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Communication of stereotypes in the classroom: biased language use of German and Turkish adolescents

Abstract: Little is known about the linguistic transmission and maintenance of mutual stereotypes in interethnic contexts. This field study, therefore, investigated the linguistic expectancy bias (LEB) and the linguistic intergroup bias (LIB) among German and Turkish adolescents (13 to 20 years) in the school context. The LEB refers to the general phenomenon of describing stereotypes more abstractly. The LIB is the tendency to use language abstraction for in-group protective reasons. Results revealed an unmoderated LEB, whereas the LIB only occurred when foreigners were in the numerical majority, the classroom composition was perceived as a learning disadvantage, or the interethnic conflict frequency was high. These findings provide first evidence for the use of both LEB and LIB in an interethnic classroom setting.

Ethnic stereotypes and prejudice pose an important obstacle to the development of open-mindedness in our multicultural societies. Language is the means of transmission of stereotypes—be it in communications at home, in school, or in the mass media (cf. Wigboldus & Douglas, 2007). Stereotypes can be communicated in many different ways. They can be expressed directly through open statements. Imagine, for example, a classroom situation in which a German and a Turkish student are engaged in an argument. The German student shouts, “Germans are more industrious than Turks” and the Turkish student answers, “But Turks are more generous than Germans.” While this is very blatant, stereotypes can be expressed in a more subtle way. Even the abstractness of utterances conveys the speakers’ beliefs in suggesting more stable attributions of stereotypic or negatively valenced behaviors. It makes a difference to say “Cem does not know the answer to the maths question” or “Cem is not well-educated.” In contrast to blatant discrimination, such subtle mechanisms are often more automatic, more difficult to control, and harder to resist (e.g., Franco & Maass, 1996). Therefore, they crucially contribute to the transmission and maintenance of stereotypes (Maass & Arcuri, 1992).

The present study set out to investigate two biases in linguistic abstraction, the linguistic expectancy bias (Maass, Milesi, Zabbini, & Stahlberg, 1995; Wigboldus, Semin, & Spears, 2000) and the linguistic intergroup bias (Maass, Salvi, Arcuri, & Semin, 1989), among German and Turkish high school students in Germany. Thereby, we aimed at investigat-

ing the transmission of mutual stereotypes among adolescents and environmental conditions that foster prejudices in such an early age.

Linguistic category model

Differences in linguistic abstraction are described in Semin and Fiedler’s (1988, 1991) linguistic category model. It postulates a continuum of four different abstraction levels. At the concrete end are descriptive action verbs (DAV), which provide an objective description of a single observable behavior (e.g., “A kicks B”). Interpretative action verbs (IAV), likewise, refer to an observable behavior but describe a more general class of behaviors (e.g., “A hurts B”). State verbs (SV) describe a more lasting emotional or mental state of the proponent (e.g., “A hates B”). Finally, adjectives (ADJ) describe abstract characteristics of the proponent (e.g., “A is aggressive”; examples adopted from Maass, Ceccarelli, & Rudin, 1996, p. 512). Recently, nouns (N) have been shown to represent an additional fifth level of abstraction (e.g., “A is a bully”; Carnaghi et al., 2008; see also Anolli, Zurloni, & Riva, 2006).

Linguistic biases

Two mechanisms underlying differences in language abstraction are captured in the linguistic expectancy bias and the linguistic intergroup bias. Regarding the linguistic expectancy bias (LEB), different levels of language abstraction derive

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from differential expectancies (Maass et al., 1995; Wigboldus et al., 2000). Specifically, the LEB describes the phenomenon that behavior consistent with one's prior expectancies about an individual is described more abstractly than behavior inconsistent with one's prior expectancies. In the intergroup context, this means that behavior of a group member, which is consistent with the stereotype about the respective group (regardless of the behavior's valence), provokes more abstract language use than behavior inconsistent with the group's stereotype.

Regarding the linguistic intergroup bias (LIB), differences in language abstraction arise from in-group protective motives (Maass et al., 1989). Specifically, the LIB is the tendency to describe positive in-group and negative out-group behavior more abstractly than negative in-group and positive out-group behavior. Abstract language use suggests stable behavior with high repetition likelihood, whereas concrete language indicates a single event unlikely to be repeated in the future. Therefore, describing positive behavior of one's own group and negative behavior of an opposing group in more abstract terms than vice versa implies that desirable behavior is more typical for the in-group, whereas undesirable behavior is more typical for the out-group. By this subtle language bias, the in-group appears in a more favorable light than the out-group, which contributes to prejudiced thinking and communication (for a summary, see Wigboldus & Douglas, 2007).

Thus, whereas the LEB bases on a merely cognitive mechanism, which occurs in particular when stereotypes are shared by the respective groups, the LIB derives from a motivational process that depends on the communicator's own group membership and the valence of the behavior. Empirical support has been found for both explanations with cognitive processes being predominant when socially shared expectancies exist (e.g., Maass et al., 1995; Wigboldus et al., 2000), and motivational processes becoming more relevant when the in-group is threatened by highly competitive or hostile conditions (e.g., Maass et al., 1996). Both processes can operate independently and additively and occur in a wide range of intergroup settings (for an overview see Maass, 1999).

Even though the LEB and the LIB transmit stereotypic expectancies and serve the maintenance of stereotypes, to date, only one study investigated the LIB with younger participants. Specifically, Werkman, Wigboldus, and Semin (1999) showed that children between 8 and 19 years described positive behavior of a friend and negative behavior of an enemy more abstractly than vice versa. Note, however, that this study focused on interpersonal rather than intergroup behavior. To the best of our knowledge, no previous study examined the use of the LEB or the LIB among children and adolescents in interethnic group contexts. This is puzzling because prejudice develops in these years to the degree that stereotypes are shared and expressed by in-group members

and to the degree that disadvantages and group threat are perceived (Nesdale, 1999). Therefore, the investigation of the LEB and the LIB among children and adolescents in different contexts would provide important insights in this process.

Even in general, only few studies investigated the LEB and LIB in interethnic contexts (e.g., Geschke, Sassenberg, Ruhrmann, & Sommer, 2010; Gorham, 2006; Schnake & Ruscher, 1998; von Hippel, Sekaquaptewa, & Vargas, 1997). And those studies addressing ethnic-related LIB effects, only assessed the perspective of one group—e.g., Caucasian/German participants—but not the perspective of the opposite group—e.g., African Americans/migrants (for an exception outside the interethnic group context, see Moscatelli, Albarello, & Rubini, 2008). Thus, it is an open question whether ethnic minorities differ in their linguistic transmission of group stereotypes from majority groups. For example, Maass et al. (1995) found no moderation of linguistic bias with the participants' group for Northern and Southern Italians. If stereotype expression were also mutual for ethnic minority and majority groups, this would imply a vicious circle of mutual stereotype confirmation, which would justify mutual prejudice and impair changing perceptions. Therefore, it is crucial to take both sides into account in intergroup settings. In addition, previous studies did not address situational moderators such as interethnic hostility and conflict.

