assessment of the student's plan they communicated to the student, their advice, or the consequences for achievement-related negative emotions they communicated. In their open-test responses, participants also warned both students equally about the consequences of the high work load. Though two marginally significant differences emerged, overall, the findings by Crosby and Monin (2007) could not be replicated for the German school context. Moreover, the interaction effects of self-esteem and contingency of self-esteem with the student's name that could be expected based on the motivational perspective did not emerge. In order to compare the predictions derived from the motivational perspective to those based on the cognitive perspective in more detail, we applied a more comprehensive design systematically varying different potentially influential factors in Study 2.

### **3. Study 2**

In the second study, our aims were to (1) replicate the results by Nishen and Kessels (2021) showing a positive bias in the feedback provided to a student with a Turkish as compared to a German name, and (2) manipulate and measure constructs that might reveal whether a cognitive-perceptual or motivational mechanism underlies a positive bias. In a 2

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(target student's name: German vs. Turkish) x 2 (response scale: subjective vs. objective endpoint) x 2 (experienced cognitive load: increased vs. none) between-subjects design we asked participants to give feedback on various dimensions of feedback (content vs. mechanics-related, *within subjects*) and measured their self-esteem. Based on the cognitive-perceptual perspective, it would be expected that a positive bias would emerge on a subjective, but not objective response scale regardless of the feedback dimension. Cognitive load was expected to magnify this difference. However, based on the motivational perspective, one would expect a positive bias only on content-related feedback dimensions regardless of the response scale format. This effect should disappear under cognitive load (see Figure 1). Moreover, greater self-esteem would be expected to lead to less positivity towards the student with a Turkish name when participants did not experience cognitive load.

### **3.1. Method**

#### **3.1.1. Participants**

Because of the complexity of the design, we conducted a-priori power analyses using GPower (Faul et al., 2007) based on the effect sizes observed by previous research, which indicated that a sample of at least 309 participants would be needed to find a similar effect (partial  $\eta^2 = .025$ ). Our sample consisted of 368 teacher students, of which we excluded five participants who questioned the coverstory and three participants who did not correctly fill in the supposed student's name in the feedback. We applied the same exclusion criteria as in Study 1. The final sample consisted of 319 teacher students, of which most were female (75.8%; one non-binary person).

#### **3.1.2. Development of Materials**

To choose a low-quality essay, two essays on the topic of one's age when moving out of one's parents' home were created. Both essays had a high number of spelling-, punctuation- and grammar-related mistakes as well as weaknesses in content (e.g., repeated and unbalanced arguments). In a pilot study, 42 teacher students each read one of the essays

and rated it on eight criteria (e.g., punctuation, structure) and likeability on a 6-Likert scale. The two essays only differed in likeability ( $t(40) = 2.46, p = .018$ ). Because we did not want participants' potential dislike to influence feedback, the first essay with a higher likeability rating ( $M = 4.09, SD = 1.31$ ) was used. Secondly, we chose the target students' names based on the dataset provided by Nett et al. (2020). We chose two German (Arne, Leo) and two Turkish (Cem, Samir) names in such a way that none of the four names differed from one another in terms of perceived competence or warmth (all  $p > .296$ ) and the names were near the theoretical midpoint of the scale.

### **3.1.3. Design and Procedure**

The experiment had a 2(target student's name: Turkish vs. German) x 2(response scale: subjective vs. objective end points) x 2(cognitive load: increased vs. none) between-subjects design and the feedback dimension (content- vs. mechanics-related) manipulated within subjects. Participants were assigned to their condition based on a truly randomized procedure, thus, differences in the number of participants per cell occurred ( $n = 24$  to  $n = 60$ ). As in study 1, participants were informed that their participation was anonymous and voluntary and they provided active consent. At the time of data collection, no formal approval by the institutional review board was required. At the beginning, participants read that they were part of a project designed to give 10<sup>th</sup> grade students easily accessible, independent feedback prior to the comprehensive German exam all students in Germany have at the end of the 10<sup>th</sup> grade. Next, all participants were presented with a short in-advance thank you note from the supposed student to whom they were assigned. All participants saw the same text, but the name on the note differed: It was either Turkish-origin (Cem, Samir;  $n = 136$ ) or German-origin (Arne, Leo;  $n = 183$ ). Afterwards, for about half of the participants ( $n = 159$ ), the cognitive load manipulation was introduced (modelled after Wegner et al., 1987). These participants were instructed to “ [...] not think about any other topics, such as upcoming exams, tasks, or work which you need to finish at the moment or with which you are

occupied. If you do think about exams, tasks or similar things, [...] try to inhibit these distracting thoughts about tasks to do until you have sent the feedback.”, and this instruction was again repeated after they had read the student’s text (before filling in the feedback). For those in the control condition ( $n = 160$ ), no such instruction was presented. Subsequently, participants read the supposed prompt for the essay and then the essay of the student. After reading the essay, teacher students were asked to indicate their feedback on the student’s writing skills on three rating scales. For these three rating scales, we manipulated whether the participants were asked to indicate their feedback on subjective scales ( $n = 143$ ) or on objective scales ( $n = 176$ ). Whereas the subjective scales were Likert-type scales, the objective scales reflected so-called BISTA-scores based on a nationwide competence scoring system (see below). Then, participants in both conditions were asked to tell the target student which grade he might get for this essay, the grade they expected him to get in the upcoming German exam, and to provide open-text feedback (no word limit). After finishing this feedback section, participants answered the manipulation check for cognitive load, filled in the self-esteem scale and their demographics. At the end of data collection, participants were informed that this was a cover story and told about the aims of the study and the reason for this deception.

#### **3.1.4. Measures**

**Rating-Scale Measures.** Participants gave feedback on three rating scales regarding mechanics-related writing skills, content-related writing skills, and writing skills overall. To ensure that participants understood the feedback nature of these rating scales, they began with “Dear [student name], I believe your [skill] is...” In the subjective response scale condition, participants answered each item on a 7-Likert scale (1 = *very bad* to 7 = *very good*). In the objective response scale condition, participants provided their feedback on a numerical scale used in Germany to indicate competence scores in standardized tests in primary school.

Participants read a short text on this scale (BISTA-scale; BILDungsSTAndards is German for

educational standards; Thoren et al., 2012), in which the standardized nature of the scale and its use as an external standard to evaluate students was highlighted. Participants were told that the teacher had provided the general competence level at which the student performed (average), and that they should now tell the student, based on the impression of the essay, the competence score they assume him to have within the range of possible values at that competence level (465-535 points). For the objective feedback of writing skills overall, participants were asked to indicate the percentile rank of the student (0-100). For the subsequent analyses, the objective ratings were adjusted to range from 1 to 7 (see Table 2 for all descriptive statistics).

**Grades.** Participants indicated the grade they would give for the essay on the German grade scale from 1+ to 6- (18-point scale). Moreover, they indicated the grade they expected the student to receive in the upcoming German exam on the same scale. For ease of interpretation, grade values were reversed such that higher values indicate a better grade.

**Open-Text Responses and Coding.** After their rating-based feedback, participants were invited to write an open-text response to the student. All but four participants did so ( $n = 315$ ). Two coders who were blinded to the condition read each text and coded the following aspects. First, the amount of positive comments related to content vs. mechanics was counted, and the same for negative comments related to content vs. mechanics (e.g., positive content “You have always supported your arguments with examples, which I also liked”; negative mechanics “You are still making a lot of spelling mistakes”). Comments on essay content that explicitly referred to an external rule were coded as mechanics-related comments (e.g., “You have touched on some disadvantages, but [...] in an argumentation you should consider both sides roughly equally, i.e., best would be three pro and contra arguments each”). Based on these counts, the percent of positive comments out of all comments was also calculated. Coders also coded the tone of the feedback on a 7-Likert scale (1 = *The tone of the*

**Table 2**

*Descriptive parameters of the dependent variables in Study 2 overall and by condition*

	Full dataset	With cognitive load				Without cognitive load			
		Objective scale		Subjective scale		Objective scale		Subjective scale	
	<i>M (SD), min- max</i>	German name <i>M (SD), min- max</i>	Turkish name <i>M (SD), min- max</i>	German name <i>M (SD), min- max</i>	Turkish name <i>M (SD), min- max</i>	German name <i>M (SD), min- max</i>	Turkish name <i>M (SD), min- max</i>	German name <i>M (SD), min- max</i>	Turkish name <i>M (SD), min- max</i>
Rating-scale measures	<i>n</i> = 319	<i>n</i> = 52	<i>n</i> = 32	<i>n</i> = 26	<i>n</i> = 41	<i>n</i> = 63	<i>n</i> = 29	<i>n</i> = 42	<i>n</i> = 34
Content-related writing skills	3.94 (1.39), 1.00-7.00	3.53 (1.56), 1.00-7.00	3.83 (1.36), 1-6.65	4.46 (1.24), 2.00-7.00	4.32 (1.29), 2.00-6.00	3.54 (1.46), 1.00-6.65	3.50 (1.32), 1.00-6.65	4.14 (1.16), 2.00-7.00	4.65 (1.10), 1.00-7.00
Mechanics-related writing skills	2.42 (1.07), 1.00-7.00	2.22 (1.18), 1.00-7.00	2.55 (1.05), 1.00-4.91	2.88 (1.18), 1.00-6.00	2.73 (0.92), 1.00-5.00	2.21 (1.18), 1.00-6.65	1.75 (0.70), 1.00-4.04	2.62 (0.88), 1.00-5.00	2.85 (0.82), 1.00-5.00
Writing skills overall	3.90 (9.05), 1.00-6.00	4.16 (0.81), 1.90-5.68	4.10 (0.86), 2.20-5.20	3.81 (1.02), 2.00-6.00	3.66 (1.06), 1.00-5.00	3.90 (0.79), 2.20-5.80	3.88 (0.63), 2.50-5.08	3.69 (1.05), 2.00-6.00	3.91 (0.93), 2.00-6.00
Grade essay	7.45 (1.97), 2.00-13.00	7.92 (1.78), 4.00-12.00	8.19 (1.71), 4.00-11.00	7.38 (2.55), 2.00-13.00	7.32 (2.05), 2.00-11.00	7.29 (2.17), 2.00-12.00	7.55 (1.21), 5.00-10.00	6.88 (1.77), 3.00-10.00	7.20 (2.07), 2.00-12.00
Grade German exam	7.63 (1.95), 2.00-14.00	8.19 (1.78), 4.00-12.00	8.22 (1.34), 5.00-11.00	7.39 (2.14), 2.00-13.00	7.24 (2.14), 2.00-12.00	7.79 (1.92), 5.00-13.00	7.86 (1.36), 4.00-10.00	6.76 (1.96), 2.00-10.00	7.44 (2.40), 2.00-14.00
Open-text responses	<i>n</i> = 315	<i>n</i> = 50	<i>n</i> = 31	<i>n</i> = 26	<i>n</i> = 41	<i>n</i> = 62	<i>n</i> = 29	<i>n</i> = 42	<i>n</i> = 34
Positive comments									
Content-related	3.99 (2.80), 0.00-15.50	4.36 (3.14), 0.00-13.00	4.48 (2.70), 0.00-11.00	4.19 (2.84), 0.00-13.00	4.32 (2.50), 0.00-10.00	4.02 (3.16), 0.00-15.50	3.60 (2.96), 0.00-11.00	3.43 (2.41), 0.00-13.00	3.43 (2.24), 0.00-10.00
Mechanics-related	0.75 (1.39), 0.00-10.50	0.82 (1.69), 0.00-10.50	0.50 (0.99), 0.00-4.00	1.02 (1.59), 0.00-6.00	1.15 (1.55), 0.00-6.00	0.66 (1.19), 0.00-6.00	0.57 (1.14), 0.00-4.00	0.52 (1.13), 0.00-6.00	0.79 (1.67), 0.00-8.00



