Social Participation of German Students with and without a Migration Background

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Abstract
Social participation is an important factor for students’ socio-emotional/academic development. The literature on the topic discusses four domains in this regard: friendships, interactions, social acceptance, and self-perception of social inclusion. It shows that marginalized groups (e.g., students with behavioral problems/learning deficiencies/physical disabilities) are experience difficulties in those domains. Little, however, is known about the effect of a migration background (one of the most commonly marginalized groups) in this context. Therefore, self-ratings and peer ratings of 818 fourth graders (148 with a migration background, defined by their first learned language not being German) were assessed. The results of the ANOVA indicate that students with a migration background show a decreased level of friendships, interactions, and social acceptance. Gender effects on self-perceived social inclusion were also found. This suggests that social participation is a rather complex concept, which is also impaired for marginalized groups due to social factors like a migration background.

Keywords Migration background · Friendship · Social interactions · Peer acceptance · Self-perception of social inclusion

Highlights
- Friendships, interactions and social acceptance are negatively affected by a migration background.
- Self-perception of social inclusion is not affected by a migration background.
- Self-perception of social inclusion is negatively affected by Gender (boys).
- Social participation is impaired for students with a migration background.

Introduction
The intensifying globalization of modern societies observed in recent decades has resulting in an unprecedented diversification of multicultural societies, as more and more people emigrate and immigrate from and to different countries. As a logical consequence, the number of people with a migration background in Europe is steadily increasing. A notable highpoint of the public debate on the issue in Germany came in 2015 in connection with the arrival of a large amount of refugees (asylum immigration) (Bundesamt für Migration und Flüchtlinge (BAMF), 2016). These numbers then declined in 2016/2017, as fewer people seeking protection arrived into the country. Nevertheless, the number of new arrivals in these years was still higher than before 2015 (Bundesministerium des Innern, für Bau und Heimat, 2019). According to Destatis – Statistisches Bundesamt, the Federal Statistical Office of Germany, (2018a), the number of people with a migration background in Germany increased by 4.4% in 2017 compared to the previous year and by 2.5% in 2018 (Destatis – Statistisches Bundesamt, 2019). Currently, around 21.2 million people (approx. 26%) with a migration background live in Germany (Destatis – Statistisches Bundesamt, 2020a).

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proportion is slightly higher than the percentage of people with a migration background in Austria, for comparison. In 2019, 23.7% of the Austrian population had a migration background. The rate has been increasing since 2009 (17.7%) (Statistik Austria, 2020). In Switzerland, however, the proportion of the population with a migration background is higher (compared to Germany), with 37.7% of the Swiss population aged 15 and older having a migration background (Bundesamt für Statistik, 2019). In neighboring France, the proportion of people with an immigrant background according to the 2017 statistics was around 20% (Bundeszentrale für politische Bildung, 2017).

Placing itself deeply in the context of migration and inclusion (and the associated social participation), this paper is based on the idea of the ratification of the UNESCO Salamanca Statement (1994) in Germany. The goal pursued with this Statement is to accommodate and provide for the needs of all children in schools, with the individual conditions of students (e.g., physical, social, intellectual, emotional, etc.) not playing any role. In this context, the Statement also explicitly addresses children from cultural, linguistic, and ethnic minorities in addition to children from disadvantaged or marginalized groups (UNESCO, 1994). Inclusive policies shall thus focus on maximizing participation and academic and socio-emotional development of all students.

Nevertheless, research on social participation has in recent years often focused on students with special educational needs (SEN) and less often on migration background as a factor (e.g., Bossaert et al., 2013; Koster et al., 2009; Mamas et al., 2020; Schwab, 2015; 2018), although the above-mentioned UNESCO Salamanca Statement (1994) explicitly mentions children from cultural, linguistic, and ethnic minorities. Therefore, the basic idea of this paper is (a) to focus explicitly on the social participation of students with a migration background and (b) to see to what extent self- and peer-ratings correlate with each other in the above-mentioned context. This is intended to close existing research gaps in the literature, especially in Germany.

Theoretical Background

Migration Background

The operationalization of migration background can be done using different approaches and also different “degrees” of migration background (e.g., first generation, second generation, etc.) (see e.g., Frank et al., 2018). For example, Kemper (2017) has shown, for example, that different operationalization methods are used for different school statistics in Germany. These different operationalizations also depend on the federal states within Germany and can differ between them. In order to be able to classify study results, it is therefore important to clearly explain which operationalization method a paper is based on and why.