Interethnic school contexts

The role of contact

Ethnic prejudice and stereotypes are affected by contact with different ethnic groups (Allport, 1954; Pettigrew, 1998). The classroom can be a major medium to foster interethnic contact among adolescents that should prepare open-mindedness for our multicultural societies. In interethnic classes, the potential for intergroup contact is high and this contact may lead to cross-ethnic friendships, which reduce prejudice and improve intergroup relations (e.g., Aberson, Shoemaker, & Tomolillo, 2004; Aboud, Mendelson, & Purdy, 2003). Consistently, a number of studies have demonstrated the advantages of ethnically diverse schools for cross-ethnic friendship and intergroup contact (e.g., Jugert, Noack, & Rutland, 2011; Khmelkov & Hallinan, 1999; Stearns, 2004; van Geel & Vedder, 2011). Note, however, that the respective schools often had specific curricula promoting multiculturalism and integration. Moreover, these schools were either very heterogeneous in regard to ethnicity (i.e., relatively lower proportions of each group per class, e.g., van Geel & Vedder, 2011) or levels of the ethnic minority was neither high nor low (e.g., Jugert et al., 2011). Therefore, it is unclear how the effects of interethnic contact vary without specific supporting

curricula and same-ethnic minority-group students in the numerical majority.

Macrostructural theory (Blau, 1977, 1994) states that not only interethnic friendship, but also conflict can result from the total number of interracial ties (for empirical evidence, see Dixon, 2006; Goldsmith, 2004). Actually, positive contact in the form of interethnic friendship is rare (e.g., Hallinan & Williams, 1989; Kao & Joyner, 2004; Quillian & Campbell, 2003; Wade & Okesola, 2002) and often not stable (Schneider, Dixon, & Udvari, 2007). Moreover, the “net effect of heterogeneity on conflict [was found] to be 2.5 times stronger than its effect on friendliness” (Goldsmith, 2004, p. 608).

Complementing this picture of negative outcomes of interethnic contact, Allport’s (1954) contact theory states that mere interethnic contact only activates the prejudice already prevalent in the population unless certain preconditions are met: equal status, support of authority, cooperation, and common goals (see also Pettigrew, 1998; Stephan, 1987; but see Hewstone & Brown, 1986). Often, the classroom setting is characterized by interdependence to achieve common goals, for example, in learning groups, and intergroup contact is fostered by institutional support. Nevertheless, Schofield and Eurich-Fulcer (2004) summarized certain obstacles that may occur.

For example, regarding equal status it is necessary to consider the group status within and outside the contact situation. Within classes, even when teachers promote equality and tolerance and ethnic minority students do not represent a numerical minority in class, often their language skills, their school performance, and their grades are worse than those of their classmates (i.e., Turkish as compared with German students in the present study; e.g., Krohne, Meier, & Tillmann, 2004). In addition, a higher status is usually conferred to the ethnic majority group as teachers, faculty members, and examples in textbooks mainly represent their group (i.e., German is set as the “standard” in Germany). Furthermore, differences in group status outside the classroom have an influence on the situation inside the classroom and there, ethnic minorities often suffer from a lower status.

Besides differing status, the basis for cooperation between minority and majority group students in school is adverse because the school context historically (and nowadays increasingly) tends to have an individualistic focus stressing academic achievement and competition (Cook, 1979; cf. Schofield & Eurich-Fulcer, 2004). In such a climate, language barriers or extra support needed by ethnic minority students likely rather leads to frustration and perceived learning disadvantages than to supportive cooperation (cf. Baur & Häussermann, 2009). Taken together, although interethnic classrooms may be an opportunity for interethnic exchange, several counteracting factors exist that may lead to a negative class climate and mutually negative attitudes.

The role of ethnic minority/majority proportions

According to group threat theory, the mere existence of a sizable minority induces threat, which leads to prejudice among the majority group (Blalock, 1967). Consistently, majority national groups have been found to perceive their status position threatened by minority groups (examples from Europe: Coenders, Gijsberts, Hagendoorn, & Scheepers, 2004; Scheepers, Gijsberts, & Coenders, 2002). Moreover, there is evidence that the perceived threat increases with the number of minority group members in a given context. For instance, previous studies reported a positive relationship between the size of the African American population and anti-Black prejudice among Caucasian Americans (e.g., Giles & Buckner, 1993; Glaser, 1994; Quillian, 1996; Taylor, 1998). Thus, a greater percentage of minority group students in class may confer a perceived illegitimate low status to the majority group students.

In classes with a higher proportion of (foreign) ethnic minority group students, teachers are also more likely to be confronted with language comprehension problems making it difficult to provide education without a certain amount of segregation. One group will then usually be disadvantaged (the minority that cannot follow, the majority that has to accept a slower progress in the—usually strictly planned—curriculum, the mere feelings of being treated differently). Such a constellation may result in perceived learning disadvantages from both sides and enhance intergroup conflict and prejudice.

Following these lines of reasoning, classes with ethnic minority group students in the numerical majority may imply the greatest perceived disadvantage on both sides. On the one hand, the ethnic majority students may perceive threat as they feel in the illegitimate minority and hindered in their learning process and school achievement. This perception may be established and reinforced by perceptions of concerned parents and peers. On the other hand, the ethnic minority students may feel illegitimately treated due to the standards imposed by the ethnic majority (curricula). Moreover, according to the opportunity hypothesis (Hallinan & Teixeira, 1987), minority group students are here less likely to be in contact with ethnic majority members who could help them get along in school and thereby counteract segregation from the ethnic majority group (see also Titzmann & Silbereisen, 2009, for friendship homophily among immigrants in schools with higher proportions of immigrants).

The present study

The current study set out to investigate (a) the mutual stereotypes of German and Turkish adolescents expressed via biased language use, namely, the LEB and the LIB, in German

classrooms and (b) the influence of crucial moderators in an interethnic group context. We chose the classroom setting because it represents real-life groups and because linguistic biases have hardly been investigated among younger participants although understanding the transmission of stereotypes should be most important here. Moreover, the investigation of mutual stereotypes has largely been neglected although the reciprocation of stereotypes by the minority group will confirm and stiffen the status quo while justifying mutual prejudice and dissent.

We focused on German and Turkish adolescents because Turkish immigrants constitute the largest ethnic minority in Germany, representing about 3% of the overall population (Woellert, Kröhnert, Sippel, & Klingholz, 2009), and representative surveys have shown that Turks are perceived as the typical foreigners in Germany (Asbrock, Lemmer, Wagner, Becker, & Koller, 2009; Asbrock, Wagner, & Christ, 2006). The Turkish population is confronted with high levels of discrimination in Germany (Wagner, van Dick, Pettigrew, & Christ, 2003) and holds a low status in terms of education, employment, income, and health (De Groot & Sager, 2010). Thus, Turkish students can be assumed to hold a lower status position than their German classmates (see also Feddes, Noack, & Rutland, 2009; Jugert et al., 2011).

German schoolchildren and adolescents have already been repeatedly found to openly express prejudices toward Turkish immigrants (e.g., Boehnke, Hagen, & Hefner, 1998; Frindte, Funke, & Waldzus, 1996; Wagner et al., 2003). However, less is known about the transmission and maintenance of these stereotypes and which role language plays in this regard. In addition, the opposite perspective was often neglected, that is, the attitudes Turkish people hold and express about Germans and about themselves (for an exception, see Jugert et al., 2011). Mutual stereotypes will likely escalate in a vicious circle that aggravates prejudice and perceived differences.