	Full dataset	With cognitive load				Without cognitive load			
		Objective scale		Subjective scale		Objective scale		Subjective scale	
		<i>M (SD), min- max</i>	German name <i>M (SD), min- max</i>	Turkish name <i>M (SD), min- max</i>	German name <i>M (SD), min- max</i>	Turkish name <i>M (SD), min- max</i>	German name <i>M (SD), min- max</i>	Turkish name <i>M (SD), min- max</i>	German name <i>M (SD), min- max</i>
Negative comments									
Content-related	3.72 (3.01), 0.00-17.50	4.09 (3.47), 0.00-12.50	3.98 (2.79), 0.00-9.50	3.29 (2.54), 0.00-9.00	3.32 (3.22), 0.00-14.00	3.97 (3.37), 0.00-17.50	3.10 (2.43), 0.00-12.00	3.93 (2.46), 0.00-11.00	3.57 (3.06), 0.00-11.50
Mechanics-related	5.38 (3.85), 0.00-22.00	6.00 (4.18), 0.00-16.50	6.00 (3.90), 1.00-15.50	5.25 (3.34), 0.50-12.00	5.65 (4.03), 0.00-18.00	5.60 (4.38), 0.00-22.00	4.69 (2.98), 0.50-11.00	5.19 (3.18), 0.00-12.00	4.06 (3.72), 0.00-14.00
Percent positive comments	34.80 (18.17), 0-100	34.97 (19.01), 0-100	35.03 (17.31), 0-69.23	38.29 (19.85), 0-78.57	38.88 (15.13), 0-70.00	32.60 (17.94), 0-66.67	33.17 (21.72), 0-71.43	30.45 (15.47), 0-64.71	37.47 (19.71), 0-100
Tone	4.75 (1.07), 1.00-7.00	4.80 (1.17), 2.00-7.00	4.95 (0.91), 2.50-6.50	4.48 (1.17), 1.50-6.50	5.20 (0.91), 2.50-7.50	4.74 (1.10), 1.00-6.50	4.55 (0.94), 3.00-6.50	4.64 (1.09), 1.00-6.50	4.50 (1.12), 1.00-7.00
Positivity indicator	1.44 (1.12), 0-4	1.48 (1.22), 0-4	1.68 (1.11), 0-3	0.88 (0.86), 0-3	1.56 (1.18), 0-4	1.63 (1.27), 0-4	1.28 (1.07), 0-4	1.45 (0.97), 0-3	1.21 (0.84), 0-3

*Note.* Values for the objective scale are reported as the standardized values, not the BISTA-scale, for ease of comparison.

*text is very cold or tough. It seems distanced, chilly, or possibly hurtful to 7 = The tone of the text is very warm or considerate. It seems friendly and full of understanding*). After discussion, interrater-reliability for these continuous codes was good to very good ( $ICC(2, 2) = .792-.982$ ). Then, coders indicated the positivity of the feedback on various aspects: 1) whether participants used smileys in the text, 2) whether they addressed the student as an equal (e.g., mentioning similarities, sharing their own experiences), 3) whether they wished the participant luck or encouraged him, and 4) whether they ended their feedback with a positive comment. Cohen's  $\kappa$  indicated average to very high interrater reliability (.562-.971). After all disagreements were resolved after discussion, these four indicators were combined into a sum score ranging from zero to four (positivity indicator).

**Self-Esteem.** As in Study 1, self-esteem was assessed based on the scales by Rosenberg (1979; translation by Ferring & Filipp, 1996). Reliability was very good (Cronbach's  $\alpha = .880$ ).

### 3.2. Results

We first conducted preliminary analyses to check our manipulations. Then, we ran 2 (target student's name: German vs. Turkish) x 2 (response scale: subjective vs. objective endpoint) x 2 (experienced cognitive load: increased vs. none) ANOVAs (Table 3). Subsequently, regression analyses were conducted to examine whether self-esteem moderated the positive bias. Based on the cognitive-perceptual perspective, a significant three-way interaction effect would be expected on the three rating scales (writing skills content, writing skills mechanics, and writing skills overall). A significant two-way interaction between student's name and cognitive load was expected on all other variables except for tone and the positivity indicator, for which no explicit predictions are made. Based on the motivational perspective, a significant two-way interaction between the target student's name and cognitive load would be expected for content-related feedback (writing skills content, writing skills overall, grades, open-text comments on content [positive and negative], percentage of positive comments,

tone, and the positivity indicator), but not for ratings of and comments related to mechanics. No missingness other than described above was observed. A full correlation table including all dependent variables can be found in the supplementary material (Table S3).

### 3.2.1. *Preliminary analyses*

We conducted two manipulation checks. First, as described above, we had used two names each to indicate either a German background or a Turkish migration background for the student. To test that the two names within each condition did not differ from one another, we conducted independent-sample *t*-tests on the three rating scales and the grades within each of the remaining conditions (i.e., differentiated by rating scale and cognitive load condition). Out of the 40 tests conducted this way, only one was significant at  $p < .05$ , which is likely due to chance. Therefore, participants did not give different feedback to Cem vs. Samir and Arne vs. Leo and all analyses did not further differentiate between the two names of the same origin.

Secondly, we examined the manipulation check for the cognitive load manipulation. Participants had indicated how difficult they had found it not to think about upcoming tasks while giving feedback on a scale from 1 = *very easy* to 7 = *very difficult*. Welch's *t*-tests revealed that the two groups did differ in this subjective experience of cognitive load, but this was not in the expected direction. Participants in the control condition indicated greater subjective experience of cognitive load ( $M = 2.12$ ,  $SD = 1.37$ ) than those in the cognitive load condition ( $M = 1.62$ ,  $SD = 0.98$ ,  $t(287.89) = 3.77$ ,  $p < .001$ ). Therefore, we decided to instead rely on actually experienced cognitive load for our analyses. For this purpose, we divided participants into two groups: Those who indicated that they had not experienced any cognitive load ( $n = 168$ ) and those who indicated some amount of cognitive load ( $n = 151$ )<sup>5</sup>.

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<sup>5</sup> Due to the non-normality of its distribution, this theory-based division also correspond to a median split.

**Table 3***Results of the ANOVAs Predicting Feedback*

	Student name		Cognitive load		Response scale format		Name*load		Name*scale		Scale*load		Name*scale*load	
	<i>F</i>	Partial $\eta^2$	<i>F</i>	Partial $\eta^2$	<i>F</i>	Partial $\eta^2$	<i>F</i>	Partial $\eta^2$	<i>F</i>	Partial $\eta^2$	<i>F</i>	Partial $\eta^2$	<i>F</i>	Partial $\eta^2$
Rating-scale measures														
Content-related writing skills	2.64	.004	0.90	<.001	5.05*	.073	2.01	<.001	1.57	<.001	0.61	<.001	2.49	.008
Mechanics-related writing skills	0.98	.001	1.07	.004	3.94*	.083	1.22	<.001	4.46*	.004	0.67	.001	3.46 <sup>+</sup>	.011
Writing skills overall	1.14	.008	0.27	.003	1.31	.018	1.46	.003	0.65	<.001	0.29	.006	0.58	.002
Grade essay	0.52	.003	1.07	.015	1.08	.018	0.35	<.001	0.01	<.001	0.05	.001	0.18	<.001
Grade German exam	2.30	.002	1.70	.006	7.33**	.046	1.54	.003	0.95	<.001	0.14	<.001	0.74	.002
Open-text Responses														
Positive comments														
Content-related	0.04	<.001	0.40	.014	0.06	.003	0.39	<.001	0.00	<.001	0.24	<.001	0.11	<.001
Mechanics-related	1.01	<.001	0.36	<.001	0.35	.005	0.26	.001	0.89	.005	0.59	.004	0.02	<.001
Negative comments														
Content-related	0.26	.003	0.72	<.001	0.00	.002	0.14	.002	0.27	.001	0.64	.006	0.07	<.001
Mechanics-related	0.17	.003	0.00	.011	0.65	.005	1.36	.006	0.09	<.001	0.08	<.001	0.12	<.001
Percent positive comments	2.80 <sup>+</sup>	.003	2.99 <sup>+</sup>	.008	0.35	.002	1.08	.002	1.22	.002	0.92	.001	0.49	.002
Tone	0.34	.002	0.37	.012	0.22	.001	5.59*	.018	0.02	.004	0.44	<.001	1.07	.003
Positivity indicator	5.94*	<.001	4.22*	<.001	4.95*	.011	5.99*	.025	1.63	.004	1.45	.003	0.52	.002

Note. \*\*  $p < .01$ . \*  $p < .05$ . <sup>+</sup>  $p < .10$ .

### 3.2.2. *Main analyses*

**Rating-Scales.** For the three ratings of content-related writing skills, mechanics-related writing skills and overall writing skills, no results consistent with the hypotheses of either theoretical perspective emerged. With regards to content-related writing skills, only a main effect of the response scale format was observed such that participants rated writing skills as higher on the Likert-scale ( $M = 4.37$ ,  $SD = 1.20$ ) than the transformed numeric BISTA-scale ( $M = 3.59$ ,  $SD = 1.44$ ;  $F(1, 311) = 5.05$ ,  $p = .025$ , partial  $\eta^2 = .073$ ). This same effect was observed for mechanics-related writing skills ( $F(1, 311) = 3.94$ ,  $p = .048$ , partial  $\eta^2 = .083$ ), though it was qualified by a marginally significant three-way interaction between response scale format, target student's name, and experienced cognitive load ( $F(1, 311) = 3.47$ ,  $p = .064$ , partial  $\eta^2 = .011$ ). As only the cognitive-perceptual perspective predicts a positive bias on mechanics-related ratings, planned contrasts based on its predictions (corresponding to Figure 1) were conducted. The contrast for the participants who did not experience cognitive load, reflecting the hypothesis that participants would exhibit a positive bias in favor of students with a Turkish name on the subjective scales, but a negative bias towards them on an objective scale, was significant ( $t(311) = 2.11$ ,  $p_{w/2} = .018$ ). However, in the direct comparisons, only the negative bias on the objective scale was significant ( $t(311) = 2.01$ ,  $p_{w/2} = .023$ ; Cohen's  $d = 0.45$ ), whereas the difference between the feedback on the subjective scale was not significant ( $t(311) = 0.99$ ,  $p_{w/2} = .163$ ). Thus, in tendency the response scale format influenced the bias shown towards students with a Turkish name when cognitive load was low, but feedback given to the students did not differ when participants experienced high cognitive load. Lastly, no factor significantly predicted teacher students' ratings of students' overall writing skills (all  $p > .227$ ).

**Grades.** The grade that participants gave the essay was unaffected by the preceding response scale format, the student's name, cognitive load and their interactions (all  $p > .299$ ). For the expected grade in the upcoming German exam, only a main effect of the response

scale format was observed ( $F(311, 1) = 7.33, p = .007, \text{partial } \eta^2 = .046$ ). When participants had given ratings on the Likert-scale before providing grades, their communication to the students indicated that they expected them to receive lower grades on the exam ( $M = 7.18, SD = 2.15$ ) than those having given feedback on the BISTA-scale ( $M = 8.00, SD = 1.70$ ).

**Open-Text Responses.** Regarding the positivity in the open-text feedback provided by teacher students, the expected effects did not emerge. The number of positive and negative comments related to both content and mechanics did not differ by any of the factors or their interactions (all  $p > .244$ ). When considering the percent of positive comments out of all comments a participant made, two marginally significant main effects of the target student's name ( $F(1, 307) = 2.80, p = .095, \text{partial } \eta^2 = .003$ ) and cognitive load ( $F(1, 307) = 2.99, p = .085, \text{partial } \eta^2 = .008$ ) emerged. Participants tended to have a higher percentage of positive comments when addressing a student with a Turkish name ( $M = 36.41, SD = 18.29$ ) than a student with a German name ( $M = 33.58, SD = 18.02$ ). When under cognitive load, participants tended to give a higher percentage of positive comments ( $M = 36.65, SD = 17.73$ ) than when they did not experience cognitive load ( $M = 33.15, SD = 18.44$ ). With regards to the tone with which feedback was conveyed, a significant two-way interaction between the target student's name and cognitive load emerged ( $F(1, 307) = 5.59, p = .019, \text{partial } \eta^2 = .018$ ). As this interaction was predicted by the motivational perspective, planned contrasts were conducted. However, results contrary to the hypotheses emerged such that no differences by the student's name were observed when people did not experience cognitive load ( $t(307) = -0.97, p_{\omega/2} = .166$ ), but a positive bias in favor of students with a Turkish name emerged under cognitive load ( $t(307) = 2.40, p_{\omega/2} = .008$ ; Cohen's  $d = 0.81$ ). When predicting the positivity indicator, a significant interaction between cognitive load and the student's name was observed ( $F(1, 307) = 5.99, p = .015, \text{partial } \eta^2 = .025$ ), which was again examined using planned contrasts based on the motivational perspective. The contrasts showed that the positivity indicator was higher for the student with a Turkish compared to a German name,

but contrary to expectations this only occurred under cognitive load ( $t(131.9) = 2.41$ ,  $p_{\alpha/2} = .009$ , Cohen's  $d = 0.79$ ). When participants did not experience cognitive load, a negative bias occurred, such that students with a Turkish name compared to a German name received less positivity, which was directly in opposition of the expected effect ( $t(128.8) = -1.82$ ,  $p_{\alpha/2} = .036$ ; Cohen's  $d = -0.54$ ). Lastly, a main effect indicated that participants showed less positivity in the written feedback following ratings using a subjective Likert-scale ( $M = 1.32$ ,  $SD = 1.01$ ) than following ratings using the objective BISTA-scale ( $M = 1.54$ ,  $SD = 1.19$ ;  $F(1, 307) = 4.95$ ,  $p = .023$ , partial  $\eta^2 = .011$ ).

