Critical Consciousness Socialization at School: Classroom Climate, Perceived Societal Islamophobia, and Critical Action Among Adolescents

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Schools are key contexts for the development of adolescents' critical consciousness. We explored how three dimensions of the classroom cultural diversity climate (critical consciousness, color-evasion, and multiculturalism) related to adolescents' critical reflection (i.e., perceived societal Islamophobia) and intended critical action (i.e., political activism). Our sample included adolescents experiencing high (second generation, Muslim, $N = 237$) versus low (non-immigrant descent, non-Muslim, $N = 478$) stigmatization in Germany. Multilevel analyses revealed that for both groups a critical consciousness climate, but not a color-evasive or a multicultural climate, was positively associated with perceived societal Islamophobia and intended critical action. Thus, to promote adolescents' critical consciousness, schools should go beyond emphasizing a common humanity and celebrating cultural diversity and include explicit discussions of social inequity.

Key words: critical consciousness – classroom cultural diversity climate – Islamophobia – adolescents

In diverse societies, histories of marginalization continue to inform the inequitable distribution of opportunities and resources across different ethnic, racial, or religious groups. In Germany, members of ethnic, racial, and religious minorities often face discrimination at school and in other domains, particularly if they have Turkish heritage or are (read as) Muslim (Gomolla & Radtke, 2009; SVR-Forschungsbereich, 2018). To prepare adolescents to become citizens of diverse, democratic, and more equitable societies, educators and education scholars in Germany and abroad argue that adolescents should be taught the skills necessary to analyze and address social inequity (Gorski, 2016; Standing Conference of the Ministers of Education, 2013).

The importance of education for reflection on and actions aimed at reducing social inequity has roots in the 1970s framework of critical consciousness put forth by Brazilian educator and philosopher Paulo Freire (1970/2018). Freire worked with adults experiencing marginalization in Brazil and argued that education should not only promote their literacy skills but also critical reflection on their social conditions, as well as feelings of efficacy and actions aimed at changing these conditions (i.e., critical consciousness). Contemporary researchers have applied Freire's ideas to the experiences of adolescents and typically define critical consciousness as an awareness of oppressive systems (critical reflection) as well as a sense of efficacy (critical motivation) and engagement in action (critical action) against oppression (for a review, see Heberle, Rapa, & Farago, 2020). While most of this research has focused on youth belonging to marginalized groups, such as Black youth in the United States (U.S.), youth belonging to privileged groups also need to develop critical consciousness to create more equitable societies (Diemer, Rapa, Voight, & McWhirter, 2016).

Education as a tool to promote critical consciousness was central in Freire's original concept and is also highlighted in contemporary research. While many studies have focused on informal (e.g., discussions with parents and peers) and nonformal (e.g., youth organizing) learning experiences (Heberle et al., 2020), recent studies have examined

critical consciousness development in formal learning contexts such as schools (Bañales et al., 2019; Seider et al., 2018). This research has highlighted that a classroom climate which fosters the active discussion of social inequity (i.e., critical consciousness climate) can contribute to adolescents' critical consciousness, while a classroom climate in which group differences are downplayed (i.e., color-evasion climate) may not (Bañales et al., 2019).

Building on this research, we explored how different aspects of the classroom cultural diversity climate were related to critical reflection and critical action, as two main components of critical consciousness, among German adolescents[1]. Besides including a critical consciousness climate and a color-evasive climate, we also explored the role of a third dimension of classroom climate in which cultural diversity, but not inequity, is emphasized (i.e., multiculturalism climate). As our study is situated in Germany, we examined critical reflection with regards to a highly salient form of social inequity in this context, namely societal Islamophobia. We included two groups of adolescents experiencing high (second generation, Muslim youth) versus low (non-immigrant descent, non-Muslim youth[2]) stigmatization in this context, and explored whether mean levels of critical consciousness, as well as associations between the classroom cultural diversity climate and critical consciousness, varied across these two groups.

Critical Consciousness Among Adolescents

Adolescence is an important period for the development of critical consciousness. Adolescents increasingly explore their own identities, including their ethnic/racial identity, which can go hand in hand with an increasing awareness of (structural) discrimination faced by different groups in society (Mathews et al., 2019). Awareness of structural inequity is an important aspect of critical reflection, which entails questioning social arrangements and structures that uphold marginalization. When

explaining disparities in academic performance between German adolescents of immigrant and non-immigrant descent, for instance, a person who is critically reflective would not merely draw on individual-level explanations, such as lack of effort or a lower level of German language skills, but also on structural explanations, such as discrimination (Froehlich, Martiny, Deaux, & Mok, 2016). Islamophobia intersects with anti-immigrant sentiment and is a highly salient form of discrimination in many Western countries, including Germany (Ahmed, 2021; Zick & Klein, 2014). Islamophobia is defined as "irrational fear of, aversion to, or discimination against Islam or people who practice Islam" (Merriam-Webster, 2019). It ranges from negative attitudes, verbal and physical assaults, and hate crimes against Muslims, to institutionalized forms of discrimination, such as the use of exclusionary policies and legislation explicitly targeting Muslims (Ahmed, 2021).[3] Against this background, we will assessed adolescents' recognition of the reality of societal Islamophobia as an indicator of their critical reflection.