The aim of the current study was twofold. First, we were interested in whether German and Turkish adolescents already share positive and negative stereotypes about their groups. For this purpose, we assessed the LEB, that is, whether adolescents of both groups would describe stereotypical behavior in general more abstractly than nonstereotypical behavior.

Second, we investigated whether in addition to the LEB, a LIB would occur. Thus, whether—independent of the behavior's stereotypicality—positive behavior of the in-group and negative behavior of the out-group would be described in more abstract terms. Drawing on social identity theory (Tajfel & Turner, 1979), Maass et al. (1996) proposed that the LIB is not a general phenomenon as the LEB but occurs only under specific circumstances. Social identity theory assumes that one's self-concept is, in part, defined by one's group membership such that positive evaluations of the in-group lead to a positive self-concept, whereas negative evaluations lead to a

negative self-concept. As the LIB is a means to let one's own group appear in a more favorable light than the respective out-group, the process is particularly likely to occur when (a) one's social identity is threatened, (b) one's group has an illegitimate low status, and (c) the intergroup setting is competitive and conflictual (Maass et al., 1996). We hypothesize that in classes with a higher proportion of foreigners, these conditions are likely to coincide for both groups. Specifically, we compare two kinds of classes: classes with a higher proportion of Germans and classes with a higher proportion of foreigners.

In sum, we expected the LEB to be a general phenomenon, whereas we assumed the LIB to be moderated by the classroom composition and the resulting perceived learning disadvantage and interethnic conflict. Note that we distinguished interethnic conflict from general conflict as only the former is linked to in-group protective motives. In regard to the differences between German and Turkish adolescents, no *a priori* hypotheses were specified.

Method

Pretesting: development of experimental material

Mutual stereotypes

To identify prevalent stereotypes about Germans and Turks, we conducted a pretest with 42 mainly German university students (20 females, $M_{\text{age}} = 24.5$ years). We presented participants with a list of 26 positive and 26 negative adjectives, which have been associated with German and Turkish stereotypes in previous studies (e.g., Kahraman & Knoblich, 2000), the mass media, or the Internet. Participants were divided into three groups. Two groups were instructed to indicate how they believe Germans, in general, perceive German ($n_1 = 14$) or Turkish ($n_2 = 14$) fellow citizens.¹ Specifically, they rated the 52 characteristics for Germans or Turks on 5-point rating scales (1 = *not at all typical*, 5 = *very typical*). The third group ($n_3 = 14$) was asked to give their personal opinion on 5-point rating scales regarding the desirability of the 52 characteristics (1 = *not at all desirable*, 5 = *very desirable*). Based on these ratings, we selected 12 items: three positive and three negative stereotypically German adjectives, and three positive and three negative stereotypically Turkish adjectives. These items were selected such that (a) stereotypically German characteristics were rated as more typical for Germans than for Turks, $M_s = 3.85$ vs. 2.69, $t(26) = 10.82$, $p < .001$, that (b) stereotypically Turkish characteristics were rated as more typical for Turks than for

¹We adopted this instruction from Fiske, Cuddy, Glick, and Xu (2002) to reduce social desirability effects and to tap the perceived stereotypes.

Table 1 Social Desirability and Typicality Ratings of Selected Characteristics (Exact German Terms are in Parentheses) of German and Turkish Participants: Pretest 1

German	Social desirability		Typically German		Typically Turkish	
	Germans	Turks	Germans	Turks	Germans	Turks
Reliable (zuverlässig)	4.50	4.85	4.14	3.91	2.57	3.40
Disciplined (diszipliniert)	4.14	4.63	4.07	3.90	2.36	2.50
Industrious (fleißig)	4.00	4.74	4.07	4.20	2.71	3.20
Bourgeois (spießig)	2.00	1.85	3.79	3.45	2.50	3.00
Pessimistic (pessimistisch)	2.07	1.95	3.57	2.45	2.86	2.90
Egoistic (egoistisch)	2.14	1.84	3.43	3.40	3.14	2.70
Turkish	Germans	Turks	Germans	Turks	Germans	Turks
Hospitable (gastfreundlich)	4.29	4.85	2.86	3.00	3.93	4.50
Fond of children (kinderliebend)	4.14	4.37	3.07	3.20	3.79	4.00
Sociable (gesellig)	4.07	4.40	3.43	3.36	4.36	4.00
Aggressive (aggressiv)	1.07	1.25	2.71	2.64	4.14	3.40
Uneducated (ungebildet)	1.57	1.37	2.07	2.00	3.64	3.10
Loud (laut)	2.07	2.21	3.00	3.20	4.21	3.80

Note. Social desirability ranged from *not at all desirable* (1) to *very desirable* (5). Typicality ratings ranged from *not at all typical* (1) to *very typical* (5).

Germans, $M_s = 4.01$ vs. 2.86 , $t(26) = -8.44$, $p < .001$, and that (c) the chosen adjectives were rated as clearly positive or clearly negative. For the latter purpose, we tested the means of positive and negative items against the midpoint of the scale (3), $M = 4.19$, $t(13) = 12.07$, $p < .001$, and $M = 1.82$, $t(13) = -16.63$, $p < .001$, respectively.

In order to assure that the selected items also represent stereotypes shared by Turks, 21 adults with a Turkish migration background (10 females, $M_{age} = 28.5$) completed the same ratings as the German sample for the 12 selected adjectives. One half rated the typicality for Germans, the other half the typicality for Turks. Subsequently, all participants judged the characteristics' desirability. Results replicated the findings of the German sample: (a) stereotypically German characteristics were rated as more typical for Germans than for Turks, $M_s = 3.53$ vs. 2.95 , $t(19) = 2.16$, $p < .04$, (b) stereotypically Turkish characteristics were rated as more typical for Turks than for Germans, $M_s = 3.80$ vs. 2.95 , $t(19) = -2.37$, $p < .03$, and (c) the means of positive and negative items differed significantly from the midpoint of the scale (3) in the predicted directions, $M = 4.65$, $t(18) = 19.53$, $p < .001$, and $M = 1.73$, $t(18) = -9.26$, $p < .001$.² The list of selected adjectives is presented in Table 1 together with the respective social desirability and typicality ratings of German and Turkish participants.

Cartoons

For each of the 12 characteristics, two single-frame cartoons were produced with a German boy (Tim) or a Turkish boy (Cem) displaying the corresponding behavior. In a second pretest, 16 participants were presented with the 12 cartoons of the German boy (the name Tim was exchanged for the

neutral word "boy") and a behavior description on the second level of abstraction of Semin and Fiedler's (1988) linguistic category model (IAV; e.g., "The boy spends a lot of time with his friends."). The description was necessary because the vignettes did not include speech bubbles, which makes it difficult to interpret the pictures without further information. The task was to judge the depicted behavior regarding valence on 7-point scales (1 = *very negative*, 7 = *very positive*). One-sample t tests showed that both positive, $M = 6.00$, $t(15) = 15.28$, $p < .001$, and negative items, $M = 2.20$, $t(15) = -12.74$, $p < .001$, differed significantly from the midpoint of the scale (4) in the predicted direction. Thus, as with the adjectives also, the vignettes combined with IAV descriptions were clearly rated as positive or negative.