### 3.2.3. Moderator Analyses: Self-Esteem

Based on the motivational perspective, it would be expected that higher self-esteem would be associated with a lower positive bias in favor of negatively stereotyped groups for those participants who did not experience cognitive load. We tested this interaction effect in regression analyses, but did not find consistent results. The expected three-way interaction between self-esteem, student's name, and cognitive load was marginally significant for only two dependent variables, the rating of mechanics-related writing skills and the friendliness of the tone of the feedback ( $b = -0.77$ ,  $SE = 0.45$ ,  $p = .090$ , and  $b = -0.84$ ,  $SE = 0.47$ ,  $p = .076$ , respectively). However, simple slope analyses indicated that the effects were not in the expected direction. When participants did not experience cognitive load, their self-esteem was not related to their rating of mechanics-related writing skills to students with Turkish ( $b = 0.37$ ,  $t(307) = 1.42$ ,  $p = .156$ ) or German names ( $b = 0.28$ ,  $t(307) = 1.42$ ,  $p = .157$ ). Under cognitive load, higher self-esteem was associated with more negative ratings given to students with a Turkish name ( $b = -0.49$ ,  $t(307) = -2.35$ ,  $p = .019$ ), but unrelated to feedback given to students with a German name ( $b = 0.19$ ,  $t(307) = 0.84$ ,  $p = .405$ ). Regarding the effect of self-esteem on the tone of the feedback, simple slopes analyses revealed that none of the slopes were significantly different from zero (all  $p > .162$ ). Thus, self-esteem was unrelated to

teacher students' friendliness with or without cognitive load and towards students with Turkish and German names (for all results, see Table S4).

### **3.3. Discussion Study 2**

In Study 2, we aimed to replicate the positive feedback bias found by multiple studies in the US (e.g., Harber et al., 2019) and in Germany (Nishen & Kessels, 2021). A second aim was to better understand whether the positive bias is based on a cognitive-perceptual or motivational mechanism, both of which have been put forward as explanations (e.g., Biernat & Manis, 1994; Harber, 1998). Our analyses did not show that teacher students gave more positive feedback towards students with a Turkish as compared to a German name in either ratings or open-text responses. The theory-derived manipulations of response scale format, feedback dimension, and cognitive load as well as the measurement of self-esteem did not influence biases towards students with a Turkish name as would be predicted by either perspective. Overall, our findings are in contrast with the findings by Nishen and Kessels (2021), which we discuss in the following.

## **4. General Discussion**

In parallel to research demonstrating negative biases towards members of negatively stereotyped ethnic groups in the educational context (e.g., Bonefeld & Dickhäuser, 2018; Glock & Krolak-Schwerdt, 2013; Quinn, 2020), findings of positive biases towards these groups have accumulated in the US (e.g., Biernat & Kobrynowicz, 1997; Crosby & Monin, 2007; Harber et al., 2010) and Germany (Holder & Kessels, 2017; Nishen & Kessels, 2021). In two studies, we examined whether the failure-to-warn phenomenon (Crosby & Monin, 2007) and the positive feedback bias (e.g., Harber, 1998) could be replicated in the German school context. We also examined potential moderators of such a positive bias based on both a cognitive-perceptual perspective (response scale format, cognitive load) and a motivational perspective (feedback dimension, cognitive load). Moreover, we measured self-esteem in both studies as well as contingency of self-esteem in Study 1 as both could influence the degree of



positive bias based on the motivational perspective. To our knowledge, this research is the first to examine the failure-to-warn phenomenon in Germany and to directly compare the predictions by two main theoretical perspectives on positive biases.

Overall, the failure-to-warn phenomenon (Study 1) and the positive bias in feedback (Study 2) were not replicated in our research. In Study 1, participants largely did not differ in the advice they gave to a student with a Turkish as compared to a German name. On two aspects of feedback, participants tended to give more encouraging feedback to the student with a Turkish name, but these effects did not reach the traditional significance threshold. In Study 2, participants largely did not provide different feedback to the student with a Turkish as compared to a German name, and the feedback rarely differed based on the factors theorized by the cognitive-perceptual or motivational perspective. In both studies, self-esteem and contingency of self-esteem on others' approval did not moderate the degree of positivity in feedback, though individual, likely spurious effects did emerge. In the following, we discuss the meaning of the results of Study 2 for both the cognitive-perceptual and motivational perspective in more detail.

#### **4.1. Cognitive-Perceptual Perspective**

Based on the cognitive-perceptual perspective, we expected that positive biases towards a student with a Turkish name would emerge on subjective scales (rating-scales with subjective response scale format, comments in the open-text responses), but a negative bias on objective scales (rating scales with objective response scale format, grades). In line with SSM assumptions, this effect was expected to be greater under cognitive load. Some individual findings support these hypotheses in part, but no analysis showed the full expected pattern (see Figure 1). Namely, for the rating of mechanics-related writing skills, teacher students who did not experience cognitive load gave more negative feedback to the student with a Turkish name on the objective scale and no such bias emerged on the subjective scale. However, this effect disappeared when participants experienced cognitive load, in direct

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contrast to the predictions. With regards to the open-text response, participants did include a higher percentage of positive comments when the student had a Turkish rather than a German name, but this difference was not greater when teacher students experienced cognitive load. Findings on the other dependent variables are also contrary to predictions: neither positive nor negative biases emerged. Overall, considering the results in more detail, we did not find a pattern of biases that would be predicted based on a cognitive-perceptual perspective. In fact, the most common finding was one of no bias at all.

#### **4.2. Motivational Perspective**

Following the argument that motivation was at the heart of the positive feedback bias, we expected a positive bias towards the student with a Turkish name on those feedback dimensions related to content or overall impressions as well as general friendliness (rating scales for content writing skills and overall writing skills, grades, positive and negative open-text comments on content, percent of positive comments, tone, positivity indicator), but not on those related to mechanics (rating scale for mechanics-related writing skills, positive and negative open-text comments on mechanics). The effects were expected to disappear when participants experienced cognitive load. Overall, participants' feedback did not differ based on the student's name on most of the feedback related to content or overall impressions. Interestingly, we observed two interaction effects between the student's name and cognitive load on two indicators of friendliness in the open-text responses, tone and the positivity indicator. On these variables, participants were friendlier to the student with a Turkish than a German name, but in direct contrast to expectations, this effect was only present when participants experienced cognitive load. Overall, the results do not support the notion that a concern to be or appear to be prejudiced might have led participants to give more positive feedback and be friendlier towards the student with a Turkish as compared to a German name.

### 4.3. Limitations

Because we consistently did not find a positive bias across two studies and multiple dependent variables, it is worthwhile to consider limitations of our study that may be responsible for the null findings. Firstly, teacher students participated online in both our studies due to the pandemic restrictions. Online studies are sometimes suspected of not being filled out honestly or carefully (e.g., Newman et al., 2021). However, based on the considerate and at times extensive open-text responses of our participants, we would not expect that this might have led to our null findings. Instead, participants may have been less focused on how others' perceive their behavior when participating in their own homes rather than a lab at a university (as was the case in prior research; Nishen & Kessels, 2021). If participating in one's familiar environment without the presence of a lab assistant or other participants makes people less self-aware (Morin, 2004), this might influence their concern to be or appear prejudiced (Harber, 2004). Based on the motivational perspective, participants may have overcorrected less—or not at all—because of their reduced concerns.

Secondly, the current events at the time of data collection might have influenced the emergence of a positive bias. Both the cognitive-perceptual and motivational perspectives could explain how the pandemic might have influenced positive biases. Specifically, at the time of data collection for both studies, schools in Germany were closed (Study 1) and teaching had been disrupted for longer periods (Study 2). In both studies, the pandemic was mentioned on the welcome page to bolster the cover story that participants were communicating to real students online. Potentially, this situation provided teacher students with the additional strong motivation to be especially helpful to the students whose learning had been so disrupted. Moreover, they may have felt a greater responsibility for providing accurate and high-quality feedback because students might have had less opportunity to get in-depth feedback by their own teachers. In terms of the cognitive-perceptual perspective, this could reduce a positive bias because when people are thought to apply stereotypes less when

they are motivated to be accurate (Fiske et al., 1999), which would in turn reduce differences in judgments of students based on stereotypes (Biernat, 2012). When considered by the motivational perspective, it may be that greater concerns about accuracy may motivate teacher students to do their task well. Indeed, participants who were especially motivated to do their task well did not differentiate in their feedback towards a Black vs. White student, whereas those in the control condition gave more positive, but less helpful feedback to Black students (Ruscher et al., 2010). In summary, if the pandemic did increase teacher students' motivation to be accurate and helpful, this might have interfered with mechanisms that might typically produce a positive bias.

Lastly, the manipulation of cognitive load in Study 2 did not work as designed. Our manipulation checks showed that participants did not experience greater cognitive load when they were exposed to our manipulations. When creating the instruction, we followed classic cognitive load instructions of thought suppression (i.e., "White Bear paradigm", e.g., Burkley, 2008; Wegner et al., 1987). However, we adapted the instruction for the specific context of the study, in which participants believed they gave feedback to an actual student, so that the cover story would not be called into question. This experimental manipulation did not work as expected, highlighting that unobtrusive manipulations of cognitive load still need to be developed and should be piloted. However, due to our manipulation check, we did have access to the actually experienced cognitive load of the participants and were able to divide our sample based on their scores. This may have suppressed effects of cognitive load because participants indicating relatively little cognitive load were grouped together with participants indicating higher cognitive load, leading to a less pronounced difference in cognitive load relative to the group without cognitive load. Though we believe that our measurement of cognitive load has high ecological validity, future research should continue to examine cognitive load as a moderator of positive biases both as a measured and manipulated construct.

#### 4.4. Implications for Research

Past research on positive biases in feedback and advice has highlighted that motivational factors play an important role in communication (e.g., Harber, 1998). This is found in limited research on feedback inflation, that is, the positivity of feedback relative to a privately held judgment, more generally (e.g., Lupoli et al., 2017), this effect was also found in a recent study on interactions with students (Nishen & Kessels, 2021). However, given the scant research on this topic in classrooms to date, it appears important to understand better how feedback and advice is shaped by students' perceived characteristics. While the interpersonal nature of feedback is clearly acknowledged (Crocker, 2021; Strijbos & Müller, 2014), it may be useful to integrate this understanding with theories on stereotyping of various social groups, of which we have examined only one. As a recent review shows, models on feedback do not consider how students' membership in a stereotyped group potentially impacts how teachers provide feedback (Lipnevich & Panadero, 2021), and rarely, if at all, acknowledge its role in students' perception of feedback (e.g., Panadero & Lipnevich, 2022; Van der Kleij & Lipnevich, 2021).