According to the German Federal Statistical Office, a person is deemed to have a migration background if he or she or at least one parent was not born with a German citizenship (Destatis – Statistisches Bundesamt, 2021a). However, an additional distinction is made here between migration background in the narrower sense (information from parents living in the same household is used) and in the broader sense (all information about parents is used) (Destatis – Statistisches Bundesamt, 2021b). According to these definitions, around 21.2 million people with a migration background in the broader sense lived in Germany in 2019 (Destatis – Statistisches Bundesamt, 2020a). However, this operationalization method raises the problem that the treatment of a child with one native and one foreign-born parent is reduced to the characteristics of the foreign-born parent, and the child then also acquires the status of a migration background. The literature criticizes the existing official definition which focuses on “inherited citizenship” and questions why the status of the native-born parent is not given greater priority (Will, 2019). Moreover, and next to the problems raised in the context of research (limited comparability of study results due to different operationalizations of a migration background), the literature also reports that the number of people with a migration background can be underestimated if operationalization is based on nationality (see Sarcelli, 2015).

As mentioned above, different approaches to defining a migration background are proposed in the literature (see also e.g., Kemper, 2010). Ultimately, however, there is no uniform definition of a migration background in the literature and research. One of the approaches suggested takes linguistic aspects, such as the first language learned, as a possible means for characterization (see e.g., Kemper, 2010).

In this study, the characterization as a student with a migration background was based on linguistic aspects (the first learned language). This was done for two main reasons. In addition to avoiding the stigmatization of a child with a migration background due to only one parent having been born abroad (Will, 2019), the construct of social participation is primarily based on interaction and thus strongly reliant on communication. Furthermore, it should be taken into consideration that the first (learned) language (of a child) is probably that of the parent who is/was the primary caregiver – and therefore also plays a major role in terms of socialization. Considering a linguistic aspect (in the sense of communication) to determine the migration background in the context of social participation as a whole therefore appeared to be particularly expedient.
Social Participation

The literature does not offer a precise definition of social participation. However, Koster et al. (2009) examined the concepts of social participation, social integration, and social inclusion more closely in a literature review (62 articles). In their theoretical investigation, they came to the conclusion that these concepts were largely described inaccurately in the literature, hardly any clear definitions could be found, and, in many articles, only implicit descriptions (e.g., through the measuring instruments used) were given. They found that the constructs are rather used synonymously. Koster et al. (2009) argue that the concept of social participation is the most suitable one (see also Bossaert et al., 2013) and Schwab (2016) or Schwab and Theunissen (2018) point(s) out that social participation goes hand in hand with active involvement as well as a concrete right of co-determination. In this context, Koster et al. (2009) report four key dimensions in their heuristic deduction from the considered papers on social participation (based on the systematic review): “friendships and relationships,” “interactions and contacts,” “peer acceptance,” and “self-perception of social inclusion” (see also Bossaert et al., 2013).

Many quantitative studies operationalize friendships and relationships using sociometric nominations, which means that friendships are usually determined by nominating three (Mamas, 2012) to five best friends (Avramidis et al., 2017; Pijl et al., 2011). Here, positive mutual nominations by two students (reciprocal friends) are seen as particularly emotionally supportive and as a greater resource compared to non-reciprocal friendships (Vaquera & Kao, 2008). However, it must be taken into account here that studies mostly examine mutual friendship (nomination) within a specific group (e.g., within one classroom). Mutual friendships outside this specific group (e.g., friendships with students of another class) can only be identified to a limited extent. Therefore, this must always be considered in this context.

Interaction and contacts refer to verbal and non-verbal communication (Carter et al., 2007). They are determined by means of (working) time spent together or, for example, social isolation (see Bossaert et al., 2013).

Peer acceptance, on the other hand, is commonly defined as social rejection, social preference, and social support, but also bullying (Bossaert et al. 2013) and is recorded via sociometric nomination/ratings (Avramidis et al., 2017). For example, each student in a class could be given a class list on which he or she is asked to indicate how much he or she would prefer (social preference) or reject (social rejection) each classmate sitting next to him or her (see e.g., Huber, 2011; Krawinkel et al., 2018).

Self-perception of social inclusion, however, is not only concerned with the self-concept of the student but also, for example, with emotions like loneliness (Bossaert et al., 2013). This last dimension of social participation is therefore mainly characterized by the self-perception of a student, whereas the first three dimensions are based on the peers’ view of a specific student.