Freire (1970/2018) assumed critical reflection to be reciprocally associated with the second component of critical consciousness, critical action. Critical action entails actively engaging individually or collectively to change social inequity, for instance, through anti-racism action (Bañales et al., 2019). As adolescents face many structural barriers to certain forms of critical action, such as not yet being allowed to vote, some researchers investigating critical action among adolescents examine their intended actions instead of actual actions (Heberle et al., 2020). Thus, in this paper, we assessed intentions for critical action among adolescents.

The third component of critical consciousness, critical motivation, entails that people feel motivated or perceive themselves as capable of effecting social change (Heberle et al., 2020). Although critical motivation may be a crucial link between critical reflection and action, we based our analyses on an existing dataset, which did not include measures of critical motivation, and thus focused on the critical reflection and action components of critical consciousness in this study. This focus aligns

[1]According to the German constitution, a "German" is someone who possesses German citizenship. Almost all adolescents (97%) in our sample ($N = 715$) possess German citizenship (89% only German citizenship, 9% dual citizenship, 3% only non-German citizenship) and most (83%) self-identify as German (61% chose "German" as self-identification, 22% a dual identification, 16% a non-German identification). We deliberately choose to refer to all youth born in Germany as "German adolescents" to recognize the breadth of national belonging.

[2]For the sake of brevity, throughout the text, we refer to these two subsamples as "Muslim vs. non-Muslim youth."

[3]To highlight the structural nature of inequity faced by Muslims, and the fact that as a group Muslims are often racialized and "othered" to justify exclusion and maintenance of existing power relations in society, some authors prefer the term "anti-Muslim racism" (Attia, 2013). Since our dataset only contained a measure of perceived societal Islamophobia and not of anti-Muslim racism specifically, we employ "Islamophobia" throughout this text.

with many conceptualizations of critical consciousness that view critical reflection and action as the central components of critical consciousness (Jemal, 2017).

Schools as Promoters of Critical Consciousness Among Adolescents

Paulo Freire (1970/2018) proposed that open dialogue and discussing experiences with social inequity and opinions about its sources can foster critical consciousness. Schools are important contexts for facilitating these discussions. Although many schools reinforce rather than redress inequitable systems, including by endorsing practices that align with exclusionary norms of belonging (Gomolla & Radtke, 2009; Moffitt & Juang, 2019a), they can also promote adolescents' critical consciousness. For example, an open classroom climate, marked by an expression of diverse opinions and exchange about social and political issues (Godfrey & Grayman, 2014; Rapa, Bolding, & Jamil, 2020), and the degree to which social inequity is emphasized in classroom discussions (Bañales et al., 2019) have each been associated with heightened critical consciousness among adolescents. We built on this research and investigated three types of classroom cultural diversity climate that differ in how much they emphasize social inequity: Critical consciousness, color-evasion, and multiculturalism.

Critical consciousness climate. A classroom climate of critical consciousness is based on Freire's (1970/2018) ideas that social inequity should be actively discussed and reflected upon to promote critical consciousness. Schools fostering a critical consciousness climate teach adolescents about social inequity and the roots and implications of systemic racism and other forms of group-based discrimination (Byrd, 2017; Schachner, Schwarzenthal, Moffitt, Civitillo, & Juang, 2021). In the context of societal Islamophobia, for example, educational leaders may encourage students to be aware of and resist prevailing negative narratives about Muslims (Ezzani & Brooks, 2019). Overall, empirical findings support the assumption that actively addressing social inequity at school can promote adolescents' critical consciousness. In an interview study with 70 adolescents in the United States, most of whom were Youth of Color, participants reported that their awareness of racism and their anti-racism action increased because teachers introduced theoretical frameworks for understanding oppression, adolescents were encouraged to make connections between the oppression faced by different groups, and had opportunities to educate each other about issues related to social inequity (Seider et al., 2018). Bañales et al.'s (2019) study of 372 racially/ethnically diverse adolescents found that youths' perceptions of critical consciousness messages predicted their involvement in anti-racism action but not their critical reflection, which may be partly because of the use of a rather broad measure of critical reflection.

Color-evasive climate. Color-evasive approaches are based on the assumption that de-emphasizing ethnic/racial group memberships may reduce prejudice and discrimination mainly enacted by members of ethnic/racial majority groups (Rosenthal & Levy, 2010). Studies in the school context have conceptualized color-evasion in different ways, for example, as highlighting commonalities between ethnic/racial/cultural groups, or as neglecting (status) differences between ethnic/racial/cultural groups (Byrd, 2017; Schachner, Schwarzenthal, Moffitt, et al., 2021). Overall, research findings suggest that color-evasion is not conducive to promoting critical consciousness. In social psychology, approaches that merely focus on commonalities to improve interethnic relations have been criticized for failing to acknowledge structural inequity and thus undermining social change (Dovidio, Gaertner, Ufkes, Saguy, & Pearson, 2016). A color-evasion approach may divert attention from racial inequity and discrimination (Neville, Lilly, Duran, Lee, & Browne, 2000) and neglect that structural factors, and not only individual factors, need to be considered to understand social inequalities (Watts, Diemer, & Voight, 2011). Along these lines, Bañales et al. (2019) found that perceived color-evasive messages at school (measured as active ignorance of ethnic/racial differences) were associated with reduced anger toward social injustice and were unrelated to anti-racism action.