Participants and design

In total, 136 students of 10 classes from five different schools participated in the study and received sweets for their participation. As we focused on intergroup relations between Germans and Turks, only students with a German or Turkish nationality were included in the analyses, resulting in a sample size of 112 participants (45 females, 31 Turkish, $M_{age} = 15.5$, ranging from 13 to 20 years). The students attended the 7th to 11th grade within three different school types: secondary general school ($n = 40$), intermediate school ($n = 31$), and grammar school ($n = 41$).³ The study had two quasi-experimental factors: participant's nationality (German vs. Turkish) and classroom composition (Germans as majority vs. foreigners as majority). Moreover, the

²Two participants did not complete the valence ratings.

³Data were aggregated over these three groups because results revealed no differences between school types.

stereotype consistency of the cartoons was manipulated between participants, that is, about half of the participants worked on stereotype-consistent cartoons (Tim: typical German behaviors; Cem: typical Turkish behaviors) while the other participants worked on stereotype-inconsistent cartoons (Tim: typical Turkish behaviors; Cem: typical German behaviors). Stereotype valence was manipulated within participants.

Procedure

Students' questionnaire

Prior to the study, we obtained written parental consent for participation. Students completed the questionnaire in class. First, students provided demographic information including their gender, age, grade, and nationality. Then, they were presented with the 12 cartoons, one half of which depicted the German boy Tim and the other half the Turkish boy Cem engaging in three positive and three negative behaviors. Five response alternatives were provided under each scene, corresponding to the four levels of abstraction in Semin and Fiedler's (1988) linguistic category model (DAV, IAV, SV, ADJ) and with nouns as an additional fifth level of abstraction (see Carnaghi et al., 2008). Response alternatives were presented in standardized order starting with the lowest level of abstraction. An example for a stereotypically negative German behavior was (1) "Tim eats the crisps he has bought alone" (DAV), (2) "Tim does not share the crisps with the other children" (IAV), (3) "Tim does not like to share" (SV), (4) "Tim is selfish" (ADJ), and (5) "Tim is an egoist" (N). An example for a stereotypically positive Turkish behavior is provided in Figure 1. Counterbalanced, participants either started with six cartoons displaying Tim or with six cartoons displaying Cem.⁴ The cartoons were preceded by the following instructions: "Tim [Cem] is a twelve year old German [Turkish] boy. He attends the XXX school [name of the school] in Mannheim. In the following pictures Tim [Cem] is depicted in a few situations. Please mark with a cross what you can see on the picture."

Teachers' questionnaire

As the hypothesized moderator classroom composition varies on an aggregate level (per class), we also assessed the perceived learning disadvantage and the interethnic and general conflict frequency on the class level via teachers' ratings. Specifically, the respective teachers of the 10 classes indicated the number of German and foreign students in their class (classroom composition) and answered the

⁴The factor was dropped from the analyses presented below because the order of presentation did not have an influence on the main results.

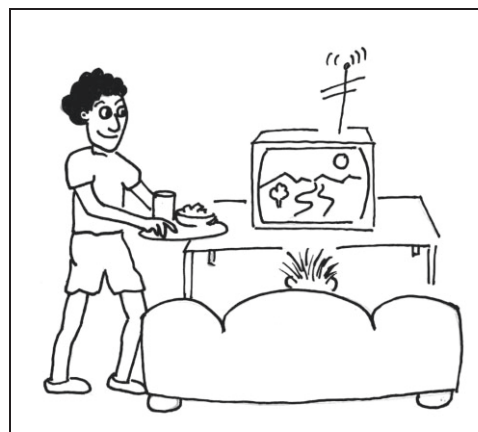


Figure 1 Example for a stereotypically positive Turkish behavior with five response alternatives differing in language abstraction [abstraction level and coding in brackets].

- Cem took a friend home and gets him crisps and a Coke. [DAV; 1]
- Cem provides his friend with food and drink. [IAV; 2]
- Cem enjoys asking friends over. [SV; 3]
- Cem is hospitable. [ADJ; 4]
- Cem is a good host. [N; 5]

following questions: "How often does it occur that conflicts in general arise?" (1 = *never*, 5 = *very often, general conflict frequency*)," How often does it occur that conflicts between German and foreign students arise?" (1 = *never*, 5 = *very often, interethnic conflict frequency*), and "How strong is your impression that students in this class think that a learning disadvantage could arise by the classroom composition? (1 = *not strong*, 5 = *very strong, perceived learning disadvantage*).

Results

Preliminary analyses

We first checked for clustering of the data on class and school level. Intraclass correlations revealed no clustering of the LIB and LEB ratings (all ICCs < .01; cf. Cohen, Cohen, West, & Aiken, 2003), wherefore we refrained from conducting multilevel analyses.

The quasi-experimental independent variable of classroom composition was built by coding the five classes with Germans in the majority (Germans: 53%, 57%, 74%, 79%, and 92%) with 1 and the five classes with foreigners in the majority (Germans: 5%, 14%, 16%, 37%, and 43%) as 2 (participants for analyses: Group 1: $n_{\text{German}} = 48$, $n_{\text{Turkish}} = 13$; Group 2: $n_{\text{German}} = 33$, $n_{\text{Turkish}} = 18$).

As expected, classroom composition implied perceived learning disadvantage and interethnic conflict. With Germans in the majority, four classes were characterized by no perceived learning disadvantage and no or seldom conflict

between Germans and foreigners. With foreigners in the majority, all five classes were characterized by some perceived learning disadvantage and four classes showed at least a medium level of interethnic conflict. Relations between classroom composition and general conflict frequency were not as clear. With Germans in the majority, two classes were characterized by seldom and three by medium to often general conflicts. With foreigners in the majority, one class was characterized by seldom, and four by medium to often general conflicts.

We were interested in comparing perceptions by German and Turkish students in these classroom environments. Therefore, we first treat perceived learning disadvantage, interethnic, and general conflict frequency as dichotomous factors (via median split) in order to obtain interpretable results. Afterwards, we present a preliminary correlational analysis at the aggregate level.

LEB

Students' responses to the cartoons were scored by assigning a value from 1 (DAV) to 5 (N) (cf. Carnaghi et al., 2008; Maass et al., 1989, 1995). To determine whether a LEB occurred, that is, whether in general typical behavior was described more abstractly than atypical behavior, we calculated the overall mean of language abstraction (stereotype consistent behavior: Cronbach's $\alpha = .48$; stereotype inconsistent behavior: Cronbach's $\alpha = .56$) and subjected the score to a 2 (stereotypicality: consistent vs. inconsistent behavior) \times 2 (participant's nationality: German vs. Turkish) analysis of variance (ANOVA). Results revealed only a significant main effect for stereotypicality, $F(1, 104) = 14.38, p < .001, \eta_p^2 = .12$ (all other $ps > .16$), indicating that, in line with our hypothesis, stereotype-consistent behavior ($M = 2.55, SD = .50$) was described more abstractly than stereotype-inconsistent behavior ($M = 2.20, SD = .50$). Because reliabilities of language abstraction by consistency were low, we additionally conducted a multivariate ANOVA (MANOVA) with stereotypicality and nationality as between factors and the abstraction ratings of all behaviors as dependent variables. The previous results were replicated: Again, only the main effect of stereotypicality was significant, $F(12, 97) = 1.84, p = .05, \eta_p^2 = .19$ (all other $ps > .21$). As expected, this main effect was unmoderated by classroom composition, perceived learning disadvantage, interethnic, and general conflict frequency (for all interactions $ps > .22$; in MANOVAs: $ps > .73$).