Additionally, our findings highlight two areas in which theory development is possible and necessary: explicitly acknowledging and addressing predictions by alternative theories as well as making the cultural background of theories explicit to facilitate cross-cultural application. First, while we considered the design for Study 2, it became clear that for some factors, namely response scale format and feedback dimensions, one of the two perspectives made a prediction, whereas the other did not mention the factor at all. We believe it is adequate to infer that the perspectives did not consider the given construct relevant to the proposed mechanism given that both perspectives have been aware of the work conducted within the framework of the other (e.g., Biernat, 2012; Harber, 1998; Harber et al., 2012). Indeed, efforts have been made to consider the influence of motivation on shifting standards ad-hoc (Biernat, 2012), though it might be useful for future research if the two perspectives

are integrated to a greater extent (e.g., addressing specific constructs within the other). Secondly, the theoretical development of both perspectives might benefit from greater reflection of the specific cultural circumstances that might give rise to the effects in the US. Given that our results show that the evidence for a positive feedback bias in Germany is inconclusive and do not provide evidence of a failure-to-warn phenomenon, differences in the cultural context may be a first explanation for these differences. For example, the motivational perspective might profit from considering how people perceive the norm to be unprejudiced towards certain groups of people, and research in other countries based on this perspective might theorize which group might truly be the best equivalent. For example, it might be that people in the US perceive the norm to be unprejudiced towards Black people as highly prevalent because of the clearly acknowledged historical injustice and oppression by White Americans. If such a highly specific context is needed to form the intergroup relations which underlie a positive bias based on motivation, then positive biases might not emerge in Germany towards students with a Turkish name even though this group is negatively stereotyped regarding their ability (Bonefeld & Karst, 2020). Clearly formulating the contexts on which mechanisms might depend could help clarify whether adaptations to different cultural contexts are appropriate.

#### **4.5. Implications for Practice**

The results of our two studies have not supported the notion that teacher students may give overly positive advice or feedback to students with a Turkish as compared to a German name. Importantly, we also did not find evidence of a negative bias, as has often been found in research on German teacher students' non-communicated judgments (e.g., Bonefeld & Dickhäuser, 2018; Sprietsma, 2013; but see also Jansen et al., 2019). Because of the inconsistency of our results with prior research (e.g., Holder & Kessels, 2017; Nishen & Kessels, 2021), it is difficult to formulate implications for the educational praxis. If our results reflect that teacher students indeed do not treat students differently simply because of their

name, this is good news for educational equality in Germany. Potentially, the younger generation of teacher students, having grown up in a more diverse country and being taught in more diverse classrooms, are more at ease with intercultural contact. However, given the limitations of our studies, the lack of bias may be a result of circumstance rather than more fundamental change. Consequences of a positive bias for students have been considered for students' self-concept, motivation, and trust towards their teacher, and have been deemed to likely be disadvantageous (Kessels & Nishen, in press). Moreover, Crosby and Monin (2007) have argued that overly encouraging advice might leave advisees inadequately prepared and doubting their own abilities when they encounter difficulties. In sum, positive biases are likely to have negative consequences for students, and though our null findings are encouraging in this regard, more research is needed to better understand the implications for schools.

#### **4.6. Conclusion**

In two studies, we did not find evidence of a positive bias in teacher students' advice (Study 1) and feedback (Study 2) given to students with a Turkish as compared to a German name contrary to prior research from the US and Germany. Moreover, moderators suggested by both a cognitive-perceptual and a motivational perspective on the mechanisms underlying positive biases did not display the expected effects. Overall, our findings do not support the thesis that teacher students display a positive (or negative) bias towards students with a Turkish name. However, the online design as well as the concurrent COVID-19 pandemic might have influenced whether a positive bias occurred. Importantly, though our findings are inconsistent with prior research, they highlight the need to integrate social psychological perspectives into research on feedback, to explicitly address diverging predictions by alternative theories, and to facilitate cross-cultural application by considering the sociocultural background in theory development.

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**Supplementary Material for:**

Failure to warn and the positive feedback bias: Are teacher students' communications with ethnic minority students positively biased in Germany?

This file contains the full correlation tables for both studies as well as the results of moderator analyses with contingency of self-esteem on others' approval (Study 1) and self-esteem (Studies 1 and 2).

**1. Study 1**

**1.1 Correlation Table**

**Table S1**

*Correlations among all dependent variables in Study 1*

Variable	1	2	3	4	5	6	7
1. Assessment of student's plans	–						
2. Advice <sup>2</sup>	.63***	–					
3. Positive achievement-related emotions	-.41***	-.42***	–				
4. Negative achievement-related emotions	.59***	.44***	-.63***	–			
5. Need-to-change messaging strength	.45***	.47***	-.29**	.18*	–		
6. Consequences for mental health	.18*	.15 <sup>+</sup>	-.18*	.13	.40***	–	
7. Consequences for time/relationships	.17*	.10	-.21*	.20*	.34***	.33***	–
8. Comprehensiveness suggested changes	.35***	.29***	-.12	.18*	.61***	.28**	.27**

*Note.* Coefficients based on listwise deletion.

\*\*\*  $p < .001$ . \*\*  $p < .01$ . \*  $p < .05$ . <sup>+</sup>  $p < .10$ .

## 1.2. Moderator Analyses

As described in the article, in the analyses including self-esteem and contingency of self-esteem on approval by others did not affect positivity of advice differently for students with Turkish and German names. However, two marginally significant main effects emerged (see Table S2). For the consequences for time and relationships that participants mentioned in their notes, a marginally significant main effect of self-esteem emerged such that participants with greater self-esteem indicated consequences for time more readily than those with lower self-esteem ( $b = 0.60, SE = 0.36, p = .094$ ). Moreover, participants with a greater contingency of self-esteem indicated in tendency that more comprehensive changes would be needed ( $b = 0.36, SE = 0.18, p = .051$ ). For all other variables, no main effects emerged (all  $p > .123$ ), indicating that self-esteem and contingency of self-esteem did not have consistent effects on advice.

**Table S2**

*Results of the regression analyses with and without the moderator variables*

Dependent variables	Intercept	Student name <sup>1</sup> <i>b (SE)</i>	Self-esteem <i>b (SE)</i>	Contingency of self-esteem <i>b (SE)</i>	Name*self- esteem <i>b (SE)</i>	Name*contingency <i>b (SE)</i>	Adj. R <sup>2</sup>
Rating-scale measures							
Assessment of student's plans	5.19***	-0.02 (0.08)					-.006
	5.19***	-0.02 (0.09)	0.21 (0.13)	0.08 (0.09)	-0.13 (0.18)	-0.07 (0.13)	-.010
Advice	2.81***	-0.10 (0.10)					<.001
	2.81***	-0.09 (0.10)	0.07 (0.15)	-0.05 (0.11)	0.06 (0.22)	-0.03 (0.16)	-.008
Positive achievement-related emotions	4.05***	0.28 (0.15) <sup>+</sup>					.016
	4.05***	0.29 (0.15) <sup>+</sup>	0.11 (0.22)	0.05 (0.16)	-0.17 (0.31)	-0.23 (0.22)	.002
Negative achievement-related emotions	3.98***	-0.12 (0.15)					-.002
	3.99***	-0.13 (0.15)	0.05 (0.23)	0.13 (0.17)	-0.37 (0.32)	-0.17 (0.23)	-.009
Open-text Responses							
Need-to-change messaging strength	3.97***	-0.28 (0.24)					.003
	3.98***	-0.28 (0.24)	0.36 (0.35)	0.07 (0.27)	-0.23 (0.51)	-0.04 (0.37)	-.017
Consequences for mental health	2.45***	0.06 (0.26)					-.007
	2.46***	0.05 (0.26)	-0.11 (0.38)	0.27 (0.29)	0.28 (0.55)	-0.21 (0.41)	-.024
Consequences for time/relationships	2.19***	-0.09 (0.25)					-.006
	2.21***	-0.10 (0.25)	0.6 (0.36) <sup>+</sup>	0.42 (0.27)	-0.77 (0.51)	-0.06 (0.38)	.016
Comprehensiveness suggested changes	3.56***	-0.30 (0.17) <sup>+</sup>					.016
	3.58***	-0.31 (0.17) <sup>+</sup>	0.34 (0.24)	0.36 (0.18) <sup>+</sup>	-0.18 (0.35)	-0.31 (0.26)	.020

Note. <sup>1</sup> 0 = German name, 1 = Turkish name.

\*\*\*  $p < .001$ . <sup>+</sup>  $p < .10$ .

## 2. Study 2

### 2.1 Correlation Table

**Table S3**

*Correlations among all dependent variables in Study 2*

Variable	1	2	3	4	5	6	7	8	9	10	11
1. Content-related writing skills	–										
2. Mechanics-related writing skills	.50***	–									
3. Writing skills overall	.50***	.42***	–								
4. Grade essay	.48***	.41***	.77***	–							
5. Grade German exam	.39***	.33***	.65***	.77***	–						
6. Positive comments content-related	.19**	.04	.24***	.26***	.20***	–					
7. Positive comments mechanics-related	.01	.06	–.01	–.03	.01	.19**	–				
8. Negative comments content-related	–.20***	–.07	–.12*	–.14*	–.07	.13*	.11*	–			
9. Negative comments mechanics-related	–.08	–.05	–.03	–.07	<.01	.31***	.30***	.31***	–		
10. Percent positive comments	.34***	.15**	.29***	.35***	.23***	.56***	.21***	–.41***	–.26***	–	
11. Tone	.17**	.03	.20***	.27***	.13*	.42***	.26***	.04	.29***	.35***	–
12. Positivity indicator	.08	–.02	.09	.12*	.06	.30***	.20**	.13*	.27***	.17**	.61***

*Note.* Coefficients based on listwise deletion.

\*\*\*  $p < .001$ . \*\*  $p < .01$ . \*  $p < .05$ . +  $p < .10$ .



## 2.2 Results of the Moderator Analyses

The full results of the moderator analyses including self-esteem were presented below. In addition to the effects described in the article itself, the following effects were observed: Greater self-esteem tended to be associated with more positive feedback on the students' overall writing skills ( $b = 0.30$ ,  $SE = 0.17$ ) and a higher number of content-related positive comments in the open-text feedback ( $b = 1.07$ ,  $SE = 0.54$ ). However, people with higher self-esteem also communicated to students that they would receive a worse grade in the upcoming German exam ( $b = -.078$ ,  $SE = 0.37$ ). For mechanics-related negative comments in the open-text feedback, there was an interaction effect of self-esteem with cognitive load ( $b = -2.79$ ,  $SE = 1.15$ ). When participants did not experience cognitive load, self-esteem was not associated with the amount of comments they made. When participants were under cognitive load, they made fewer mechanics-related negative comments the greater their self-esteem was. Overall, no consistent picture emerges across these effects (e.g., both greater positivity and greater negativity associated with higher self-esteem), and they are likely not to be reliable.