Multiculturalism climate. Multicultural approaches are based on the assumption that race and ethnicity should be recognized as meaningful and that group differences should be valued (Rosenthal & Levy, 2010). In schools, multicultural approaches may be expressed through including different cultural contents in the curriculum or by encouraging adolescents to learn something about their own and others' heritage cultures (Banks, 2015; Byrd, 2017;

Schachner, Schwarzenthal, Moffitt, et al., 2021). Critical multicultural education researchers have argued that a focus on culture while maintaining silence about inequity ignores wider structural constraints that affect the lives of adolescents belonging to marginalized groups (Gorski, 2016; Sleeter, 2012). Indeed, qualitative research conducted in continental Europe shows that multicultural approaches in schools tend to center around celebrating different (religious) holidays and hosting events such as multicultural breakfasts, with little emphasis put on addressing racism and discrimination (Civitillo et al., 2016). How a multicultural classroom climate relates to adolescents' critical reflection and action is not clear. Perceptions of a stronger multicultural climate were associated with more discrimination experiences among youth both with and without a family history of immigration in Germany (Schwarzenthal, Schachner, van de Vijver, & Juang, 2018) and to more experienced and perceived racist victimization in a diverse sample of children in the Netherlands (Verkuyten & Thijs, 2002). There are multiple potential explanations for these findings. For instance, multiculturalism may inadvertently promote cultural essentialism, treating culture as unchanging, and may thus evoke stereotyping and actually increase discrimination. Another possibility, however, is that learning about the perspectives of different groups may increase awareness of discrimination (Schwarzenthal et al., 2018). However, these previous studies focused on (personal) discrimination experiences or perceptions of discrimination of peers at one's school and not on recognition of societal-level inequity. A multicultural classroom climate was also indirectly (mediated by ethnic identity exploration) related to more prosocial behavior among adolescents in Italy (Moscardino et al., 2019), but little is known about its association with other forms of critical action, such as more political engagement. Thus, we explored associations between perceptions of a multicultural classroom climate with perceived societal Islamophobia and intended critical action among German adolescents.

Individual versus aggregated perceptions of the classroom climate. Classroom climate is typically assessed by measuring student perceptions of practices and norms in their classroom. Students' individual perceptions of the classroom cultural diversity climate are consistently associated with adjustment and intergroup outcomes (Bañales et al., 2019; Schachner, Schwarzenthal, & Noack, 2021). However, individual perceptions of the climate are partially shaped by processes of projection (i.e., students perceiving the environment to mirror their own attitudes) and do not capture the intersubjective reality in a certain classroom. Therefore, in line with recommendations to capture the classroom climate as a contextual construct (Marsh et al., 2012), we also included the classroom-aggregated perceptions of the climate in our analyses. In previous research, the aggregated perceptions of classroom cultural diversity climate were less strongly associated with student outcomes than the individual perceptions (for an overview, see Schachner, Schwarzenthal et al., Noack, 2021).

Interaction between different approaches. The three types of classroom cultural diversity climate mentioned above can co-exist in the same classroom. Perceptions of critical consciousness climate, color-evasive climate (as in an emphasis on commonalities), and multiculturalism climate are positively associated among German secondary school adolescents (Schachner, Schwarzenthal, Moffitt, et al., 2021). A combination of several approaches may be most beneficial to promote adolescents' critical consciousness. A color-evasive climate by itself may lead to a failure to acknowledge structural inequities (Dovidio et al., 2016). However, a color-evasive climate (as in an emphasis on commonalities) may also promote a common, shared group identification among students, which, according to the Social Identity Model of Collective Action (van Zomeren, 2013), is a central predictor of intentions to improve one's group's conditions. One prerequisite for a common group identity to result in critical action may be that structural inequities are actually perceived. In this case, a focus on a common humanity may promote social change as it may create a sense of positive connection that frames unfair disparities as a threat to the integrity of the larger group (Dovidio et al., 2016). Therefore, we also investigated interaction effects among the three classroom cultural diversity climate approaches.

Critical Consciousness Among Adolescents Experiencing Different Degrees of Marginalization and Privilege

Among adolescents belonging to marginalized groups, critical consciousness may act as an "antidote to oppression" (Watts, Griffith, & Abdul-Adil, 1999) and may be a necessity to resist the harms of a systemically unjust society. Adolescents

belonging to more privileged groups may have less direct motivation to engage in societal change as they benefit from their privileges. However, creating more equitable societies may benefit everyone in the long run and should not merely be the responsibility of groups experiencing marginalization. In this study, we therefore included both Muslim and non-Muslim adolescents and examined whether critical consciousness, as well as associations between the classroom cultural diversity climate and critical consciousness, varied across these two groups.

As personal experiences with discrimination may contribute to critical consciousness (Tyler, Olsen, Geldhof, & Bowers, 2020), it may be expected that youth belonging to marginalized groups show higher critical consciousness. However, findings on group differences in critical consciousness among adolescents have been mixed, with some observing higher (Godfrey & Grayman, 2014), lower (Diemer, Voight, Marchand, & Bañales, 2019), and similar (Bañales et al., 2019) levels of critical consciousness among Youth of Color compared with white youth in the United States. For populations experiencing more privilege, it may be easier to critique the system without experiencing negative consequences (Diemer et al., 2019). Moreover, participation in political activities requires social and economic capital, which may be less accessible for Youth of Color or youth of immigrant descent (Bañales et al., 2019). In Germany, critical reflection has rarely been studied empirically, but numerous studies have examined political engagement among adolescents with and without a family history of immigration. These studies found no differences in political engagement (Jugert, Eckstein, & Noack, 2018), or, after controlling for educational and financial background, higher levels of political engagement among adolescents with a family history of immigration versus those without (Eckstein, Jugert, Noack, Born, & Sener, 2015). Because of these inconsistent findings, we explored whether critical reflection and action vary across Muslim and non-Muslim adolescents in Germany.