Social Participation of Students with a Migration Background

In order to provide an overview of the current literature, the four different dimensions of social participation addressed below, with special consideration given to students with a migration background:

Graham et al. (2009) report that students prefer peers of the same ethnic origin rather than students of other ethnic origins as friends. In this context, an explanation can be seen through the homophily effect (preference for individuals with similar or comparable characteristics; see e.g., Graham et al., 2009; Leszczensky & Pink, 2015; Hoffmann et al., 2021). However, the current literature also shows that preferences in the context of the homophily effect clearly go beyond ethnicity, as Campigotto et al. (2021) describe in their study. According to the authors’ research, gender, among other things, but also cultural characteristics seem to be important here. For students born abroad, country of birth, generational status and religion seem to be important.

In addition, Darmody et al. (2016) show that the number of friendships varies among different ethnicities. They found that individuals of Eastern European descent or Asian children are more likely to have fewer friends compared to other nationalities. However, in this context, the authors also report on different participation among children with different migration backgrounds, taking into account different contexts (e.g., sport/fitness club, cultural activities, etc.). In their considerations, they discuss, for example, that sports participation could be due to different sports traditions in the individual countries or a lack of knowledge about local facilities. Thus, the authors emphasize the importance of the specific context here.

Beyond that, Kokkonen et al. (2015) show that individuals are more likely to be friends with immigrants if they work at diverse workplaces (compared to homogenous workplaces). Similar results may be expected for students in the classroom context. Also, the time spent in an immigrant country seems to play a crucial role for inclusion. Gabrielli et al. (2013) showed that students with a migration background gained more and more native friends over time.

Furthermore, recent studies, such as those by Wahl et al. (accepted), report that students with a migration background receive slightly fewer positive sociometric nominations, whereas the negative nominations are significantly higher compared to their peers without a migration background. Comparable results can also be found in a study by Krawinkel et al. (2018). In this study, migrant children had a
lower electoral status (social preference) and a higher rejection status than non-immigrant children. In addition, previous studies have shown that children with a migration background are more often affected by negative nominations than by positive ones (Kronig et al., 2000). Plenty and Jonsson (2017) investigated the isolation of students more precisely and show that especially students of the first migration generation are affected by isolation, compared to students of the second one (the educational level of the parents did not have any effect). Furthermore, in contrast to the number of students with a migration background, the general class size does have an influence on rejection; the probability of rejection is reduced with increasing class size.

With regard to social acceptance, elementary school students with a migration background have a lower social acceptance and a higher social rejection (Krull et al., 2018). These findings are also consistent with the study by Wahl et al. (accepted). However, the acceptance of students also seems to depend on class composition. For instance, Asendorpf and Motti-Stefanidi (2017) pointed out in a longitudinal study that students with a migration background receive fewer positive and more negative nominations than their classmates without a migration background. They also observed that this was not the case in classes with a proportion of pupils with a migration background of more than two-thirds. In those classes, students with a migration background found more acceptance among their peers at the beginning of the study. Over the three-years course of their study, the initially stronger rejection directed at students with a migrant background lessened – regardless of the proportion of migration-background students within the class. Even in classes with a lower proportion, students with a migration background received increasingly positive nominations (Asendorpf & Motti-Stefanidi, 2017). So, a high number of children with a migration background in class, but also being female, having higher cognitive abilities, coming from a household with a higher income and having parents with a higher educational status than their classmates seems to reduce rejection (Plenty & Jonsson, 2017). Furthermore, it shows that the risk for students with a migration background of the first generation is higher than for students of the second generation – regardless of their origin (Plenty & Jonsson, 2017). More precisely, Plenty and Jonsson (2017) reported that second-generation students are less affected by victimization. The research basis for victimization of students with a migration background is, however, mixed: some studies report that children with a migration background are bullied more often than their peers (Hjern et al., 2013; Sulkowski et al., 2014). Whereas, for example, Fandrem, et al. (2009) or Hamel et al. (2021) did not find any differences in the level of victimization. However, the exact migration background also seems to be important in this context. Stefanek et al. (2012) report that students of a Turkish origin are less affected by victimization compared to (Austrian) native students, but also compared to students of other origins (e.g., the former Yugoslavia). Likewise, Strohmeier et al. (2008) report that minorities are less often identified as victims than majority students.

To the best of the authors’ knowledge, there is currently little research on the self-perceived social participation rate, especially of students with a migration background. Rich Madsen et al. (2016), however, outline that immigrant adolescents are more likely to feel negative emotions like loneliness than adolescents without such a background; the same could not be shown for the descendants of immigrants.