LIB

To determine whether in addition to the LEB a LIB occurred, we calculated the mean of the three positive in-group, three negative in-group, three positive out-group, and three negative out-group cartoons, resulting in four scores per partici-

pant. Then, following Maass et al. (1996), a compound LIB index was built: LIB-index = (in-group positive – in-group negative) + (out-group negative – out-group positive). In a first step, we conducted a one-sample t test with the LIB index against 0. As expected, the t test was not significant, $t(111) = .80, p = .43$, indicating that no general LIB occurred. There was also no significant difference in the mean LIB of German and Turkish students, $t(110) = 1.12, p = .27$. Because we expected the LIB only to occur under specific conditions, in a next step, we investigated the moderating effects of classroom composition, perceived learning disadvantage, interethnic, and general conflict frequency.

Classroom composition

We subjected the compound LIB index to a 2 (classroom composition: German majority vs. foreign majority) \times 2 (participant's nationality: German vs. Turkish) ANOVA. Consistent with the hypothesis, the results revealed a significant main effect for classroom composition, $F(1, 108) = 5.16, p = .03, \eta_p^2 = .05$, indicating a more pronounced LIB for classes with a foreign majority ($M = .47, SD = 1.62$) than for classes with a German majority ($M = -.17, SD = 1.57$). Further t tests revealed that only the mean for the foreign majority classes differed significantly from zero, $t(50) = 2.07, p = .04$, whereas the difference for the German majority classes was not significant, $t(60) = -.84, p = .40$, indicating a LIB effect only in the former but not in the latter group. All other main or interaction effects were not significant (all $ps > .25$).

Perceived learning disadvantage

The LIB index was also subjected to a 2 (perceived learning disadvantage: low vs. high) \times 2 (participant's nationality: German vs. Turkish) ANOVA. A significant main effect for perceived learning disadvantage occurred, $F(1, 108) = 6.35, p = .01, \eta_p^2 = .06$, indicating that students in classes that—according to the teachers' ratings—felt more disadvantaged by the classroom composition showed a stronger LIB ($M = .40, SD = 1.63$) than students in classes that felt less disadvantaged ($M = -.24, SD = 1.54$). Further t tests revealed that only the mean for the high perceived disadvantage group differed marginally significantly from zero, $t(1,62) = 1.95, p = .056$, whereas the difference for the low perceived disadvantage group was not significant, $t(1,48) = 1.08, p = .29$, indicating a LIB only in the former but not in the latter group. All other main or interaction effects were not significant (all $ps > .11$).

Interethnic and general conflict frequency

The LIB index was then subjected to a 2 (interethnic conflict frequency: low vs. high) \times 2 (participant's nationality:

German vs. Turkish) ANOVA. As expected, we found a significant main effect for interethnic conflict frequency, $F(1,108) = 6.76, p = .01, \eta_p^2 = .06$, indicating that students in classes with high interethnic conflict frequency ($M = .53, SD = 1.65$) showed a LIB, $t(1,47) = 2.24, p = .03$, whereas students in classes with low interethnic conflict frequency ($M = -.19, SD = 1.53$) did not, $t(1,63) = -.98, p = .33$. All other main or interaction effects were not significant (all $ps > .18$). When including general conflict frequency as a moderator instead of interethnic conflict frequency, no moderation emerged (for the main effect and interaction with participant's nationality $ps > .17$).

Aggregate analyses

We finally conducted a correlational analysis at the aggregate class level, which should be interpreted with caution due to the small sample size of classes ($n = 10$, weighted for the number of participants per class). In line with the descriptions for the classroom composition factor, the continuous percentage of foreign students was descriptively related to perceived learning disadvantage ($r = .57$) and to interethnic conflict frequency ($r = .41$). However, perceived learning disadvantage and interethnic conflicts appeared to be unrelated ($r = .06$). Interestingly, the categorical classroom composition factor (Germans majority vs. foreigners majority) showed a higher relation to perceived learning disadvantage ($r = .79$) and a lower relation to interethnic conflicts ($r = .31$) than the continuous percentage variable.

All four variables were related to the mean LIB ratings per class: continuous percentage of foreign students ($r = .46$), categorical classroom composition factor ($r = .52$), perceived learning disadvantage ($r = .33$), and interethnic conflict frequency ($r = .65$). In contrast, the LIB hardly showed a relation with general conflict frequency ($r = .11$).

Discussion

We presented the first field study to investigate the subtle mutual transmission of stereotypes via the LIB and the LEB (a) among younger participants (adolescents aged 13 to 20 years) and (b) in an interethnic (classroom) context. In our investigation of German and Turkish students in German high schools, we found that both groups share and express stereotypic views of Germans and Turks (via the LEB). Moreover, subtle linguistic in-group favoritism and out-group derogation (LIB) was present in classes with foreign students in the majority. These classes were characterized by greater perceived learning disadvantages and interethnic conflicts. Bidirectional mechanisms between subtle linguistic stereotype expression and confirmation, on the one hand, and tensions between ethnicities in the classroom, on the other hand, may foster and stiffen mutual prejudice and impair positive interethnic contact.

The study's findings

LIB and LEB

The results of the current field study with German and Turkish adolescents supported our hypotheses and provide evidence for the generalizability of previous research on language biases as a tool for communicating stereotypes (cf. Wigboldus & Douglas, 2007). In the present sample, a general LEB emerged: Regardless of students' group membership and valence of behavior, more abstract descriptions were chosen for stereotype-consistent than for stereotype-inconsistent behaviors. Because the stereotypic behaviors were chosen from pretests with German and Turkish adults, these results indicate that adolescents already share adults' interethnic stereotypes. This is even more striking as adults stated their opinions on explicit measures and adolescents expressed them on such a subtle measure as the LEB. In addition, for both adults and adolescents, stereotypes were shared by Germans and Turks. Thus, both groups seem to share and communicate stereotypes about each other from (at least) the age of 13 years on.

As expected, a LIB was only present under conditions of threat or conflict that give need for in-group protection. When foreigners were in the numerical majority, students described positive in-group and negative out-group behavior more abstractly than vice versa. This classroom composition effect was accompanied by higher perceived learning disadvantage and interethnic conflict frequency, but not by general conflict frequency. In line with our reasoning that classes with foreigners in the majority should face greatest barriers, we found a correlation of learning disadvantage with the percentage of foreigners on the aggregate level; however, this relation was stronger when contrasting "foreigners in the majority" classes with "Germans in the majority" classes. Notably, as with the LEB, we found no differences in the expression of the LIB due to adolescents' ethnicity. Thus, German and Turkish students in classes characterized by perceived learning disadvantages or interethnic conflict (according to teachers' ratings) appeared to hold mutual prejudices expressed via biased language use, favoring their respective in-group against the out-group.