Experiencing high versus low stigmatization based on religion and background may also affect how adolescents are impacted by classroom cultural diversity climate. Adolescents drawing on personal discrimination experiences to develop an understanding of inequitable systems may rely less on the classroom cultural diversity climate to develop critical consciousness. However, since critical consciousness is a "theory for the oppressed," one may also assume that learning about structural inequities at school is particularly important for adolescents experiencing marginalization. Thus, we examined differences in associations between the classroom cultural diversity climate and adolescents' critical consciousness in an exploratory fashion.

The German Context

While the discourse on social inequity in the U.S. tends to focus on the construct of "race," in Germany the term "race" is primarily used in historical context in association with the Holocaust[4] (Juang, Moffitt, Schachner, & Pevec, 2021). Instead, the term "migrant background"[5] is commonly used. The term is officially based on immigrants' and their descendants' place of birth or citizenship (Will, 2019). Based on this definition, one fourth of Germany's population today has a "migrant background." This group encompasses a vast range of people with different migration experiences and heritage countries, with the largest heritage countries being Turkey (13%), Poland (11%), and the Russian Federation (7%) (Statistisches Bundesamt, 2020).

While officially based on place of birth or citizenship, in both public discourse and empirical research, the category of "migrant background" is racialized, and is often used to refer to anyone perceived as having non-German ancestry, particularly those of Turkish or Arab descent, an "Islamic background," and other People of Color (Moffitt & Juang, 2019b). People of Turkish heritage, those who identify as Muslim, and those who self-report having a "visible migrant background" in terms of appearance and/or accent, experience higher levels of discrimination in Germany compared to those with other heritages, non-Muslims, and those

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[4]This tendency can reinforce the fact that racial discrimination experiences faced by Black Germans and Germans of Color remain largely invisible. To change this, in 2020, several organizations created the *Afrozensus*, the first large-scale survey of Black Germans that will provide important information regarding racial discrimination experiences (Aikins, Bremberger, Aikins, Gyamerah, & Yıldırım-Caliman, 2021).

[5]In recent years, the term "migrant background" has faced increasing criticism, such as that it is highly racialized and marks descendants of immigrants as "other" for generations, yet cannot capture ethnic/racial discrimination experiences (Moffitt & Juang, 2019; Will, 2019). To respond to this criticism, an expert commission initiated by the German government recently suggested replacing the term with "immigrants and their (direct) descendants" (Federal Government Expert Commission on the Framework for Sustainable Integration, 2021), which however, does not solve the problem that a lack of clear terminology still complicates discussing ethnic/racial discrimination experiences.

without a "visible migrant background" (SVR-Forschungsbereich, 2018).

Islamophobia is one of the most common forms of inequality in Germany (Zick & Klein, 2014), with about two thirds of the population endorsing at least some negative stereotypes against Muslims, for instance, casting them as aggressive and disinterested in education. Muslims are often treated as a homogeneous group and contrasted with "Germans," suggesting that being Muslim is incompatible with being German (Foroutan et al., 2014). In recent years, there has been a rising number of threats, attacks and insults against Muslims and mosques (Bundesinnenministerium, 2021). Islamophobic narratives are picked up by adolescents. Kaddor, Karabulut, and Pfaff (2018) interviewed 20 non-Muslim adolescents in Germany about their perceptions of Islam. They identified four narratives, namely that (1) Muslim men oppress women, (2) uncontrolled immigration of Muslims threatens the democratic way of life in European societies, (3) Muslims create a terrorist threat, and (4) Muslims live in a "parallel society" and need to be assimilated. However, some non-Muslim adolescents also showed critical reflection regarding the systemic discrimination against Muslims, for example, by agreeing that the media lump all Muslims together (Kaddor et al., 2018). Against this background, we examined recognition of societal Islamophobia as a salient form of critical reflection in the German context and included second generation, Muslim adolescents as well as non-immigrant descent, non-Muslim adolescents as two groups facing different degrees of stigmatization in this context.

The Present Study

In this study, we investigated how three aspects of the classroom cultural diversity climate were associated with critical reflection and action among adolescents. We expanded previous knowledge in several ways: (1) we applied the concept of critical consciousness to a context in which it has been understudied (Germany) and examined critical reflection with regards to societal Islamophobia, a highly salient form of social inequity in this context. (2) In addition to a critical consciousness climate and a color-evasion climate (as investigated by Bañales et al., 2019), we included a third aspect of classroom cultural diversity climate, multiculturalism. (3) We investigated interactions between the different types of classroom cultural diversity climate. (4) We included both the individually perceived as well as the classroom-aggregated

perceptions of the classroom cultural diversity climate as predictors. (5) We examined whether critical consciousness, as well as associations between the classroom cultural diversity climate and adolescents' critical consciousness, varied across Muslim and non-Muslim adolescents. Based on our review of the literature, we formulated the following hypotheses[6]:

Hypothesis 1

We expected that individual and aggregated perceptions of a critical consciousness climate (vs. perceptions of a color-evasive climate) would be positively associated with adolescents' critical reflection and action. We also explored how individual and aggregated perceptions of a multicultural climate were associated with adolescents' critical reflection and action. We expected that individual perceptions of the climate would be more strongly associated with students' critical reflection and action than aggregated perceptions of the climate.