Finally, and in addition to the findings already described, there are also indications in the literature of gender-related differences in the areas of social participation. For example, Wittek et al. (2020) report that, in addition to ethnic origin, gender also seems to have an influence on friendships. This is corroborated by the study by Huber et al. (2018) which showed that boys rated children without a migration background more positively in their comparison of social acceptance of children with and without a migration background. In turn, girls rated both groups similarly. Similar results can also be found in longitudinal studies (e.g., Von Marées & Petermann, 2010).

In summary, the presented findings show that students with a migration background seem to be at risk of being disadvantaged in their social participation. Also taking into account later effects, this seems to be a cause for concern. Resch et al. (2021), for example, examine social inclusion in the context of academic stays abroad during higher education studies. On the one hand, they describe that students with a migration background report a lower level of social inclusion, but on the other hand also that students (also with a migration background) who report a high level of social inclusion (among others with their peers) at the beginning of their studies are more likely to study abroad later. This also shows the possibility of impairments in later (working) life that are related to a lower level of social inclusion.

However, the perspectives of the available literature focus primarily on selected sub-dimensions of social participation. The simultaneous consideration of all four target dimensions of social participation of students with a migration background (based on one sample) is not yet available at the present time to the best of the authors’ knowledge. It is also unclear whether and to what extent the available results of the literature can be transferred to Germany.

**Research Questions**

In order to investigate the social participation of students with and without a migration background, all domains of social participation (“friendships and relationships,”
“interactions and contacts,” “peer acceptance,” and “self-perception of social inclusion”) according to Koster et al. (2009) and Bossaert et al. (2013) are to be assessed using the methods of self-ratings, peer ratings, and combined ratings of students and their peers. Based on current literature, the aim of the present study is to apply a broad approach to the investigation of social participation of students with a migration background, especially in Germany. The study then pursues the following research question based on the current state of research:

How do students with a migration background differ in their social participation compared to students without a migration background?

In the context of the aforementioned research question and on the basis of the literature addressed in the theoretical background, we pose the following explicit hypotheses:

a. Students with a migration background have fewer reciprocal friends than their peers without a migration background.

b. Students with a migration background have fewer interactions than their peers without a migration background.

c. Students with a migration background are less socially accepted by their peers than students without a migration background.

d. Students with a migration background feel less socially included than their peers without a migration background.

Method

Design and Implementation

The current data was collected in the course of the study “Social Inclusion of Students in Inclusive Classes” (SISI) (DFG Funding number: 393078153). In particular, the data was collected at the beginning of the 2018/2019 school year. A one-hour paper-pencil questionnaire was used to collect the data from all students. The data was only included if written consent was provided by the student’s parents (or the student’s legal guardian). The survey was conducted according to a standard protocol by qualified project members. Students with disabilities (e.g., reading difficulties) were supported by project members. The aim was to ensure that all students understood the questions and items correctly.

Sample

In total, 818 students (mean age of about 10; 396 girls; 5 missing values in gender, 28 missing values in migration background) from 48 4th grade classes in North-Rhine Westphalia (Federal state in which (a) most people with a migrant background live and (b) the migration rate is among the highest in Germany (Destatis – Statistisches Bundesamt, 2020b)) took part in the survey. The participants in the sample are from both rural and urban areas. 148 students had a migration background (74 girls, 2 missing values in gender). The most frequent first languages in the sample were Turkish, Russian, Arabic, Albanian, Polish and Greek. This distribution of data therefore largely coincides with the data from the Federal Statistical Office (Destatis – Statistisches Bundesamt, 2018c), according to which Turkish (17%) was the most commonly spoken language in households with a migration background, followed by Russian (16%), Polish (9%) and Arabic (7%). The most common places of birth in the sample were Syria, Greece, Iraq, Afghanistan, and Italy.

Instruments

Migration background

Based on the discussion of the problem of defining a migration background described in the section on the theoretical background, a migration background is operationalized in this study on the basis of the language first learnt by a student. Students with German as their first language were classified as students without a migration background. Students with a language other than German as their first language were classified as students with a migration background.

Friendships

The number of friendships between students and their classmates were assessed by reciprocal friendship nominations of the students within a class. In the sense of sociometric nomination (see e.g., Avramidis et al., 2017), the students were asked to name their five best friends among their classmates (item: “Name your 5 best friends in class”). Nominations of persons who were not classmates were excluded from the analysis, as well as nominations that exceeded the maximum number of five classmates. The number of best friends ranged from zero to five.