**Table S4**

*Results of the regression analyses including self-esteem and its interactions with the other factors*

	Intercept	Name <sup>1</sup>	Cognitive load <sup>2</sup>	Response scale format <sup>3</sup>	Self-esteem	Self-esteem *name	Self-esteem *load	Name *load	Name *scale	Scale *load	Name *scale *load	Name* load*self-esteem	Adj. R <sup>2</sup>
		<i>b (SE)</i>	<i>b (SE)</i>	<i>b (SE)</i>	<i>b (SE)</i>	<i>b (SE)</i>	<i>b (SE)</i>	<i>b (SE)</i>	<i>b (SE)</i>	<i>b (SE)</i>	<i>b (SE)</i>	<i>b (SE)</i>	
Rating-scale measures													
Content-related writing skills	4.11*** (0.21)	0.54+ (0.31)	0.35 (0.34)	-0.60* (0.27)	0.28 (0.26)	-0.14 (0.43)	-0.38 (0.40)	-0.67 (0.46)	-0.57 (0.44)	-0.35 (0.42)	1.10+ (0.64)	0.51 (0.60)	.065
Mechanics-related writing skills	2.60*** (0.16)	0.27 (0.24)	0.29 (0.25)	-0.40* (0.20)	0.28 (0.20)	0.09 (0.33)	-0.09 (0.30)	-0.44 (0.35)	-0.78* (0.33)	-0.23 (0.32)	0.84+ (0.48)	-0.77+ (0.45)	.097
Writing skills overall	3.66*** (0.14)	0.26 (0.21)	0.13 (0.22)	0.21 (0.18)	0.30+ (0.17)	-0.10 (0.29)	0.06 (0.27)	-0.39 (0.31)	-0.28 (0.29)	0.22 (0.28)	0.29 (0.42)	-0.26 (0.40)	.024
Grade essay	6.83*** (0.30)	0.38 (0.45)	0.51 (0.49)	0.41 (0.39)	0.48 (0.38)	-0.14 (0.62)	0.46 (0.58)	-0.39 (0.66)	-0.13 (0.63)	0.32 (0.61)	0.32 (0.92)	-0.55 (0.86)	.027
Grade German exam	9.32*** (0.30)	-0.76+ (0.44)	-0.69 (0.48)	-1.04** (0.38)	-0.78* (0.37)	0.54 (0.61)	0.37 (0.56)	0.86 (0.65)	0.66 (0.62)	0.15 (0.60)	-0.82 (0.90)	-0.53 (0.84)	.046

	Intercept	Name <sup>1</sup> <i>b (SE)</i>	Cognitive load <sup>2</sup> <i>b (SE)</i>	Response scale format <sup>3</sup> <i>b (SE)</i>	Self-esteem <i>b (SE)</i>	Self-esteem*name <i>b (SE)</i>	Self-esteem*load <i>b (SE)</i>	Name*load <i>b (SE)</i>	Name*scale <i>b (SE)</i>	Scale*load <i>b (SE)</i>	Name*scale*load <i>b (SE)</i>	Name*load*self-esteem <i>b (SE)</i>	Adj. R <sup>2</sup>
Open-text responses													
Positive comments													
Content-related	3.31***	0.12 (0.65)	0.88 (0.70)	0.61 (0.56)	1.07 <sup>+</sup> (0.54)	-0.49 (0.90)	-1.07 (0.84)	-0.02 (0.95)	-0.56 (0.91)	-0.44 (0.89)	0.47 (1.33)	-0.30 (1.24)	.002
Mechanics-related	0.54* (0.22)	0.27 (0.32)	0.52 (0.35)	0.14 (0.28)	-0.13 (0.27)	0.66 (0.44)	-0.61 (0.42)	-0.17 (0.47)	-0.47 (0.45)	-0.50 (0.44)	0.22 (0.66)	0.26 (0.62)	.015
Negative comments													
Content-related	3.86*** (0.47)	-0.28 (0.70)	-0.57 (0.76)	0.04 (0.61)	0.60 (0.59)	-0.26 (0.98)	-0.59 (0.91)	0.31 (1.04)	-0.59 (0.99)	0.76 (0.97)	0.42 (1.44)	0.09 (1.35)	-.018
Mechanics-related	5.08*** (0.60)	-1.02 (0.89)	0.26 (0.96)	0.43 (0.77)	0.98 (0.74)	-0.94 (1.23)	-2.79* (1.15)	1.32 (1.31)	0.20 (1.25)	-0.08 (1.22)	-0.23 (1.82)	2.51 (1.70)	.009
Percent positive comments	0.30*** (0.03)	0.07 <sup>+</sup> (0.04)	0.08 <sup>+</sup> (0.05)	0.02 (0.04)	0.01 (0.04)	0.09 (0.06)	0.02 (0.05)	-0.06 (0.06)	-0.08 (0.06)	-0.05 (0.06)	0.07 (0.09)	-0.11 (0.80)	.003
Tone	4.63*** (0.17)	-0.12 (0.25)	-0.16 (0.27)	0.10 (0.21)	0.14 (0.21)	0.24 (0.34)	0.17 (0.32)	0.84* (0.36)	-0.12 (0.35)	0.29 (0.34)	-0.56 (0.50)	-0.84 <sup>+</sup> (0.47)	.026
Positivity indicator	1.48*** (0.17)	-0.27 (0.26)	-0.60* (0.28)	0.17 (0.22)	-0.21 (0.22)	0.42 (0.36)	0.31 (0.33)	0.94* (0.38)	-0.15 (0.36)	0.44 (0.35)	-0.40 (0.53)	-0.75 (0.49)	.013

Note. <sup>1</sup>0 = German name, 1 = Turkish name. <sup>2</sup>0 = no load, 1 = cognitive load. <sup>3</sup>0 = subjective response scale, 1 = objective response scale.

\*\*\*  $p < .001$ . \*\*  $p < .01$ . \*  $p < .05$ . +  $p < .10$ .

### **III. General Discussion**

## Summary of Results

In four studies, this dissertation established a line of research addressing two main research questions: First, whether there existed a positive bias in judgments of as well as communications with students with a Turkish as compared to a German name, and second, whether either of two different theoretical perspectives could adequately predict under which conditions such a positive bias would emerge. This research strengthens our understanding of positive biases towards members of negatively stereotyped groups which contribute to the maintenance of stereotypes and strained intergroup interactions (Biernat, 2012; Shelton, 2003; Shelton et al., 2006). This is especially paramount in the school context which is so influential for youth both concurrently and in the long run. In the following, I will first summarize the results of the four experimental studies and contextualize the meaning of all four studies for both the cognitive-perceptual and motivational perspective. Because the results are inconsistent across studies, I will then separately discuss the two main explanations for this inconsistency: First, that a positive bias simply may not exist in Germany and secondly, that differences in experimental design and timing of the data collection may have influenced the results. Subsequently, I consider limitations which all four studies have in common and delineate theoretical as well as practical implications. Finally, I will discuss avenues for further research based in this work before ending with a conclusion.

Overall, the four studies provide mixed evidence regarding the two research questions. Studies 1 and 2 showed evidence of a positive bias towards students with a Turkish (vs. German) name, whereas no biases were observed in Studies 3 and 4. Following the cognitive-perceptual perspective, Study 1 (*When ethnic minority students are judged as more suitable for the highest school track: A shifting standards experiment*) examined whether the type of judgment standard (minimum vs. confirmatory) would influence whether a positive or negative bias towards Turkish-German as well as male students would emerge. In accordance with predictions, teacher students showed a positive bias in their judgments of suitability to

the academic track: Participants required fewer achievement-related behaviors to recommend the academic track for a student with a Turkish (vs. German) name when minimum standards were indicated. In tendency, however, they required more achievement-related behaviors for the student with a Turkish (vs. German) name when confirmatory standards were induced. These results are in line with prior research from the US demonstrating that the use of minimum vs. confirmatory standards can lead to positive and negative biases towards members of a negatively stereotyped group, respectively (Biernat & Kobrynowicz, 1997; Biernat et al., 2008, 2010; Biernat & Fuegen, 2001). Interestingly, we only observed such an effect for the ethnicity which the name of the student indicated (Turkish vs. German), but not the gender (male vs. female). This is in contrast to other recent findings in Germany that demonstrate that students' gender also affects teachers' judgments (Bonefeld et al., 2022) and may interact with students' ethnicity to produce differing biases (Bonefeld et al., 2020). As discussed in the article itself, the stereotype about boys may be more faceted than for Turkish-German students: While there are lower expectations for boys' German skills, their intelligence overall is estimated to be higher (e.g., Steinmayr & Spinath, 2009), which may counteract the effect of the stereotype concerning German skills.

In Study 2 (*Non-communicated judgements of, vs. feedback on, students' essays: Is feedback inflation larger for students with a migration background?*), teacher students gave feedback on or provided non-communicated judgments of the essays written by male students with a Turkish and a German name. In addition to testing whether a positive feedback bias existed in Germany, this study examined whether such a bias was driven by sugarcoating or negativity omission and considered multiple person-related moderators. As expected, participants showed a positive bias towards a student with a Turkish (vs. German) name in rating-based as well as open-text feedback and judgments. The presence of a positive bias in feedback replicates results from existing U.S.-research (Croft & Schmader, 2012; Harber, 1998, 2004; Harber et al., 2010, 2012, 2019), especially given the differentiation between

content- and mechanics-related feedback. Interestingly, the analyses indicated that participants especially increase the number of their positive comments (sugarcoating) and suggested that they might also criticize less (negativity omission), though this latter finding was less reliable. This pattern is in line with original findings (Harber, 1998), but only partially corresponds with two more recent Canadian studies (Croft & Schmader, 2012). In contrast to the predictions of the motivational perspective, a positive bias also emerged in non-communicated judgments. Lastly, we observed that participants with higher self-esteem showed a lower positive bias in their open-text responses while the results for other person-related moderators were more complex.

In contrast, Studies 3 and 4 (*Failure to warn and the positive feedback bias: Are teacher students' communications with ethnic minority students positively biased in Germany?*) did not find evidence of a positive bias even though the materials closely resembled prior work on the failure-to-warn phenomenon (Crosby & Monin, 2007) and the positive feedback bias (e.g., Harber, 1998; Study 2 in this dissertation). In Study 3, teacher students saw the (overly difficult) workload for upper secondary school that a student was planning to take and were asked to give advice to the student. Contrary to the predictions of the motivational perspective and the findings by Crosby and Monin (2007), we did not find evidence of a positive bias in advice given to male students with a Turkish (vs. German) name. That is, the advice that participants gave, as well as the impression of the workload they communicated to the student (e.g., its difficulty) did not differ between the two students. Study 4 aimed to replicate the positive bias observed in Study 2 and to provide greater insight into the mechanism (cognitive-perceptual or motivational) that may drive it. Teacher students again gave feedback to male students on their essay based on rating-scales and in an open-text format. Contrary to findings from the U.S. and Canada (Croft & Schmader, 2012; Harber, 1998, 2004; Harber et al., 2010, 2012, 2019) as well as our own results in Study 2, teacher students' feedback did not differ based on the target student's name (Turkish vs. German).

Additionally, Study 4 was specifically designed to provide insight into which mechanism may underlie a positive bias, manipulating and measuring key constructs. However, a positive bias did not emerge either under the conditions specifically designed to test the cognitive-perceptual nor motivational perspective. Rather than showing which mechanism of the two was at play, this suggests that neither mechanism influenced teacher students' feedback. In the following, I summarize the relationship of the findings from the four studies to the two perspectives to better answer the question which mechanism may be at play when positive biases do occur.

### *Relation to the Cognitive-Perceptual Perspective*

Overall, the results provide limited evidence that a cognitive-perceptual mechanism is at work producing a positive bias. Specifically, the results from Study 1 are in line with the theoretical reasoning that a minimum standard will lead to a positive bias, whereas a confirmatory standard will lead to a negative bias. Teachers may indeed use different reference groups to judge a student's suitability to the academic track if they are looking for only minimal evidence of suitability. However, it is not yet clear which standard teachers use in practice and therefore, how students may be impacted. In Study 2, we also found a pattern of results that could be interpreted as speaking for a cognitive-perceptual mechanism—a positive bias did not just emerge in feedback but also in non-communicated judgments. However, two additional findings regarding the response scale format speak against this interpretation. First, participants did not have a more positive impression of the essay's style and mechanics even though a subjective response scale format was used. Based on the SSM, a positive bias would be particularly expected on this dimension because the stereotype about Turkish-Germans explicitly includes the expectation that students are less proficient in German (Glock & Krolak-Schwerdt, 2013; Reiss et al., 2019; Sprietsma, 2013; Wenz et al., 2016). Secondly, the absence of a positive bias on subjective scales in Study 4 also speaks against the working of a cognitive-perceptual mechanism. However, Studies 2 and 4 were

designed around the study of communications between the participant and the target student—a context in which the SSM had not been previously applied. In previous research examining shifting standards in communication, the focus was on participants' communication about a target person to a third person (Biernat & Sesko, 2013; Collins et al., 2009) or how participants interpreted feedback given to them by others (Biernat & Danaher, 2012). Overall, the situation of providing feedback to someone may not lead people to use different reference groups, or other factors might be more influential, overriding this mechanism. Our results suggest that the predictions of the SSM may not be generalizable to communications of teachers with students, though the limitations discussed below apply.