Hypothesis 2

We expected that different dimensions of classroom cultural diversity climate would interact. A color-evasive climate (as in highlighting commonalities) may not promote critical consciousness by itself but may promote a common overarching identity, that, in the presence of active discussions of social inequity, may make it more likely that people frame inequities as a threat to the integrity of the larger group (Dovidio et al., 2016). Therefore, we expected that critical consciousness climate would be more strongly positively associated with adolescents' critical reflection and action when there was also a stronger color-evasion climate.

Exploratory research question

Because of mixed findings regarding group differences in critical consciousness in previous research (Bañales et al., 2019; Diemer et al., 2019; Godfrey & Grayman, 2014) and a lack of findings regarding

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[6]Preliminary analyses for this study were run two years ago, and we did not pre-register our hypotheses then. As we strongly support principles of open science, a full list of items used as well as robustness checks are provided in the supplementary materials. Furthermore, the syntaxes used were made available on the website of the open science platform (https://osf.io/37jb5/?view_only=None).

differential associations between the classroom cultural diversity climate and critical consciousness, we explored whether Muslim and non-Muslim adolescents differed in critical reflection and action, and whether associations between the classroom cultural diversity climate and the outcome variables differed across these two groups.

METHOD

Participants and Procedure

The sample for this study was part of a larger study on adolescents in Berlin schools exploring diversity, identity, and equity. The Berlin Senate Committee for Education, Youth, and Science and school principals granted study approval. After obtaining parents'[7] consent and adolescents' assent/consent, we administered a questionnaire to 1335 adolescents in 66 9th grade classrooms in 17 schools in 2016. For the present study, we included two subsamples of adolescents that clearly differ in the degree of stigmatization they experience in society: Muslim adolescents born in Germany with at least one parent born abroad[8] ($N = 237$, 54% female, $M_{age} = 14.83$ $SD_{age} = 0.68$) and non-Muslim adolescents with no family history of immigration ($N = 478$, 48% female, $M_{age} = 14.54$ $SD_{age} = 0.69$), resulting in a final total sample of $N = 715$ adolescents (50% female, $M_{age} = 14.63$ $SD_{age} = 0.69$). Among the group of Muslim adolescents, 26 different heritage countries were represented. Most of the parents were born in Turkey ($N = 69$ mothers, $N = 89$ fathers), followed by Lebanon ($N = 25$ mothers, $N = 32$ fathers). We assessed the number of books in the household as an indicator for educational resources in the family[9] with a scale ranging from (1) *none or very few* to (5) *more than 200 books* (Bos et al., 2003). Adolescents in the Muslim subsample ($M = 2.67$, $SD = 1.23$) on average

reported fewer books in the family than adolescents in the non-Muslim subsample ($M = 3.84$, $SD = 1.27$, $t(709) = 11.71$, $p < .001$).

Of all 715 adolescents included in the final sample, 63% attended an integrated secondary school, a school track that combines the former vocational and comprehensive school types, and offers all school leaving certificates, and 37% a *Gymnasium*, which is the academic school track. Within these school tracks, adolescents in Germany are clustered by class through 10th grade, which means they spend most of their time with the same group of adolescents. More than half (56%) of the adolescents attended classrooms with 0–25% Muslim adolescents, 20% attended classrooms with 26–50% Muslim adolescents, 3% attended classrooms with 51–75% Muslim adolescents, and 22% attended classrooms with 75–100% Muslim adolescents, indicating high segregation with either very few or very many Muslim adolescents per classroom.

Measures

Classroom cultural diversity climate. We used three subscales of the six-subscale Classroom Cultural Diversity Climate Scale (Schachner, Schwarzenthal, Moffitt, et al., 2021) that map onto the three dimensions of classroom climate focused on in this study. The validity, factor structure, and measurement equivalence across gender, school track, and immigrant descent was assessed by Schachner, Schwarzenthal, Moffitt, et al. (2021), based on the larger sample that was drawn on to create the subsamples for the present study. We averaged items from each subscale to represent different aspects of classroom climate. The response scale for all subscales ranged from (1) *no, that's not right* to (5) *yes, that's right*.

Critical consciousness. Critical consciousness climate was measured with five items, for example, "In school we talk about how the German school system does not offer the same opportunities to all adolescents"; α = .82.

Color-evasion. Color-evasion climate was assessed with five items that mainly captured the degree to which schools emphasized that people from different ethnic/racial/religious groups share a common humanity, for example, "In school, we are taught that we are all people, regardless of where we are from"; α = .90.

Multiculturalism. Heritage/intercultural learning climate was used to measure multiculturalism. It was assessed with seven items, for example, "During class, we discuss the various opinions and

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[7]Following guidelines of the Berlin Senate, parental consent was only required for questions asking about the participants' parents.

[8]We excluded first generation adolescents since the sample of first generation, Muslim adolescents was very small ($N = 43$), and since perceptions of societal inequities may differ between adolescents who only recently immigrated vs. those who were born in Germany. However, we also conducted robustness checks using the full sample of adolescents (see Results section).

[9]The number of books was used as an indicator for educational background since direct information from the parents on their income or education was not available in our study, and adolescents may not be able report their parent's educational background or occupation correctly, especially as some of the parents have not received their education in Germany.

perspectives of people from different cultures"; α = .90.