Interactions

The students’ social interaction rating was determined using the mean values of the sociometric ratings. Similar to the approach of Roberts and Smith (1999), students were presented with a complete list of their classmates and were asked to rate how often they take their break with each classmate (1 = “never” to 5 = “every time”). The mean rating from all respondents regarding one target student was then calculated to determine his or her level of social
interaction in the class. These values ranged between one and five.

Peer Acceptance

The values for social acceptance of students among their classmates (peer acceptance) were also derived from the friendship nominations as described. The peer acceptance value was calculated by applying the following formula proposed by Moreno (1974 see also Dollase, 1976; Petillon, 1978) as used in other recent studies (e.g., Huber, 2011; Schwab, 2015):

\[
Peer\ \text{acceptance} = 1 + \frac{\text{mean number of elections of the peers in the class}}{\text{maximum number of elections}}.
\]

As was done in similar studies (e.g., Huber, 2011), the values calculated in this way were subjected to a z-transformation for each school class. The expected value thus corresponds to 0, the variances to 1. High (positive) values correspond to a good social acceptance, low (negative) values correspond to a bad social acceptance.

Self-perception of social inclusion

A subscale of the Finnish school health questionnaire, based on the international Health Behavior in School-aged Children (HBSC) study (Kämppi et al., 2012) was created to measure the self-perception of students’ social inclusion. The translation into English was done by Finnish academics, with the translated scale then being checked by a native English speaker. The translation into German was also checked by a suitable native speaker. Finally, a person from the team who speaks Finnish and German was consulted. The subscale includes the following items: “I like being in school,” “I feel comfortable with each other,” and “Other students accept me as I am.” The students were asked to rate each item on a scale from one to five (1 = “I completely disagree” to 5 = “completely agree”). The corresponding mean from all the items was used for the analysis.

Statistical Analysis

A two-factor ANOVA (factor 1: migration vs. no migration background; factor 2: gender) was conducted to investigate the differences in the social participation of students. The different dimensions of social participation (friendships, interactions, peer acceptance and self-perception of social inclusion) were each used as a dependent variable. Migration background and gender were used as independent variables.

Results

Friendships

The relative distribution of reciprocal friends was calculated (see Table 1). The results show that students with a migration background are more likely to have fewer or no friends than students without a migration background. For example, students with a migration background tend to have few to no reciprocal friends (girls with a migration background and no reciprocal friends: 16.2%; girls without a migration background and no reciprocal friends: 4.6%) and are unlikely to have many reciprocal friends (girls with a migration background and 5 reciprocal friends: 6.8%; girls without a migration background and 5 reciprocal friends: 14.2%). Similar results can also be observed for boys (see Table 1).

The results of the ANOVA yielded significant differences for students with a migration background \( (F[1, 780] = 13.849; p = 0.000; \eta^2 = 0.02) \) in contrast to those without a migration background. Students with a migration background have fewer reciprocal friends \( (M = 2.18, SD = 1.48) \) compared to students without a migration background \( (M = 2.68, SD = 1.44) \). Concerning gender, no significant differences were found \( (F[1, 780] = 0.347; \text{n.s.}) \). Interaction effects (migration background*gender) were not detectable \( (F[1, 780] = 0.876; \text{n.s.}) \).

Interactions

Significant differences in interactions were found for students with a migration background \( (F[1, 779] = 9.238; p = 0.002; \eta^2 = 0.01) \) in contrast to those without a migration background. Students with a migration background show fewer interactions \( (M = 2.10, SD = 0.56) \) compared to students without a migration background \( (M = 2.25, SD = 0.52) \). We found no significant differences for gender \( (F[1, 779] = 1.283; \text{n.s.}) \). Interaction effects (migration background*gender) were not detectable \( (F[1, 779] = 0.666; \text{n.s.}) \).