### ***Relation to the Motivational Perspective***

The pattern of results predicted based on the motivational perspective is only inconsistently found across studies. Overall, the results of Study 2 support the predictions by the motivational perspective and replicated the often observed specificity of the positive feedback bias to feedback dimensions without clear external rules to guide criticism (content-related feedback). In this study, we found evidence particularly of the practice of sugarcoating, that is, increasing positive content in written feedback, and—less reliably—of negativity omission, that is, reduced criticism, towards students with a Turkish (vs. German) name. Interestingly, feedback and non-communicated judgments did not differ in the extent of the positive bias. This finding could be integrated into the motivational perspective through post-hoc explanations but were not tested further within the line of research presented here. The finding that higher self-esteem was associated with a lessened positive bias on some dependent variables also speaks for a motivational mechanism. Lastly, the results of Studies 3 and 4 are contrary to the expectations of the motivational perspective, both in the general absence of a positive bias and the lack of influence of theoretically relevant moderators. Overall, no consistent evidence for a positive bias in advice and feedback in Germany or an underlying motivational mechanism was found.



***Explanations for the Inconsistent Results***

In essence, there are two explanations for the divergent results in Studies 1 and 2 as compared to Studies 3 and 4. On the one hand, the non-significant findings in the last two studies may represent the actual effect in the German school context: That there is none, and the results of Studies 1 and 2 represent false positive findings. On the other hand, conditions that were present only in Studies 3 and 4 may have affected positive biases, indicating that they do exist, but that can be diminished by experimental design or current events. I discuss these two explanations in turn.

**There is no Positive Bias in the German School Context.** The first and potentially most parsimonious explanation for the mixed results is that a reliable positive bias towards Turkish-German students does not exist in Germany. As discussed above, it may be that the SSM may not be applicable to communications directly with the person who was being evaluated, that is, to feedback and advice. Moreover, differences in the sociocultural contexts of the U.S. and Germany may explain the absence of a positive bias based on the motivational mechanism. That is, Germans may simply not be highly concerned about being or being perceived to be prejudiced against Turkish-Germans. As discussed in the theoretical background chapter, there exist relevant differences between the relationship between Black and White people in the U.S. and the relationship of German and Turkish-German people in Germany. Specifically, the relationship between Black and White people in the U.S. may be especially fraught because it is heavily marked by centuries-long, openly institutionalized oppression, which arguably continues in less explicit form until today (Alexander, 2010). Because this history goes back much longer and has been very openly institutionalized (e.g., in laws), the contemporary norm not to be prejudiced towards Black people may be much more substantial compared to the norm not to be prejudiced towards Turkish-Germans in Germany. Moreover, past US-American laws have specifically targeted the education of Black people (e.g., forced illiteracy, the separate-but-equal doctrine during the Jim-Crow era).

As a result, concerns about prejudice and educational inequality may be more present for educators in the U.S. than Germany. Overall, a strong norm to be unprejudiced towards the group in question is crucial from the motivational perspective, and one explanation for the lack of consistent positive biases is that it may simply not be present vis-à-vis Turkish-Germans in Germany. I further discuss this possibility in the theoretical implications.

**Experimental Design or Current Events Influence the Positive Bias.** Alternatively, differences between the studies may explain the inconsistent results post-hoc. First, the experimental design may influence whether a positive bias occurs. As compared to Study 2, which did find evidence of a positive bias, Studies 3 and 4 were conducted online and both used a between- rather than within-subjects design. The nature of participating in the study online might reduce concerns to be or appear to be prejudiced. When in the lab, participants interact directly with the research assistant, whereas participants at home will likely give feedback or advice alone, without heightened attention to the fact that they are participating in a study. This might make them less self-aware (Morin, 2004), that is, they may less actively engage with their “mental states (e.g., perceptions, sensations, attitudes, intentions, emotions) and public self-aspects” (p. 198). In turn, Harber (1998) has argued that lower situational self-awareness should reduce concern about prejudice. Relatedly, the within-subjects design of Study 2 might make teacher students more conscious of the fact that they are giving feedback to a Turkish-German student, potentially pushing concerns about being or appearing to be prejudiced to the forefront. Interestingly, with one exception all prior studies showing a positive feedback bias had used a between-subjects design, so it is surprising that we found an effect when using a within- but not when using a between-subjects design.

Secondly, the timing of the data collection could explain the inconsistent findings. Both Study 1 and 2 were conducted prior to the closure of schools due to the COVID-19 pandemic, whereas Studies 3 and 4 were conducted during the pandemic. The pandemic might have been especially present in teacher students’ minds because in both Study 3 and 4,

it was mentioned in the introduction as an explanation as to why the study would be conducted online. Teacher students may have considered the enormous consequences of school closures for students and held themselves more responsible for providing high-quality feedback. They may have also felt more accountable or motivated, potentially believing that the students had less opportunities to receive in-depth feedback at the time. Such increased accuracy concerns or accountability might lead to the elimination of a positive bias. First, the use of stereotypes is reduced when people have higher accuracy concerns, as they will pay more attention to individuating information (Fiske, 1998; Fiske et al., 2002), which should reduce effects of shifting standards (Biernat, 2012). For example, an experimental vignette study from Luxembourg showed that when teachers felt highly accountable, they no longer showed a negative bias against students with a migration background in their tracking recommendations (Pit-ten Cate et al., 2016). Secondly, participants who feel more accountable may have a greater incentive to get the task right (Ruscher et al., 2010), introducing a new motivational factor. Indeed, a small-scale experiment showed that under low accountability, White university students gave more positive, but less helpful feedback to Black than White school students—this effect was eliminated or reversed when higher accountability was induced (Ruscher et al., 2010). Overall, then, if the pandemic increased the sense that one's feedback needed to be more accurate and helpful, this may have worked to eliminate the positive bias observed in Studies 1 and 2.

### ***Person-Related Moderators***

Both the cognitive-perceptual and the motivational perspective have considered person-related moderators in the past. In terms of such moderators, research in the cognitive-perceptual tradition has considered factors that potentially relate to the strength of stereotypes while the motivational perspective examined personality-related factors that may relate to concern about prejudice in addition to stereotype endorsement. Within research on the SSM,

explicit and implicit attitudes as well as stereotype endorsement have been examined, but except for two early studies (Biernat & Manis, 1994), no effect was found (Biernat et al., 2008, 2009; Biernat & Sesko, 2013). Situational factors, that is, the response scale format and the judgment standard, have more consistently been found to be related to the shifting standards pattern (for an overview, see Biernat, 2012). Overall, the cognitive-perceptual perspective would not predict that any of the person-related moderators examined in this dissertation would influence standard shifts.

In turn, person-related moderators such as the motivation to respond without prejudice have been considered within the framework of the motivational perspective. With regards to feedback and advice specifically, some evidence has accumulated that the internal motivation to respond without prejudice is related to a positive bias (Crosby & Monin, 2007), though it may be qualified by the external motivation to respond without prejudice (Croft & Schmader, 2012). In addition to these proximal constructs, the more distal constructs of self-esteem and contingency of self-esteem may be of interest for positive biases more generally. Overall, if person-related moderators are demonstrated to relate to the degree of positive bias, this would provide evidence for a motivational and against a cognitive-perceptual mechanism.

### ***Cognitive Load***

Lastly, diverging predictions can be derived from the two perspectives for the effect of cognitive load. A person with high cognitive load, also referred to as cognitive busyness, is defined as being “simultaneously involved in several resource-consuming tasks” (Gilbert & Hixon, 1991, p. 510). Though both theoretical perspectives have the same understanding of what cognitive load entails—less cognitive resources available to do resource-intensive tasks—they disagree about the processes that they consider effortful. Based on this difference, diverging predictions can be derived as to which processes might be compromised due to cognitive load.

On the one hand, the SSM argues that people will use stereotypes more readily when under cognitive load (Biernat et al., 2003). This is because stereotypes can be considered energy-saving mechanisms and using them is less effortful than using individuating information (Allport, 1954; Fiske et al., 2018; Macrae et al., 1994; Pendry & Macrae, 1994). Therefore, when cognitive capacities are reduced, as is the case under cognitive load, stereotypes should be more readily applied (Macrae & Bodenhausen, 2000; though see Gilbert and Hixon (1991) for the relevant distinction between stereotype activation and application). Importantly, both within- and cross-category comparisons are considered to be based on stereotypes—therefore, less cognitive resources should intensify effects in both types of comparisons, leading to a greater negative bias based on cross-category comparisons and a greater positive bias based on within-category comparisons (Biernat et al., 2003). Indeed, four experiments with the typical shifting standards design manipulating cognitive load have found just that (Biernat et al., 2003). When judging stereotype-consistent targets, participants not placed under cognitive load judged men as being objectively taller and more athletic than women, and this effect was attenuated when using a subjective scale. This typical shifting standards pattern was larger when participants were placed under cognitive load (Biernat et al., 2003). Therefore, if biases become more extreme under cognitive load, this would provide evidence in favor of a cognitive-perceptual mechanism.

On the other hand, the motivational perspective would consider the process of correcting one's initial judgments or regulating one's behavior as effortful (e.g., Richeson & Shelton, 2003; Richeson & Trawalter, 2005; Trawalter et al., 2009). Inhibition and the regulation of behavior are basic processes that require executive resources (Diamond, 2013), and in interracial interactions, people may try to inhibit negative stereotypes as well as regulate their behavior in accordance with social norms or an idealized self (Mendes & Koslov, 2013; Richeson & Shelton, 2007, 2011; Trawalter et al., 2009). Indeed, research has found that White people have lower cognitive resources after an interaction with Black as

compared to White people (Richeson & Shelton, 2003; Richeson & Trawalter, 2005). For example, the performance of White participants on a Stroop-task, measuring how well someone inhibits a well-learned response, was impaired after an interaction with a Black (vs. White) confederate (Richeson & Trawalter, 2005). Overall, the motivational perspective would predict that positive biases should be reduced or eliminated when less cognitive resources are available, though the relation to positivity during actual interactions has not yet been tested. To date, the role of cognitive resources has only been considered in interracial interactions more generally (e.g., Richeson & Trawalter, 2005), and not in relation to the positive feedback bias and failure-to-warn phenomenon. In this case, if positive biases are no longer observed under cognitive load, this would speak to a motivational mechanism.

### ***Summary***

While both models aim to explain how positive bias towards members of negatively stereotyped groups might emerge, their predictions diverge at key points. Regarding cognitive load, clearly contrasting predictions can be derived from the two perspectives. For the other moderators, only one of the theoretical perspectives engages with a given moderator. In this section, I have connected predictions made by proponents of both perspectives as well as those that can be derived from their arguments. This comparison can provide the basis for further research discerning the cognitive-perceptual and motivational mechanisms that can elicit positive biases.

### **Limitations**

Several limitations presented here should be noted when interpreting the results of this line of research. First and foremost, differences in the design and timing of the four studies highlighted above make it difficult to directly compare their results and, importantly, to understand whether a positive bias does in fact exist in the German school context. In the following, I discuss additional limitations that are shared by all four studies.

### ***The Experimental Setting***

The necessity to consider the external validity of one's findings and claims is inherent in experimental designs. By definition, we aim to manipulate theoretically relevant factors while controlling other influences, resulting in a situation that is considerably less complex than every-day life. In the studies presented here, such a simplification existed in (1) the limited knowledge the teacher students had about the target students, (2) the fact that a one-time interaction or judgment was observed, (3) that interactions were always written rather than face-to-face, and (4) that participants only judged or communicated with one student (with the exception of Study 2). In their classrooms, teachers know much more about their students than simply their name and general performance level and can observe students' behavior, know their interests and consider their learning trajectory. Unlike the experimental setting, such individuating information, especially if diagnostic for students' competencies, could lead teachers to rely less on stereotypes, as has been shown for lay people (Rubinstein et al., 2018). In turn, this would reduce standard shifts. In terms of a motivational mechanism, the concern to be or appear to be prejudiced may be reduced when a lasting relationship has been built (Trawalter et al., 2009). In this case, teachers may be able to trust that their feedback or advice will not be taken as prejudiced after having established a consistent "track record" of benevolent intentions, at least if they are on good terms with the student. However, interpersonal concerns about how one acts or is perceived may become more salient in face-to-face as compared to written feedback (Harber, 2004). Overall, I believe these simplifications are adequate regarding the aims of this research to provide initial tests of a positive bias exists in a cultural context different from the U.S., but that this research should be complemented by differently designed studies.