Adolescent critical consciousness. *Critical reflection.* In line with a large body of research that has employed proxy measures to capture critical consciousness (Heberle et al., 2020), we used the perceived Islamophobia Scale (Kunst, Sam, & Ulleberg, 2013) as a measure of critical reflection. The scale comprises three subscales assessing (1) perceptions of a general fear of Islam and Muslims (six items in original scale, we selected four of these[10]), for example, "Germans are suspicious of Muslims," (2) fear of Islamization (three items), e.g. "Many Germans fear an "Islamization" of Germany," and (3) Islamophobia in the media (three items), e.g. "German media always presents Muslims as dangerous people." Reliability and validity were supported in the original study (Kunst et al., 2013). We used a scale ranging from (1) *no, that's not right* to (5) *yes, that's right*. An initial factor analysis modeling the three subscales and an overarching perceived Islamophobia factor revealed that one item, "Most Germans feel safe among Muslims," showed a non-significant loading, most likely because it was worded in a different direction than the other items. This item was omitted from further analyses. The model fit of the final CFA was good, $\chi^2/df = 4.88$***, CFI = .97, RMSEA = .08 [90% CI: 0.06; 0.08], SRMR = .04, as was the reliability of the cumulative scale, α = .90.

Critical action. We assessed critical action with a scale capturing adolescents' intention for engaging in a range of political behaviors (Lyons, 2008), which has been successfully used with adolescents of immigrant and non-immigrant descent in the German context (Eckstein et al., 2015). Adolescents were asked to rate how likely it was that they would engage in a range of activities in the future, for example, "Taking part in a public event or demonstration for a political or social cause," on a scale from (1) *not at all likely* to (5) *very likely*. We ran a CFA on the items and the modification indices indicated a correlated error between two items that both referred to online engagement. With this correlated error, the fit of the one-factor model was good, $\chi^2/df = 1.84$*, CFI = .99,

RMSEA = .04 [90% CI 0.00; 0.06], SRMR = .02, as was the reliability, α = .84.

Control variables. At the individual level, we controlled for gender (0 = *male*, 1 = *female*), and the number of books in the household (Bos et al., 2003). At the classroom level, we controlled for school track and the proportion of Muslim adolescents in a classroom.

Analytic Approach

First, we checked missing values and tested the measurement equivalence of critical reflection and action across our two adolescent groups. Next, we calculated descriptive statistics and correlations among the study variables for the two groups separately and estimated intraclass correlations (ICCs) to determine the proportion of variance in our variables at the classroom level. To test hypotheses, we ran multilevel path models in Mplus 8 (Muthén & Muthén, 1998-2017) using the MLR estimator. All predictors that were strictly at the individual level were mean centered. We took a stepwise approach, first introducing control variables, predictors, and interaction terms at the individual level, and then introducing control variables at the classroom level. To introduce the classroom-level perceptions of the classroom cultural diversity climate, we aggregated the perceptions of all adolescents in one classroom (i.e., based on the initial sample of $N = 1335$ students) in SPSS 27.0 (IBM Corp., 2020) and introduced these aggregated scores as predictors at the classroom level in Mplus. To calculate interactions between aggregated perceptions of the climate and the adolescents' background (i.e., Muslim vs. non-Muslim), we modeled random slopes between adolescent background and the outcome variables at the individual level and then predicted these slopes with the aggregated perceptions of the climate. We further tested interactions between different climate dimensions at the classroom level. Multiple indices were used to test model fit, with a comparative fit index (CFI) of more than .95, a root mean squared error of approximation (RMSEA) of less than .06, and a standardized root mean square residual (SRMR) of less than .08 indicating good fit (Hu & Bentler, 1999).

RESULTS

Preliminary Analyses

In total, 2% of data were missing on the variables included in the main analysis. To deal with the

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[10]We had excluded two items as they had loaded onto a different factor in a pilot study (most likely as they were worded in a different direction than most of the other items), and to reduce the overall number of items.

missing data, we used full information maximum likelihood (FIML) in Mplus 8 (Muthén & Muthén, 1998-2017) which is considered best practice (Enders, 2010). All scales showed configural equivalence (i.e., equivalence of factor structures) and metric equivalence (i.e., equivalence of factor loadings) across the two adolescent groups. All but the perceived societal Islamophobia scale also showed scalar equivalence (i.e., equivalence of intercepts) (see Supplemental Materials B: Appendix S1). The lack of scalar equivalence of the perceived societal Islamophobia scale was because of different intercepts of the higher-order factor (i.e., the three subscales loading onto a higher factor). This may imply that group mean differences on perceived societal Islamophobia should be interpreted with caution (He & van de Vijver, 2012). However, in cases of a rather large disparity in group means, a lack of scalar invariance may also be a statistical artifact (Welzel, Brunkert, Kruse, & Inglehart, 2021). Descriptive statistics and bivariate correlations among study variables at the individual and classroom level are reported in Table 1. The ICCs of our predictor and outcome variables were all above .08 (see Supplemental Materials C: Appendix S1), indicating that there is sufficient variance at the classroom level to conduct multilevel analyses.

Multilevel Path Analyses

First, we entered control variables at the individual level. Adolescents with more books in their household perceived less, and Muslim adolescents (vs. non-Muslim adolescents) more societal Islamophobia. Females (vs. males) and adolescents with more books in the household reported higher critical action intentions. The control variables explained 11% of variance in perceived societal Islamophobia, and 5% of variance in intended critical action at the individual level.