Peer Acceptance

The examination of the peer acceptance of students with a migration background yielded significant differences \( (F[1, 780] = 8.240; p = 0.004; \eta^2 = 0.01) \) in contrast to those without a migration background. Students with a migration background show less peer acceptance \( (M = −0.18, SD = 0.98) \) compared to students without a migration background \( (M = 0.07, SD = 0.96) \). No such significant differences were found for gender \( (F[1, 780] = 0.000; \text{n.s.}) \). Interaction effects (migration background*gender) were not detectable \( (F[1, 780] = 0.060; \text{n.s.}) \).
Self-perception of Social Inclusion

Students with a migration background showed no significant differences in their self-perception of social inclusion ($F[1, 781] = 0.249; \text{n.s.}$) compared to those without an migration background. Concerning gender, significant differences were found ($F[1, 781] = 6.611; p = 0.010; \eta^2 = 0.01$). Boys show a lower level of self-perception of social inclusion ($M = 3.74$, $SD = 0.87$) compared to girls ($M = 3.95$, $SD = 0.73$). Interaction effects (migration background*gender) were not detectable ($F[1, 781] = 0.140; \text{n.s.}$).

Discussion

This study aimed to gain insights into the social participation of students with and without a migration background. For this purpose, social participation was considered in terms of friendships, interactions, social acceptance, and perception of social inclusion among fourth graders. The migration background was operationalized via the student’s first language.

Prima facie, reviewing the average numbers of reciprocal friends revealed significant overall differences between students with and without a migration background. Students with a migration background had fewer friends than their peers without a migration background. Gender or interaction effects (migration background*gender) did not significantly affect the results. The main effect (migration background) is thus in line with previous studies (e.g., Krull et al., 2018; Wahl et al., accepted). On the other hand, gender effects identified in Krull’s (2018) study, for example, could not be found in the comparisons of means. A look at the descriptive data shows, for example, that girls with a migration background (16.2%) were almost four times more likely to have no reciprocal friends among their classmates than girls without a migration background (4.6%). Similarly, the likelihood to have five reciprocal friends was almost twice as high for girls without a migration background (14.2%) compared to girls with a migration background (6.8%). Comparable results could also be observed in boys, though the differences between students with and without a migration background are less pronounced. Future research should nevertheless not ignore other student characteristics apart from their gender in its investigations, in order to be able to draw more differentiated conclusions in the context of friendships. In this context, one possible explanation might be the homophily effect (e.g., see Graham et al., 2009; Leszczensky & Pink, 2015). This effect suggests that students seem to prefer friendships with individuals with the same ethnic background. Being part of a minority group often means having fewer peers with same ethnicity available to make friends with.

Focusing on language skills (the first language students learned at home was used in this survey to classify a status of migration background), another possible explanation could be that students with a migration background may be affected by communication barriers due to possible deficits in German language skills.

Regarding interactions, the results indicate that students with a migration background differ from students without such a background significantly. Gender and interaction effects (migration background*gender), however, seem to have no significant influence. These results again seem to reflect the importance of language skills in the context of migration itself. Language skills seem to play a key role in successful social participation and the associated inclusion. This can be seen as a plausible conclusion, since interactions at this age are strongly associated with verbal communication. In addition, the current data is in line with those of Plenty and Jonsson (2017), showing that students with a migration background are more prone to be affected by isolation and thus experience fewer interactions.

In terms of social acceptance, students with a migration background show a significant smaller magnitude of social acceptance compared to students without a migration background. Considering gender and interaction effects (migration background*gender) does not yield any differences. The present findings are therefore in line with previous studies (Krull et al., 2018; Wahl et al., accepted), which indicate that students with a migration background are less accepted by their peers compared to students without a migration background. However, these findings are only partially consistent with the results obtained by Asendorpf and Motti-Stefanidi (2017). In their research, it was also shown that immigrants (compared to native Greeks and depending on the proportion of immigrants in a class) were less accepted (and more rejected) by their peers. However, the difference in the degree of rejection between Greek students and immigrants disappeared completely over the survey period of three school years. Since the students in the present study are in the fourth grade (and have thus already spent up to three years together), these findings contrast those of Asendorpf and Motti-Stefanidi (2017). In this context, however, it needs to be taken into account that Asendorpf and Motti-Stefanidi (2017) also report that immigrants with higher involvement in Greek culture were more likely to be accepted by their Greek peers. Since the involvement of the students in German culture was not included in the present study, this aspect could unfortunately not be taken into account and therefore maybe responsible for the deviating results. Along with these considerations, there is also the question of the
definition or operationalization of a migration background. While the focus in the context of migration in the study by Asendorpf and Motti-Stefanidi (2017) was on immigrants as defined by the participants’ country of origin, language was used as the defining characteristic in the present study. The deviating operationalization within the framework of the methodological approach should therefore also be considered when interpreting the (deviating) results. This leads to the conclusion that the factor of social acceptance could represent a domain of social participation, which seems to be sensitive to a classification of migration background.