### ***Participants***

Relatedly, the group of teacher students that participated in our studies differs in experience and age from teachers that students typically encounter in the classroom. This

could have influenced our results, though it is not immediately clear which group may be more likely to show a positive bias. On the one hand, teacher students' assessment skills are not as good as those of in-service teachers (Mertler, 2005) and they may rely more on information that is not directly relevant to students' achievement for tracking recommendations (e.g., migration background; Böhmer et al., 2012, 2017; but see also Glock et al., 2015). If they rely on stereotypes to a greater extent, they would be more likely to shift standards. On the other hand, in-service teachers have likely been exposed to more stereotype-confirming information given that students with a Turkish migration background underperform in comparison to their peers without a migration background (Müller & Stanat, 2006). Therefore, associations in line with the stereotype might be stronger, which could lead them to shift their standards to a greater extent. Moreover, in-service teachers have considerably more experience when it comes to giving feedback as compared to the teacher students in our studies, who may have only given feedback in their limited in-school praxis sessions. Giving feedback might demand much more concentration and effort from teacher students, taking away resources that are required to regulate one's behavior. Thus, teacher students may be less likely to show a positive bias simply because they are more strongly focused on getting the task right, potentially seeing a learning opportunity in the participation in our studies. Overall, then, it is unclear whether teacher students or in-service teachers may be more likely to exhibit a positive bias, and our studies are limited in that they cannot speak to such a difference.

### ***Performance Level Portrayed in Materials***

In this line of research, we aimed to establish whether a positive bias existed in the German context, which meant that we necessarily focused on specific conditions under which the bias would be most likely to appear. Specifically, we only considered low-quality student essays in Studies 2 and 4 and mediocre student performances in Studies 1 and 3. Both theoretical perspectives indicate that the performance level could be highly consequential for



positive biases (Biernat & Vescio, 2002; Harber, 1998). The cognitive-perceptual perspective considers the performance level important because it might influence the application of stereotypes (Biernat & Vescio, 2002). Following Kunda and Thagard (1996), Biernat and Vescio (2002) argue that stereotypes may be most influential in guiding judgments when the ability level portrayed is mediocre, as very high and very low performance are easily recognized as such. Though focusing on athleticism rather than academic achievement, Biernat and Vescio (2002) did show that the typical shifting standards pattern was especially pronounced for targets portrayed as having mediocre ability. However, research on negative biases towards ethnic minority students has found them to be most pronounced when students' performance level is low (Bonefeld & Dickhäuser, 2018; Glock, 2016; Glock & Krolak-Schwerdt, 2013; but see also Wenz and Hoenig, 2020), suggesting that stereotypes can also be applied under these conditions. On the other hand, Harber (1998) and the research that followed explicitly focused on low-quality essays in order to ensure that participants needed to criticize the essay to some extent. A positive bias based on a concern about prejudice might not occur in better performances because it is the act of criticizing that could be suspected as negatively prejudiced (Harber, 1998; Harber et al., 2012). Especially in terms of the motivational perspective, then, it remains an open question how concerns to be or appear to be prejudiced might manifest at different levels of the student's performance.

***Data Interpretation: Focus on Positivity***

Lastly, the dependent variables we assessed and coded out of open-text responses focused on the general positivity of judgments, advice, and feedback. Arguably, the usefulness of feedback and advice could have been examined as well, as this may be central to the consequences of positive biases. Indeed, prior research on the positive feedback bias has included indicators of feedback quality and suggests that feedback given to Black (vs. White) students provides them with insufficient challenges, fewer opportunities for improvement, and fewer models of good writing (Croft & Schmader, 2012; Harber et al., 2019; Ruscher et al.,

2010). In addition, even though some degree of general feedback inflation may be beneficial for rapport and motivation, overly high positivity may in itself also be an indicator of lower quality (e.g., Harber, 1998; Kessels & Nishen, in press). That is, overly positive feedback may be less useful precisely because it provides the students with a less accurate picture of their performance (Hattie, 2013; Kessels & Nishen, in press). In terms of advice, Crosby and Monin (2007) framed overly positive communication as a “failure” because it does not provide students with an adequate idea of what they are taking on. In the studies presented here, our aim was to first replicate and examine the principles behind a positive bias in the German school context. However, our research cannot address whether the usefulness of feedback or advice might be similarly impacted over and above the effect of inflated positivity itself.

## **Implications**

The work presented here has expanded on existing theory and research by testing cross-cultural generalizability, adapting research designs to directly compare two major theoretical perspectives in their predictions, and focusing on the school context. In the following section, I will elaborate the implications of this work for both further theory development and practice.

### ***Theoretical Implications***

Expanding on existing theoretical deliberation and empirical data, this dissertation aimed to transfer theories on positive biases cross-culturally and to test two theoretical perspectives against one another. The challenges in deriving predictions, creating insightful experimental designs, and interpreting patterns of results can inform further theory development. This is especially true for the clarification of predictions and boundary conditions.

Firstly, how consistently a positive bias occurs in the German school context can speak to the generalizability of theories on interactions of Black vs. White dyads (or judgments of these targets) to interactions between other racial-ethnic groups with a different intergroup history. Our first two studies indicated that the predictions may be generalizable to the German context, but the picture is more ambiguous when Studies 3 and 4 are taken into account. This highlights the need to consider the sociocultural context when developing theories on intergroup interactions, and this is true for both the cognitive-perceptual and motivational perspective. In particular, subtle aspects of the sociocultural context and the specific groups examined may influence whether a bias occurs. For example, how extreme the perceived differences between two groups are and how easily accessible the stereotype is may differ between sociocultural contexts. For the SSM, the degree to which the groups are perceived as being different is highly important. If only a small difference exists, the use of different reference groups for members of two groups may be barely noticeable, or other group memberships may be used as reference points as they are more predictive of group differences and, therefore, more useful heuristics. Of course, it is difficult to know whether the stereotypes about Black people in the U.S. compared to Turkish-German people in Germany are more extremely negative. As discussed in the theoretical background chapter, they are similar in many ways. However, it may be useful to further clarify assumptions about the extremity of stereotypes and compare different combinations of groups within the same sociocultural context as well as similarly-positioned groups across different contexts.

Similarly, the motivational perspective may benefit from reflecting on the specificities of the North-American sociocultural context. This is because the norm to be or appear to be unprejudiced towards certain racial-ethnic groups may be stronger in this context and therefore only limited in its generalizability. Even though German teachers are aware of negative stereotypes (e.g., Bonefeld & Karst, 2020) and might be concerned about prejudice and how to approach cultural diversity in classrooms (Civitillo et al., 2021; Hachfeld et al.,

2011), the relationship between Turkish-Germans and Germans is not as fraught and may therefore not be subject to the same motivational processes. Overall, the motivational perspective may benefit from more precisely articulating the underlying assumptions about the greater sociocultural context and the relationship between the specific groups involved, as well as perceived pervasiveness of the norm to be unprejudiced. More rigorous theorizing here could support researchers world-wide in testing the generalizability of its predictions to various combinations of intergroup contact.

Secondly, this dissertation explicitly articulates and addresses divergent predictions of two major perspectives on positive biases, adding to prior theoretical thinking. While research in both traditions made passing references to the other perspective from time to time (e.g., Biernat, 2012; Harber, 1998), no overview over divergent predictions had been advanced. Developing such an overview was fruitful in deriving new research propositions and predictions and enabled the construction of research designs to directly compare the two perspectives. Thus, it may be a source of new inspiration to more clearly delineate the boundary conditions and basic assumptions within each perspective, starting with aspects that have been considered in other perspectives on positive biases. This includes the two perspectives just mentioned, but also other alternative explanations for positive biases (e.g., greater positivity due to pity; Cuddy et al., 2007). This would allow a broader understanding of positive biases, with a better grasp on the mechanism at play in specific types of situations. In addition to better differentiating theoretical predictions of the two perspectives, it may also be useful to give more thought to their integration. Specifically, what would interactions look like if both the conditions for motivational and cognitive-perceptual mechanisms are present? The complexity of this scenario becomes clear when considering that these mechanisms could be in line with one another, both working in favor of a positive bias (e.g., concern about prejudice and a minimum standard is provided), but could also counteract each other (e.g., concern about prejudice, but a confirmatory standard is provided). A thorough first attempt at

this was included in an overview chapter by Biernat (2012), though it focused on how five core motives may influence the shifting standards process and stopped short of considering how motivational factors may bring about positive biases in their own right. Overall, the research presented in this dissertation added to existing work precisely because it was the first to bring together two perspectives on positive biases and create conditions under which they could be tested against one another. Further theoretical development offers the chance to conduct research that can accurately differentiate mechanisms producing positive biases.

### ***Practical Implications***

Because of the mixed evidence presented in this dissertation, it is not warranted to delineate clear and final implications of the presence or absence of a positive bias in judgments, feedback, and advice. In the following, I discuss possible implications of both the absence and presence of such a bias, aiming to give an overview of what the practical implications could be if this line of research was to be developed further and a clearer picture emerged.

**If a Positive Bias Does not Exist.** If indeed no positive bias towards members of negatively stereotyped groups exists, this is good news because of the potential detrimental effects of such biases (see below). It is also important to stress that we did not find evidence of a negative bias towards students with a Turkish name either. If this accurately reflects how teacher students judge and give feedback to students, this is encouraging for the state of educational inequality in Germany. In terms of the cognitive-perceptual perspective, lack of positive biases—accompanied by a lack of negative biases under the specified conditions—suggests that teacher students may not use stereotypes to judge their students' performance and ability. Based on the motivational perspective, this finding would indicate that teacher students are not concerned about prejudice, for example because they trust that the student will not perceive them as being prejudiced. Accurate teacher judgments and feedback can contribute to students' academic achievement and a lack of bias is therefore a refreshing

result, which could indicate a positive turn in teacher-student relationships. Nonetheless, there are extensive previous findings regarding biases in Germany, both on negative biases in teachers' and teacher students' judgments (e.g., Bonefeld & Dickhäuser, 2018; Sprietsma, 2013), as well as evidence of lower standards for and a positive bias in feedback to and judgments of students with a Turkish name (Studies 1 and 2; Holder & Kessels, 2017). Thus, more research is needed to understand when positive and negative biases emerge and whether they may be due to cultural differences, specificities of the teacher student population, or another factor.

**If a Positive Bias Does Exist.** If teachers do give consistently more positive feedback or advice to students belonging to negatively stereotyped groups, this is likely to affect students' understanding of themselves and their learning (Hattie, 2013; Kessels & Nishen, in press). Though arguments about the effects of overly positive feedback are largely theoretical at the moment, several likely consequences have been discussed, which I will touch on briefly following Kessels and Nishen (in press). Importantly, students will receive less helpful and informative feedback, thus losing opportunities for growth (Cohen & Steele, 2002; Harber, 1998). Additionally, the effect on students may depend on whether or not they accept the feedback at face value. When students accept feedback at face value, they may develop an overly positive self-concept, for example, believing their writing skills to be much better than they actually are (Kessels & Nishen, in press). Though a positive self-concept is associated with positive outcomes (Ferla et al., 2009; Marsh & Martin, 2011), it is unclear whether this would be the case for an overly positive self-concept (Butler, 2011; Hattie, 2013; Praetorius et al., 2016). Indeed, overly positive feedback may have negative consequences for students regardless of group membership as it could lead to choosing tasks with inadequate difficulties or a generally reduced motivation to improve further (Hattie, 2013; Kessels & Nishen, in press). Moreover, students belonging to negatively stereotyped groups may also be especially vulnerable to detrimental motivational effects by not trusting that the teacher's feedback is

authentic. These students may be cautious when receiving feedback by a teacher belonging to a non-stereotyped group because of the associated attributional ambiguity (Aronson & Inzlicht, 2004; Crocker et al., 1991; Major et al., 2016; Mendoza-Denton et al., 2010). If they discount the feedback they receive, they will also lose learning opportunities, evaluate their abilities less accurately, and trust their teacher to a lesser extent (Aronson & Inzlicht, 2004; Cohen & Steele, 2002; Kessels & Nishen, in press). Moreover, if they believe the feedback simply reflects low expectations that the teacher holds for them, they may disengage from the subject more and more, that is, detach their self-esteem from academic achievements (Cohen & Steele, 2002; Major et al., 1998).