When the individually perceived dimensions of classroom cultural diversity climate were entered as predictors at the individual level, critical consciousness positively and color-evasion negatively predicted perceived societal Islamophobia. In addition, critical consciousness was positively related to intended critical action (supporting Hypothesis 1). Multiculturalism was unrelated to the outcome variables. The percentage of explained variance increased to 14% in perceived societal Islamophobia, and 13% in intended critical action.

We tested whether group membership (Muslim vs. non-Muslim) moderated relations between classroom cultural diversity climate and the outcome variables, but none of the interaction terms significantly predicted perceived societal Islamophobia or intended critical action. We tested interactions between the climate dimensions one by one, but none of them were significant (not supporting Hypothesis 2). Thus, we did not include interaction terms in the further models.

When we introduced control variables at the classroom level, we found that adolescents in *Gymnasium* classrooms (vs. integrated secondary school) perceived less societal Islamophobia and reported higher intentions for critical action. The proportion of Muslim adolescents in a classroom was unrelated to the outcome variables. The control variables explained 39% of variance in perceived societal Islamophobia, and 47% of variance in intended critical action at the classroom level. We proceeded by adding the aggregated classroom cultural diversity climate dimensions as predictors at the classroom level. Only critical consciousness climate was positively related to intended critical action (partly supporting Hypothesis 1). Introduction of the predictor variables increased the proportion of explained variance to 43% in perceived societal Islamophobia, and to 77% in intended critical action.

To test whether the relation between the classroom-aggregated cultural diversity climate and the outcomes was moderated by group membership, we introduced random slopes between group membership (Muslim vs. non-Muslim) and the outcome variables, and predicted these with the aggregated climate. However, the variance of the random slope was non-significant, and none of the climate dimensions significantly predicted the random slope. We also tested interactions between the different climate dimensions at the classroom level, but none of these were significant (not supporting Hypothesis 2). Coefficients of the final model are displayed in Table 2. In this model, the negative association between an individually perceived color-evasion climate and adolescents' perceived societal Islamophobia is only marginally significant.

Robustness Check

As a robustness check, we ran analyses with the whole sample of 1335 adolescents, using religious group membership (Muslim vs. non-Muslim) as a moderator. Results remained very similar, except for one additional positive effect of multiculturalism climate on intended critical action at the

TABLE 1
Individual and Classroom Level Bivariate Correlations and Descriptives

Individual level

	1.	2.	3.	4.	5.	6.	7.
1. Gender (0 = male, 1 = female)	—	.05	.07	.11*	.04	-.01	.15**
2. No. of books in the household	-.04	—	.11*	.11*	.04	-.23***	.30***
3. Critical consciousness climate	-.10	.12	—	.44***	.51***	.05	.29***
4. Color-evasion climate	-.04	.18**	.22**	—	.52***	-.12**	.19***
5. Multiculturalism climate	-.01	.08	.33***	.01	—	.01	.21***
6. Perceived societal Islamophobia	.07	-.01	.15*	.18**	.00	—	-.16***
7. Intended critical action	-.02	.11	.31***	.30*	.23***	.00	—
Non-immigrant descent, non-Muslim adolescents *M (SD)*	.48 (.50)	3.84 (1.27)	2.66 (0.89)	3.52 (0.99)	2.66 (0.87)	2.68 (0.76)	2.73 (0.90)
Second generation, Muslim adolescents *M (SD)*	.55 (.50)	2.67 (1.23)	2.62 (0.94)	3.41 (1.04)	2.78 (0.89)	3.31 (0.94)	2.65 (0.96)
MANOVA ($F_{(6, 653)} = 33.44$, $p < .001$, $\eta^2_{partial} = .24$) Post-hoc tests		$F_{(1, 653)} = 134.78$, $p < .001$, $\eta^2_{partial} = .17$	$F_{(1, 653)} = 0.12$, $p = .73$, $\eta^2_{partial} = .00$	$F_{(1, 653)} = 0.95$, $p = .33$, $\eta^2_{partial} = .00$	$F_{(1, 653)} = 2.76$, $p = .10$, $\eta^2_{partial} = .00$	$F_{(1, 653)} = 81.97$, $p < .001$, $\eta^2_{partial} = .11$	$F_{(1, 653)} = 1.37$, $p = .24$, $\eta^2_{partial} = .00$

Classroom level

	1.	2.	3.	4.	5.	6.	7.
1. School track (0 = Integrated Secondary School, 1 = Gymnasium)	—	-.48***	.04	.20	-.23	-.31*	.37**
2. Proportion of Muslim adolescents in a classroom	-.41**	—	.01	-.09	.13	.15	-.28*
3. Critical consciousness climate	-.05	.27	—	.45***	.58***	.03	.31*
4. Color-evasion climate	.19	-.08	.36*	—	.69***	-.24	.34**
5. Multiculturalism climate	-.22	.20	.61***	.70***	—	-.08	.25
6. Perceived societal Islamophobia	-.16	-.04	.09	-.08	.09	—	-.37**
7. Intended critical action	-.02	-.05	.42**	.30*	.38**	.03	—

Note. *p < .05. **p < .01. ***p < .001. N = 478 non-immigrant descent, non-Muslim adolescents in 62 classrooms and N = 237 second generation, Muslim adolescents in 51 classrooms. Correlations for non-immigrant descent, non-Muslim adolescents above diagonal, correlations for second generation, Muslim adolescents below diagonal.