In regard to the self-perceived social inclusion, no significant differences were found between students with and without a migration background. However, significant differences could be identified with regard to gender, but not with regard to interaction effects (migration background*gender). Thus, the data suggests that a migration background does not affect the self-perception of one’s own feeling of being socially included. These findings contradict those of Rich Madsen et al. (2016). According to Rich Madsen et al. (2016), students with a migration background rate their social participation lower compared to their peers without a migration background. However, the authors operationalized self-perception of social participation solely via the perceived feeling of loneliness, which is a clear measure of negative emotions. In contrast, this study applied a more balanced measure of self-perceived social inclusion. It is conceivable that the valence of the items may moderate the resulting effect.

Summarizing the previous results at this point, also in retrospect of the first research question put forward in the paper, differences in social participation due to migration background can be observed in specific domains (friendships, interactions, social acceptance). Self-perception of social inclusion, however, does not seem to be affected here. Likewise, gender does not seem to play a role in terms of interaction effects (migration background*gender). However, it should also be taken into account that classification of migration background status (for example, based on other underlying (individual) definitions) just as operationalization (see thoughts on self-perception of social inclusion in the context of the findings of Rich Madsen et al. (2016)) might have influenced the resulting differences with regard to social participation.

It is also worth noting that similar effects to this study were found in studies investigating the social participation of students with SEN. Students with SEN are also found to experience lower social participation compared to their peers without SEN. As for the current data, these studies found differences for friendships, interactions, and social acceptance but only partially for self-perceived social inclusion. Regarding the self-ratings, differences were only found for variables with a negative valence such as loneliness (for an overview see Schwab, 2018). Furthermore, the current results are consistent with Koster et al. (2010), indicating that the social self-concept of students with SEN does not differ from those of students without SEN, rendering no differences in self-perception.

Limitations

The results obtained in this study can be classified as meaningful due to the (partly) high(er) migration proportions, e.g., in the German-speaking neighboring countries of Germany (e.g., Statistik Austria, 2020). Nevertheless, with regard to the measures used, different definitions of a migration background in the various countries and the resulting limited comparability of the results need to be taken into account (see also Schenk et al., 2006). Moreover, the data collected on (reciprocal) friendships relied on self-rating and is therefore highly subjective. Students may have different criteria or thresholds to consider someone a friend. In addition, only friendships among classmates were assessed (extra-curricular activities, activities in their spare time were not considered). Thus, the construct of social participation, as applied in this study, refers exclusively to social participation in the classroom on the basis of the available data. Unfortunately, it is not possible to draw conclusions about social participation in other areas of life on the basis of the collected data (data protection regulation affecting data collection). A more comprehensive consideration of social participation (also outside the classroom or school context) should therefore be considered in future studies. Besides that, the current study only assesses positive aspects of social participation (using items of positive valence). Highlighting the negative continuum (e.g., social rejection, negative social interaction) may shed more light on the complex interplay of the variety of aspects of social participation. Considering the rather young age of the participating students, this approach could raise ethical questions and must therefore be handled with special care.

Finally, there are different key topics of social participation that were analyzed separately (following the work of Koster et al., 2009 and Bossaert et al., 2013). This procedure was chosen, on the one hand, because the different key topics in the present study were assessed with very heterogeneous methods (e.g., sociometric nominations vs. self-rating scales), but, on the other hand, also to be closer to the literature on which this work is based (Koster et al., 2009 and Bossaert et al., 2013). Future studies would do well to empirically analyze the structure of the four dimensions (e.g., exploratory factor analysis) in order to check whether the underlying factors correspond to the theoretically assumed four dimensions of social participation (according to the heuristic model of Bossaert et al., 2013 and Koster...
et al., 2009). Nevertheless, future studies should also consider measuring social participation using an overall score. There are also studies using, for example, the teaching rating scales, in which social participation is assessed as a one-dimensional construct including all four key themes as subscales (Koster et al., 2008).

With regard to variables that were (not) assessed, further research is needed to examine aspects of a homophily effect in more detail. Students (e.g., when choosing friends) may tend to choose peers who are more similar to their own characteristics (e.g., Leszczensky & Pink, 2015; Smith et al., 2014; Titzmann & Silbereisen, 2009). Especially considering the fact that studies from German-speaking countries, e.g., in comparison to Anglo-American countries (e.g., Strohmeier et al., 2006), report less pronounced tendencies of cultural homophily effects, it cannot be clearly clarified whether the present results are subject to possible biases. Here, it remains questionable whether there is a bias regarding the form that students with a specific migration background may have chosen students with a similar or even identical migration background and thus also generally had a smaller reservoir of potential friends or interactions. Thus, in light of the homophily effect, it must be considered that students with a less common ethnicity will always face difficulties in finding friends inside the classroom – which does not necessarily imply that their overall social participation in other areas of life is equally low.