If positive biases can have such negative consequences for students, it is important to consider which solutions may be available to counteract them. Indeed, a combination of solutions based on the cognitive-perceptual and motivational perspectives may address both mechanisms at the same time. To do so, an intervention aiming to reduce the use of stereotypes more generally can be adopted which can then be complemented by reducing teachers' concerns about prejudice. As Biernat (2012) argues, it is "unlikely that social categories can be avoided as referents for judgment, and the inherent subjectivity of language will always allow us to use the same words to mean different things" (p. 49). Therefore, the best target for an intervention may be to first clarify a common standard to compare a person's characteristic to, and secondly, to make judgments relative to that standard as accurate as possible (Biernat, 2012). This could take the form of clearly defined assessment criteria in combination with clearly defined information about when a criterion is met (Biernat, 2012). Indeed, teacher students did not show biases by gender or ethnicity when they were provided with a criterion rubric for evaluation (Jansen et al., 2019; Quinn, 2020).

Within the motivational perspective, research has shown that preventing explicit threat to a person's self-image is effective in reducing positive biases (Harber et al., 2010, 2019; Ruscher et al., 2010). Relatedly, the concept of *wise feedback* (Cohen & Steele, 2002; Cohen

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et al., 1999) has been introduced in stereotype threat research as a way to provide informative and motivating feedback across racial-ethnic lines, and has been shown to positively affect Black students' motivation (Cohen et al., 1999). Wise feedback consists of two aspects—first, the actual feedback on the student's performance, and secondly, a message that provides an empowering framing of the feedback. This message combines “the invocation of high standards with the assurance of students' capacity to reach those standards” (Cohen et al., 1999; p. 1304). Thus, students can attribute criticism to high standards (rather than prejudice) and are supported in their self-efficacy. Importantly, wise feedback could also allay teachers' concerns about prejudice. Specifically, when giving feedback this way, teachers may feel that they can include criticism and remove exaggerated praise because their intention will be understood as benevolent and appropriately stimulating. Thus, concerns about being or appearing to be prejudiced may be allayed by better understanding and communicating one's standards and expectations. Combining these proposals of the cognitive-perceptual and motivational perspectives points to a useful and realizable solution to a positive bias if it does exist: The development and communication of a single set of criteria in combination with the explicit assurance that they will be used to judge or give accurate and authentic feedback to all students.

### **Avenues for Future Research**

In addition to cues for theory development, the research presented here may inspire related research in both social and educational psychology as it is situated at the intersection of these two general fields. In the following, I would like to propose three avenues for future research that go beyond merely addressing the limitations discussed above.

#### ***Effects of Positive Biases on Teachers***

It is clear that research on the potential consequences of a positive bias for students is needed and valuable to understanding how to handle biases when they occur (Kessels &



Nishen, in press). However, positive biases not only affect the person on the receiving end, but may also influence the person who shows the bias, in this case, the teacher. Firstly, positive biases could contribute to the maintenance of stereotypes held by teachers. Indeed, there is no evidence that positive biases in judgments or communications induce a dissonance-led reduction in stereotypes. On the contrary, people communicated more positively about the academic record of a Black (vs. identical White) student, but afterwards remembered this record to be worse for the Black (vs. White) student (Biernat & Sesko, 2013; Collins et al., 2009). Moreover, greater positivity in judgments of Black students was associated with a situational increase in prejudice towards Black people (Biernat & Sesko, 2013), and a greater tendency to shift standards has been related to the lower allocation of hypothetical resources (Biernat et al., 2009). Moreover, if a motivational mechanism drives positive biases, the negative affective consequences of self-regulatory effort may “[bleed] into individuals’ evaluations of the outgroup” (Shelton et al., 2006; p. 352; see also Gaertner & Dovidio, 1986). Overall, it does not seem to be the case that positive biases lead to dissonance-induced change in stereotypes or attitudes, but rather maintain them. However, future research could engage with this question more directly.

Secondly, positive biases may lead teachers to behave in less predictable ways towards negatively stereotyped students due to a process termed moral licensing. Research in moral psychology suggests that people’s moral behavior can vary between situations because of their recent history of (im)moral behavior (Miller & Effron, 2010; Sachdeva et al., 2009). Specifically, people are more likely to do something considered moral following immoral behavior (moral cleansing), but after moral behavior are more likely to engage in immoral behavior (moral licensing; Monin & Miller, 2001; Sachdeva et al., 2009). This also extends to behaviors that could be construed as prejudiced (e.g., Effron et al., 2009, 2012; Monin & Miller, 2001). If teachers understand differential treatment of students belonging to a negatively stereotyped group as morally questionable, showing a positive bias towards them

may become part of an iterative cycle of moral licensing and moral cleansing. If this is the case, teachers may sometimes show overly high positivity, but at other times engage in more negative or avoidant behaviors towards ethnic minority students. This could hurt the trust that students place in teachers, making them feel uncertain about where they stand and leading to attributional ambiguity with its own negative consequences (e.g., Aronson & Inzlicht, 2004; Major et al., 2016). Thus, applying research from the field of moral psychology may give us important insights into the consequences of teachers showing a positive bias, for themselves as well as their interactions with students in the long run.

### ***Connecting the Relative and Absolute Valence of Feedback***

In the research presented here, we focused on the relative positivity of feedback given to one group of students compared to another, that is, a bias in feedback. As such, our aim was not primarily to consider the positivity or negativity of feedback in absolute terms. However, our research highlights some complexities in the field of feedback studies and may inspire a greater delineation of different aspects of feedback valence, which can in turn be considered in research on biases in feedback.

Our results from Studies 2 and 4 demonstrate that feedback on complex tasks is in itself also complex and includes both positive and negative comments. Indeed, even though student performance was low, roughly one-third of comments by teacher students were positive in both studies. Such mixed-valence feedback has often been overlooked in research in favor of feedback that was either singularly positive or negative (e.g., Lechermaier & Fassnacht, 2018). Research on mixed-valence feedback is rare and stems from other disciplines such as management (e.g., Wu & Bailey, 2007), whereas research on feedback on complex tasks considers aspects of feedback other than its valence or only considers negative feedback (e.g., Parr & Timperley, 2010; Strijbos et al. 2021; for research combining negative feedback and praise, see Lipnevich & Smith, 2009). It is uncertain whether results from such studies could be generalized to mixed-valence feedback because individual evaluative

feedback statements are not presented as independent pieces of information, and because it likely contains information over and above a simple sequence of positive and negative feedback statements. We found exploratory evidence of these characteristics in our feedback studies in the way participants connected positive and negative comments in the same sentence as well as their additional elaboration and instruction. Thus, research on the generation and communication of complex, mixed-valence feedback is much-needed.

In turn, research on positive biases in feedback could benefit from such studies on mixed-valence feedback. This is because it has, above all, focused on the relative positivity rather than the absolute valence of feedback given to members of negatively stereotyped groups. Understanding the absolute valence of feedback may be important to better predict how a positive bias can impact students. In his article, Harber (2004) reports that the feedback for Black students was inflated to such a degree that it may actually have represented positive feedback. For example, White students received ratings reflecting a “fair” evaluation, whereas the positive feedback bias towards Black students meant that their essay was on average rated as “mildly strong”—a qualitatively different feedback (Harber, 2004). In Study 2 of this dissertation, this was not the case. Instead, the feedback a student with a Turkish name received continued to have a substantial amount of negative open-text comments and therefore was—in absolute terms—less negative rather than more positive than the feedback given to the student with a German name. Whether overly positive feedback is more positive or simply less negative in absolute terms could have important consequences for the effects of this bias. For example, a qualitative change in feedback from predominantly negative to predominantly positive could lead students to extend less effort believing that they are closer to their learning goal than they actually are (Harber, 2004). Less negative feedback—if the bias remains undetected by the student—may be more benign as it still conveys that the student could improve and allows them to engage with criticism. Therefore, future research

could contribute to an understanding of the consequences of the positive feedback bias in relation to its absolute valence and the message the feedback communicates as a result.

### ***Developing an Intersectional Approach***

Lastly, it is worthwhile to touch on the importance of an intersectional approach in future research on positive biases. Originally developed for and used as a legal and political tool fighting the discrimination of people at “hidden” intersections in the U.S. (Combahee River Collective, 1982; Crenshaw, 1989), intersectionality can also be understood as an umbrella term for “analytic approaches that simultaneously consider the meaning and consequences of multiple categories of identity, difference, and disadvantage” (Cole, 2009, p. 170). An intersectional approach to positive biases may be valuable because concurrent group memberships may influence both which reference group a person is compared to as well as concerns about being or appearing to be prejudiced. Of course, it may be that out of multiple known group memberships, the most salient one is picked out and is acted upon (e.g., only racial-ethnic group membership), whereas the others (e.g., gender) are simply ignored (Macrae & Bodenhausen, 2000). In this case, an intersectional design may be able to inform us which group membership is most salient. However, information about multiple group membership may also be integrated and used in tandem, leading to divergent results for people who belong to the same group in one regard, but different groups in another (e.g., high-SES vs. low-SES student with a Turkish name). In terms of the cognitive-perceptual perspective, different reference groups may be used for these two people, similar to the use of subgroups discussed within stereotype maintenance research (Richards & Hewstone, 2001). When considering a motivational mechanism, other group memberships of the target person may further exacerbate concerns about being or appearing to be prejudiced, especially when they are also negatively stereotyped. On the other hand, concerns may also be alleviated if people share one of the additional group memberships with the target (e.g., both are women) or if the combination of certain group memberships creates a very warm, unthreatening

stereotype (e.g., the stereotypical image of a non-threatening, nurturing Black “Mammy” combines group memberships based on gender, race, and body size; Collins, 2009; Thomas et al., 2004). Overall, research considering concurrent group memberships could provide greater insights into the interactions with students who occupy different intersections of group memberships.

## **Conclusion**

In the work presented here, I aimed to examine (1) whether positive biases towards members of a negatively stereotyped group could be observed in the German school context, and (2) whether cognitive-perceptual and motivational perspectives on such a bias could explain the findings. The research provides inconclusive results as to whether a positive bias exists among German teacher students. Positive biases were found under the conditions predicted by the cognitive-perceptual perspective as well as the motivational perspective, though two additional studies did not support their predictions. Because of these inconclusive results, the second research question cannot be definitively addressed either. Keeping in mind the limitations discussed above, the present research contributes to research on the generalizability of positive biases to a different sociocultural context as well as the school context. Moreover, the inconclusive results highlight the usefulness of further inquiry and theoretical development of theories on positive biases. Potentially, insights from related fields such as moral psychology could inspire further research on the consequences of positive biases for both students and teachers.

Finally, the research conducted here highlights again the complexity of stereotypes and their effects on intergroup judgments and interactions. Specifically, we considered only one aspect of the effects of stereotypes: The effect of existing negative stereotypes about members of a specific ethnic group on the judgments and feedback of members of a non-stereotyped ethnic group. Though it cannot be conclusively said whether a positive bias exists,

the present research hints at the possibility that even this relatively specific aspect may be highly complex. That is, the conditions that might lead to a positive bias may be more complex than delineated in the original theories, potentially including both broader sociocultural aspects and more situational, transient factors over and above those originally specified. Moreover, evidence of two different mechanisms leading to positive biases has been observed, highlighting that a further consideration of various mechanisms may be timely. I hope that this complexity is not seen as a detriment to this topic, but instead inspires further research to better understand how teachers and students can interact constructively and authentically across lines of difference.

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## **Eigenständigkeitserklärung**

Hiermit erkläre ich, die vorliegende Dissertation mit dem Titel

*A positive bias towards negatively stereotyped students? Teacher students' feedback to and judgments of students with a Turkish vs. a German name*

selbstständig verfasst und ohne unerlaubte Hilfe angefertigt habe. Alle Hilfsmittel, die verwendet wurden, habe ich angegeben. Die Dissertation ist in keinem früheren Promotionsverfahren angenommen oder abgelehnt worden.

Ort, Datum

Anna Kristina Nishen

## **Curriculum Vitae: Anna K. Nishen**

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