Because abstract language use implies greater temporal and cross-situational stability and suggests future repetition of the actor's behavior (cf. Maass, 1999; Semin & Fiedler, 1988), the LEB and the LIB can lead to a vicious cycle of prejudice perpetuation: When a speaker describes negative out-group behavior (LIB) in abstract terms, this can have an influence on the formation of prejudice in the listener or reinforce the listener's prior expectations. In contrast, when positive out-group behavior is described on a more concrete level, this implies a single event, like an "exception from the rule" and thereby, positive—stereotype disconfirming—

behaviors have no enduring effect on preexisting negative conceptions of the out-group. The shared LEB may amplify this process if, for instance, Turks express negative stereotypes about their own group more abstractly; this confirms German students' negative expectations. The same is true for Germans' abstract description of negative stereotypical German behaviors. Thus, the LIB and the LEB induce inferences and expectancies in the recipients that may affect their language use in the future. Moreover, biased language use helps the speaker to maintain his or her beliefs even when confronted with contradicting evidence (Karpinski & von Hippel, 1996)—not to mention that the subtle expression of expectancies may lead to self-fulfilling prophecies (Rosenthal & Rubin, 1978). Thus, on an interindividual as well as on an intraindividual level, differential language use may bolster existing stereotypes and contribute to the development and maintenance of shared belief systems.

Our results provide first evidence that adolescents use the LEB and the LIB in a realistic setting of interethnic classrooms. It is important to identify these critical factors of stereotype development and expression in an early stage because established linguistic biases are difficult to alter. Especially, the subtle automatic way in which prejudice is conveyed and maintained via biased language use may impede its detection and inhibition. In particular, linguistic biases are more difficult to change the stronger the prior expectancies, the longer the biases have been prevalent, and the more the goal to inhibit biases is in conflict with other goals such as in-group protection (cf. Wigboldus & Douglas, 2007). Therefore, schools should be a main place to monitor language use from a very early age onwards—and particular attention should be paid the more conflictual the environment is.

The interethnic environment

In the present study, we identified three factors, which influenced the use of the LIB of German and Turkish adolescents: classroom composition, perceived learning disadvantage, and interethnic conflict frequency. Especially, classes with foreigners in the majority were characterized by a greater perceived learning disadvantage while interethnic conflict frequency appeared to more gradually increase with the percentage of foreigners. As learning disadvantage and interethnic conflict were unrelated on an aggregate level, they seem to constitute rather independent consequences of classroom composition. However, both were related to the aggregate LIB. Because it is difficult (e.g., Baur & Häussermann, 2009) and also not always desirable to change the classroom composition (cf. studies indicating the advantages of multicultural classrooms: Eisenberg et al., 2009; Hallinan & Williams, 1990; Lease & Blake, 2005), it seems important to reduce the perceived learning disadvantage and the interethnic conflict potential. Interethnic

conflict frequency actually showed the highest correlation with the LIB and might be a good candidate to address in the classroom setting. In this regard, teachers' attitudes seem to play an important role. Epstein (1985), for example, found that teachers' attitudes toward racial integration in schools had a substantial impact on how they ran their classrooms—with those who favor integration creating more opportunities for cross-racial contact.

The perceived learning disadvantage has to be addressed via different channels. Extra support (e.g., German language lessons) needs to be provided for ethnic minority students in a way so that the strict curricula can be fulfilled. Besides teachers, parents, and the media have a strong influence on the students. Since Germany participates in international studies of achievement such as the Programme of International Students Assessment, learning disadvantages of students with a migration background and of classes with a high proportion of immigrants have been the focus of discussion and affect parents' fear of learning disadvantages for their children. There is an increasing trend of ethnic segregation because concerned German parents send their children to schools with a higher proportion of German students even when they live in areas with a high proportion of immigrants. As a consequence, in some schools, the proportion of student's with a migration background is already 100% (cf. Baur & Häussermann, 2009). Thus, changes in the school system, political interventions, and mass media communication are needed to tackle the roots of (expected) learning disadvantages.

Limitations and future directions

We are aware that this study is only a first step toward investigating the early and mutual linguistic transmission of stereotypes in interethnic contexts. Notably, the number of schools and classes we investigated was limited. A broad scale study even assessing earlier classes and longitudinal data would be desirable. Relatedly, the number of Turkish participants in the present study was relatively small ($n = 31$). Therefore, our statements about the mutuality of stereotypes have to be approached with caution and call for future research with greater samples. Moreover, it would be desirable to assess the language use of teachers as well. Given that the adolescents and adults expressed the same stereotypes in our findings, it is not unlikely that teachers adhere to the same biases. Whether teachers' unbiased language use, however, counteract influences outside of school (from parents, media) could be of interest for interventions. In sum, future research with a greater number of participants, a fine-grained assessment of moderating variables (in the individual and aggregate level), and longitudinal studies may help to gain more insight into the causal mechanisms and to create specific interventions.

Conclusion

The current study advances the literature for at least three reasons: (1) It is the first to show LEB and LIB effects in an interethnic setting of adolescents; (2) it takes the perspective of the ethnic majority group (i.e., Germans) and the ethnic minority group (i.e., Turks) into account suggesting similar effects for both; and (3) it identifies specific factors (i.e., classroom composition and corresponding perceived learning disadvantage and interethnic conflict) that promote prejudice as expressed in the LIB. We call for attention to these potentially self-perpetuating mechanisms of mutual

stereotype expression and confirmation that pose crucial barriers to developing mutual openness in our multicultural environments.