Furthermore, differences between certain ethnic groups in terms of the overall number of friends need to be considered. For example, students of Eastern European descent or Asian individuals seem to have fewer friends (Darmody et al., 2016). However, in this context also other contextual variables (e.g., different sports traditions in the individual countries, a lack of knowledge about local facilities) need to be taken into account as well (Darmody et al., 2016). Moreover, the current study measured the quantity but not the quality of friendships. It remains an open question as to whether students might be satisfied with fewer friends if these friendships are of high quality.

Taking into account the research design, more sophisticated technologies like the R-FIT technique could improve the validity of the measured data (e.g., Eberle et al., 2017; Elmer et al., 2019). Likewise, additional information, e.g., through qualitative interviews, should be included in the research (mixed method design). Considering that individuals of different migration generations can differ in terms of their social participation (Plenty & Jonsson, 2017), but also that the number of school years (spent together) can influence relationships and interactions (Asendorpf & Motti-Stefanidi, 2017), it remains open to what extent the dimensions of social participation are stable constructs, which requires longitudinal studies.

**Conclusion**

Social participation of students with a migration background has been shown to be impaired in specific domains in comparison to students without a migration background. For example, specific results of the study show that students with a migration background have fewer friends, fewer interactions, and are less socially accepted. In contrast, gender seems to play only a minor role in the context of migration background. Only in the self-perception of social inclusion do girls and boys differ from each other. Here, however, the migration background again does not play a role.

Taking these findings and the importance of social participation in general into account, especially with regard to the effects of low social participation on students’ future lives, a clear need for intervention is identifiable (see also Ulger et al., 2018). For instance, Carbonaro and Workman (2013) indicate that students with a higher number of closer friends are less likely to drop out of school (see also Resch et al., 2021). Particularly when considering the current situation in Germany and many other European countries, the number of students with a migration background will continue to increase, e.g., due to the influx of refugees. Therefore, there is certainly a need to look more closely at the situation of children with a migration or the special needs of those with a refugee background (see e.g., Taylor & Sidhu, 2012). Increased contact with locals is associated with less discrimination and more identification and thus indirectly influences the desire to stay in the new country (Di Saint Pierre et al., 2015). Necessary further research in the context of social participation (especially of students with a migration background) makes it possible to clarify deficiencies more precisely. Here, the focus should be placed primarily on examining the social participation of students with a migration background, taking into account further contextual variables (e.g., homophily effect). These findings can then be used in a targeted manner to develop appropriate intervention measures in order to implement these in cooperation with schools. Thus, based on the findings of the current paper in the context of students with a migration background, interventions should primarily start with promoting friendships and interactions of as well as social acceptance by students within the classroom community to ensure social participation (and thus also social inclusion) of all students (gifted, disabled, children from remote population groups, but also from cultural, linguistic, and ethnic minorities etc.), regardless of their individual characteristics (physical, social, intellectual, emotional, etc.) (see Salamanca Statement, 1994).

With these conclusions, the present study makes its own contribution to providing insight into the social participation of students with a migration background (in Germany) and
to the ongoing discussion of inclusive schooling for all students. It is necessary to raise awareness of several risk factors for social participation and a broader view of the concept of inclusion.

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Compliance with Ethical Standards

Conflict of Interest The authors declare no competing interests.

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Appendix

Table 1

| Status                | Subsample | Reciprocal friendships in class |
|-----------------------|-----------|---------------------------------|
|                       |           | 0 | 1 | 2 | 3 | 4 | 5 |
|                       | n         | % | % | % | % | % |
| No Migration Background | 303       | 4.6 | 14.5 | 25.7 | 22.4 | 18.5 | 14.2 |
| Female                | 335       | 9.5 | 17.6 | 18.8 | 23.2 | 20.8 | 9.8 |
| Migration Background  | 74        | 16.2 | 24.3 | 14.9 | 23.0 | 14.9 | 6.8 |
| Male                  | 72        | 12.5 | 22.2 | 25.0 | 19.4 | 13.9 | 6.9 |
| Total                 | 396       | 10.3 | 18.7 | 19.9 | 22.3 | 19.4 | 9.1 |

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