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References

- Aberson, C. L., Shoemaker, C., & Tomolillo, C. (2004). Implicit bias and contact: The role of interethnic friendships. *The Journal of Social Psychology, 144*, 335–347. doi: 10.3200/SOCP.144.3.335-347.
- Aboud, F. E., Mendelson, M. J., & Purdy, K. T. (2003). Cross-race peer relations and friendship quality. *International Journal of Behavioral Development, 27*, 165–173. doi: 10.1080/01650250244000164.
- Allport, G. W. (1954). *The nature of prejudice*. Oxford, England: Addison-Wesley.
- Anolli, L., Zurloni, V., & Riva, G. (2006). Linguistic intergroup bias in political communication. *The Journal of General Psychology, 133*, 237–255. doi: 10.3200/GENP.133.3.237-255.
- Asbrock, F., Lemmer, G., Wagner, U., Becker, J., & Koller, J. (2009). Das Gefühl macht den Unterschied—Emotionen gegenüber “Ausländern” in Ost- und Westdeutschland [The feeling makes the difference—Emotions toward “foreigners” in East and West Germany]. In W. Heitmeyer (Ed.), *Deutsche Zustände, Folge 7* (pp. 152–167). Frankfurt am Main, Germany: Suhrkamp.
- Asbrock, F., Wagner, U., & Christ, O. (2006). Diskriminierung. Folgen der Feindseligkeit [Discrimination. Consequences of hostility]. In W. Heitmeyer (Ed.), *Deutsche Zustände, Folge 4* (pp. 156–175). Frankfurt am Main, Germany: Suhrkamp.
- Baur, C., & Häussermann, H. (2009). Ethnische Segregation in deutschen Schulen. [Ethnic segregation in Germany's schools]. *Leviathan, 37*, 353–366. doi: 10.1007/s11578-009-0053-2.
- Blalock, H. M., Jr. (1967). *Toward a theory of minority-group relations*. New York: Wiley.
- Blau, P. M. (1977). *Inequality and heterogeneity: A primitive theory of social structure*. New York: Free Press.
- Blau, P. M. (1994). *Structural contexts of opportunities*. Chicago: University of Chicago Press.
- Boehnke, K., Hagen, J., & Hefner, G. (1998). On the development of xenophobia in Germany: The adolescent years. *The Journal of Social Issues, 54*, 585–602. doi:10.1111/j.1540-4560.1998.tb01237.x.
- Carnaghi, A., Maass, A., Gresta, S., Bianchi, M., Cadinu, M., & Arcuri, L. (2008). Nomina sunt omina: On the inductive potential of nouns and adjectives in person perception. *Journal of Personality and Social Psychology, 94*, 839–859. doi:10.1037/0022-3514.94.5.839.
- Coenders, M. T. A., Gijsberts, M. I. L., Hagendoorn, A. J. M. W., & Scheepers, P. L. H. (2004). Introduction: Nationalism and exclusionist reactions. In M. I. L. Gijsberts, A. J. M. W. Hagendoorn, & P. L. H. Scheepers (Eds.), *Nationalism and exclusion of migrants: Cross-national comparisons* (pp. 1–25). Aldershot, England: Ashgate.
- Cohen, J., Cohen, P., West, S. G., & Aiken, L. S. (2003). *Applied multiple regression/correlation analysis for the behavioral sciences* (3rd ed.). Mahwah, NJ: Lawrence Erlbaum.
- Cook, S. W. (1979). Social science and school desegregation: Did we mislead the Supreme Court? *Personality and Social Psychology Bulletin, 5*, 420–437. doi: 10.1177/014616727900500404.
- De Groot, O., & Sager, L. (2010). Migranten in Deutschland: Soziale Unterschiede hemmen Integration [Immigrants in Germany: Social differences restrain integration]. *Wochenbericht des DIW Berlin, 49*, 1–10.
- Dixon, J. C. (2006). The ties that bind and those that don't: Toward reconciling group. *Social Forces, 84*, 2179–2204. doi: 10.1353/sof.2006.0085.
- Eisenberg, N., Sallquist, J., French, D. C., Purwono, U., Suryanti, T. A., & Pidada, S. (2009). The relations of majority-minority group status and having an other-religion friend to Indonesian youths' socioemotional functioning. *Developmental Psychology, 45*, 248–259. doi: 10.1037/a0014028.
- Epstein, J. (1985). After the bus arrives: Resegregation in desegregated schools. *The Journal of Social Issues, 41*, 23–44. doi: 10.1111/j.1540-4560.1985.tb01127.x.
- Feddes, A. R., Noack, P., & Rutland, A. (2009). Direct and extended friendship effects in minority and majority children's interethnic attitudes: A longitudinal study. *Child Development, 80*, 377–390. doi: 10.1111/j.1467-8624.2009.01266.x.
- Fiske, S. T., Cuddy, A. G. C., Glick, P., & Xu, J. (2002). A model of (often mixed) stereotype content: Competence and warmth respectively follow from perceived status and competition. *Journal of Personality and Social Psychology, 82*, 878–902. doi: 10.1037/0022-3514.82.6.878.
- Franco, F. M., & Maass, A. (1996). Implicit versus explicit strategies of out-group discrimination: The role of intentional control in biased language use and

- reward allocation. *Journal of Language and Social Psychology*, 15, 335–359. doi: 10.1177/0261927X960153007.
- Frindte, W., Funke, F., & Waldzus, S. (1996). Xenophobia and right-wing-extremism in German youth groups—Some evidence against unidimensional misinterpretations. *International Journal of Intercultural Relations*, 20, 463–478. doi: 10.1016/0147-1767(96)00029-6.
- van Geel, M., & Vedder, P. (2011). Multicultural attitudes among adolescents: The role of ethnic diversity in the classroom. *Group Processes & Intergroup Relations*, 14, 546–558. doi: 10.1177/1368430210379007.
- Geschke, D., Sassenberg, K., Ruhrmann, G., & Sommer, D. (2010). Effects of linguistic abstractness in the mass media: How newspaper articles shape readers' attitudes towards migrants. *Journal of Media Psychology*, 22, 99–104. doi: 10.1027/1864-1105/a000014.
- Giles, M. W., & Buckner, M. A. (1993). David Duke and black threat: An old hypothesis revisited. *The Journal of Politics*, 55, 702–713. doi: 10.2307/2131995.
- Glaser, J. M. (1994). Back to the black belt: Racial environment and white racial attitudes in the south. *The Journal of Politics*, 56, 21–41. doi: 10.2307/2132344.
- Goldsmith, P. A. (2004). Schools' role in shaping race relations. *Social Problems*, 51, 587–612. doi: 10.1525/sp.2004.51.4.587.
- Gorham, B. W. (2006). News media's relationship with stereotyping: The linguistic intergroup bias in response to crime news. *The Journal of Communication*, 56, 289–308. doi: 10.1111/j.1460-2466.2006.00020.x.
- Hallinan, M. T., & Teixeira, R. A. (1987). Opportunities and constraints: Black-White differences in the formation of interracial friendships. *Child Development*, 58, 1358–1371. doi: 10.2307/1130627.
- Hallinan, M. T., & Williams, R. A. (1989). Interracial friendship choices in secondary schools. *American Sociological Review*, 54, 67–78. doi: 10.2307/2095662.
- Hallinan, M. T., & Williams, R. A. (1990). Students' characteristics and the peer-influence process. *Sociology of Education*, 63, 122–132. doi: 10.2307/2112858.
- Hewstone, M., & Brown, R. (1986). Contact is not enough: An intergroup perspective on the "contact hypothesis". In M. Hewstone & R. J. Brown (Eds.), *Contact and conflict in intergroup encounters* (pp. 1–44). Oxford: Basil Blackwell.
- von Hippel, W., Sekaquaptewa, D., & Vargas, P. (1997). The linguistic intergroup bias as an implicit indicator of prejudice. *Journal of Experimental Social Psychology*, 33, 490–509. doi: 10.1006/jesp.1997.1332.
- Jugert, P., Noack, P., & Rutland, A. (2011). Friendship preferences among German and Turkish preadolescents. *Child Development*, 82, 812–829. doi: 10.1111/j.1467-8624.2010.01528.x.
- Kahraman, B., & Knoblich, G. (2000). "Stechen statt sprechen" Valenz und Aktivierbarkeit von Stereotypen über Türken ["Stereotypes about Turks": Valence and activation]. *Zeitschrift für Sozialpsychologie*, 31, 31–43. doi: 10.1024//0044-3514.31.1.31.
- Kao, G., & Joyner, K. (2004). Do race and ethnicity matter among friends? Activities among interracial, interethnic, and intraethnic adolescent friends. *The Sociological Quarterly*, 45, 557–573. doi: 10.1111/j.1533-8525.2004.tb02303.x.
- Karpinski, A., & von Hippel, W. (1996). The role of the linguistic intergroup bias in expectancy maintenance. *Social Cognition*, 14, 141–163. doi: 10.1521/soco.1996.14.2.141.
- Khmelkov, V. T., & Hallinan, M. T. (1999). Organizational effects on race relations in schools. *The Journal of Social Issues*, 55, 627–645. doi: 10.1111/0022-4537.00139.
- Krohne, J. A., Meier, U., & Tillmann, K. J. (2004). Sitzenbleiben, geschlecht und migration [Repeating a year in school, gender and migration]. *Zeitschrift für Pädagogik*, 50, 373–391.
- Lease, A. M., & Blake, J. J. (2005). A comparison of majority-race children with and without a minority-race friend. *Social Development (Oxford, England)*, 14, 20–41. doi: 10.1111/j.1467-9507.2005.00289.x.
- Maass, A. (1999). Linguistic intergroup bias: Stereotype perpetuation through language. In M. Zanna (Ed.), *Advances in experimental social psychology* (Vol. 31, pp. 79–121). San Diego, CA: Academic Press.
- Maass, A., & Arcuri, L. (1992). The role of language in the persistence of stereotypes. In G. R. Semin & K. Fiedler (Eds.), *Language, interaction, and social cognition* (pp. 129–143). London: Sage.
- Maass, A., Ceccarelli, R., & Rudin, S. (1996). Linguistic intergroup bias: Evidence for in-group protective motivation. *Journal of Personality and Social Psychology*, 71, 512–526. doi: 10.1037/0022-3514.71.3.512.
- Maass, A., Milesi, D., Zabbini, S., & Stahlberg, D. (1995). Linguistic intergroup bias: Differential expectancies or in-group protection. *Journal of Personality and Social Psychology*, 68, 116–126. doi: 10.1037/0022-3514.68.1.116.
- Maass, A., Salvi, D., Arcuri, L., & Semin, G. (1989). Language use in intergroup contexts: The linguistic intergroup bias. *Journal of Personality and Social Psychology*, 57, 981–993. doi: 10.1037/0022-3514.57.6.981.
- Moscattelli, S., Albarello, F., & Rubini, M. (2008). Linguistic discrimination in minimal groups: The impact of status differentials. *Journal of Language and Social Psychology*, 27, 140–154. doi: 10.1177/0261927X07313652.
- Nesdale, D. (1999). Social identity and ethnic prejudice in children. In P. Martin & W. Noble (Eds.), *Psychology and society* (pp. 92–110). Brisbane: Australian Academic Press.
- Pettigrew, T. F. (1998). Intergroup contact theory. *Annual Review of Psychology*, 49, 65–85. doi: 10.1146/annurev.psych.49.1.65.
- Quillian, L. (1996). Group threat and regional change in attitudes toward African-Americans. *American Journal of Sociology*, 102, 816–860. doi: 10.1086/230998.
- Quillian, L., & Campbell, M. E. (2003). Beyond black and white: The present and future of multiracial friendship segregation. *American Sociological Review*, 68, 540–566. doi: 10.2307/1519738.
- Rosenthal, R., & Rubin, D. (1978). Interpersonal expectancy effects: The first 345 studies. *The Behavioral and Brain Sciences*, 3, 377–415.

- Scheepers, P., Gijssberts, M., & Coenders, M. (2002). Ethnic exclusionism in European countries. Public opposition to civil rights for legal migrants as a response to perceived ethnic threat. *European Sociological Review*, 18, 17–34. doi: 10.1093/esr/18.1.17.
- Schnake, S. B., & Ruscher, J. B. (1998). Modern racism as a predictor of the linguistic intergroup bias. *Journal of Language and Social Psychology*, 17, 484–491. doi: 10.1177/0261927X980174004.
- Schneider, B. H., Dixon, K., & Udvari, S. (2007). Closeness and competition in the inter-ethnic and co-ethnic friendship of early adolescents in Toronto and Montreal. *The Journal of Early Adolescence*, 27, 115–138. doi: 10.1177/0272431606294822.
- Schofield, J. W., & Eurich-Fulcer, R. (2004). When and how school desegregation improves intergroup relations. In M. B. Brewer & M. Hewstone (Eds.), *Applied social psychology* (pp. 186–205). Malden, MA: Blackwell Publishing.
- Semin, G. R., & Fiedler, K. (1988). The cognitive functions of linguistic categories in describing persons: Social cognition and language. *Journal of Personality and Social Psychology*, 54, 558–568. doi:10.1037/0022-3514.54.4.558.
- Semin, G. R., & Fiedler, K. (1991). The linguistic category model, its bases, applications, and range. In W. Stroebe & M. Hewstone (Eds.), *European review of social psychology* (Vol. 2, pp. 1–30). Chichester, England: Wiley.
- Stearns, E. (2004). Interracial friendliness and the social organization of schools. *Youth & Society*, 35, 395–419. doi: 10.1177/0044118X03261617.
- Stephan, W. G. (1987). The contact hypothesis in intergroup relations. In C. Hendrick (Ed.), *Group processes and intergroup relations: Review of personality and social psychology* (Vol. 9, pp. 13–40). Newbury Park, CA: Sage.
- Tajfel, H., & Turner, J. C. (1979). An integrative theory of intergroup conflict. In W. G. Austin & S. Worchel (Eds.), *The social psychology of intergroup relations* (pp. 33–47). Monterey, CA: Brooks/Cole.
- Taylor, M. (1998). How white attitudes vary with the racial composition of local populations: Number count. *American Sociological Review*, 63, 512–535. doi: 10.2307/2657265.
- Titzmann, P. F., & Silbereisen, R. K. (2009). Friendship homophily among ethnic German immigrants: A longitudinal comparison between recent and more experienced immigrant adolescents. *Journal of Family Psychology*, 23, 301–310. doi: 10.1037/a0015493.
- Wade, J. C., & Okesola, O. (2002). Racial peer group selection in African American high school students. *Journal of Multicultural Counseling and Development*, 30, 96–109. doi: 10.1002/j.2161-1912.2002.tb00482.x.
- Wagner, U., van Dick, R., Pettigrew, T. F., & Christ, O. (2003). Ethnic prejudice in East and West Germany: The explanatory power of intergroup contact. *Group Processes and Intergroup Relations*, 6, 22–36. doi: 10.1177/1368430203006001010.
- Werkman, W. M., Wigboldus, D. H. J., & Semin, G. R. (1999). Children's communication of the linguistic intergroup bias and its impact upon cognitive inferences. *European Journal of Social Psychology*, 29, 95–104. doi: 10.1002/(SICI)1099-0992(199902)29:1<95:AID-EJSP898>3.0.CO;2-Z.
- Wigboldus, D. H. J., & Douglas, K. (2007). Language, stereotypes, and intergroup relations. In K. Fiedler (Ed.), *Social communication* (pp. 79–106). New York: Psychology Press.
- Wigboldus, D. H. J., Semin, G. R., & Spears, R. (2000). How do we communicate stereotypes? Linguistic bases and inferential consequences. *Journal of Personality and Social Psychology*, 78, 5–18. doi: 10.1037/0022-3514.78.1.5.
- Woellert, F., Kröhnert, S., Sippel, L., & Klingholz, R. (2009). *Ungenutzte Potenziale. Zur Lage der Integration in Deutschland* [Unexploited potential. On the situation of integration in Germany]. Berlin, Germany: Berlin-Institut für Bevölkerung und Entwicklung.