TABLE 2
Final Multilevel Path Model

	Perceived societal Islamophobia			Intended critical action		
	B (SD)	95% CI	β	B (SD)	95% CI	β
Intercept	3.10*** (0.44)	2.24; 3.96	12.19***	1.14** (0.40)	0.37; 1.92	5.13*
Individual-level predictors						
Gender (0 = male, 1 = female)	0.07 (0.06)	−0.04; 0.18	0.05	0.12 (0.06)	0.00; 0.23	0.07
Number of books	−0.04 (0.02)	−0.09; 0.00	−0.07	0.10** (0.03)	0.04; 0.17	0.16**
Membership in stigmatized group (0 = non-immigrant descent non-Muslim, 1 = second generation Muslim)	0.43*** (0.08)	0.28; 0.58	0.25***	0.13 (0.10)	−0.08; 0.33	0.07
Critical consciousness climate	0.13** (0.04)	0.04; 0.21	0.14**	0.19*** (0.05)	0.10; 0.29	0.20***
Color-evasion climate	−0.07 (0.04)	−0.14; 0.01	−0.08	0.02 (0.04)	−0.07; 0.11	0.02
Multiculturalism climate	−0.02 (0.05)	−0.12; 0.09	−0.02	0.09 (0.05)	−0.01; 0.19	0.09
Classroom-level predictors						
School track (0 = Integrated Secondary School, 1 = Gymnasium)	−0.39** (0.12)	−0.61; −0.16	−0.67***	0.29*** (0.10)	0.10; 0.48	0.57**
Proportion of Muslim adolescents in a classroom	−0.05 (0.20)	−0.44; 0.34	−0.06	0.00 (0.20)	−0.40; 0.40	0.00
Aggregated critical consciousness climate	0.14 (0.18)	−0.20; 0.48	0.17	0.43** (0.17)	0.11; 0.76	0.60**
Aggregated color-evasion climate	−0.06 (0.16)	−0.38; 0.26	−0.09	0.01 (0.15)	−0.28; 0.30	0.02
Aggregated multiculturalism climate	−0.15 (0.18)	−0.51; 0.21	−0.23	0.06 (0.21)	−0.36; 0.47	0.10
R^2						
Individual level	.10**			.10***		
Classroom level	.43**			.77***		

Note. $N = 715$ adolescents in 66 classrooms and 17 schools. Model fit: $\chi^2/df = 2.73$**, CFI = .97, RMSEA = .05, SRMR$_{within}$ = .04, SRMR$_{between}$ = .01
*$p < .05$. **$p < .01$. ***$p < .001$.

individual level ($\beta = .11^{***}$, $p < .001$). Moreover, the negative association between a color-evasive climate and adolescents' recognition of societal Islamophobia remained significant in the final model. Full results are reported in Supplemental Materials D: Appendix S1.

DISCUSSION

Schools are important sites for the development of adolescent critical consciousness. We explored how classroom cultural diversity climate relates to adolescents' critical reflection (i.e., perceived Islamophobia) and intended critical action. To expand previous knowledge, we studied critical consciousness in a context where it has previously been understudied (Germany) and included three dimensions of the classroom cultural diversity climate (critical consciousness, color-evasion, multiculturalism), as well as their interactions. We accounted for individual and classroom-aggregated perceptions of the classroom cultural diversity climate and compared Muslim and non-Muslim adolescents. Our findings support literature showing that discussing social inequity at school is important for adolescents' critical consciousness (Bañales et al., 2019; Seider et al., 2018). They also raise a range of questions for future research, particularly concerning the conceptualization of critical consciousness among adolescents experiencing more privilege.

Classroom Cultural Diversity Climate and Adolescents' Critical Consciousness

Supporting Hypothesis 1, we found that individual perceptions of a critical consciousness climate were positively associated with adolescents' critical reflection and intended action. In contrast, perceptions of a color-evasive climate were (marginally) negatively associated with critical reflection and not associated with intended action. Thus, when adolescents report in-class discussions about systemic inequity they are more likely to report a recognition of societal Islamophobia, including that German media spreads fear of Muslims. They also have stronger intentions for critical action, for example, through taking part in demonstrations for political or social causes. This is not the case when adolescents report mainly being encouraged to focus on similarities across people from different backgrounds. This result is in line with Bañales et al. (2019), who found that a critical consciousness climate, but not a color-evasive climate,

predicted adolescents' anti-racism action. In contrast to their findings, we also found that a critical consciousness climate was associated with adolescents' critical reflection. Our use of a measure assessing recognition of one specific dimension of social inequity, Islamophobia, may explain these slightly differing findings. Broad measures of critical reflection, that is, asking whether different groups have "fewer chances to get ahead," may be rather abstract, especially for younger adolescents. Thus, while discussing social inequity at school may be associated with adolescents' perceptions of a highly salient, concrete form of inequity in this particular context (in this case, Islamophobia), it may not be associated with broader, more abstract perceptions of social inequity.

Moreover, we could show that beyond individual perceptions of the classroom climate, the classroom-aggregated critical consciousness climate was positively associated with adolescents' critical action intentions. Including the classroom-aggregated perceptions of the climate overcomes limitations of only relying on individual perceptions (e.g., being shaped by processes of projection, not being measured at the context level) and captures the intersubjective reality in a specific classroom (Schachner, Schwarzenthal et al., 2021). Our findings show that to some extent adolescents within one classroom agreed in their perception of the climate (marked by ICCs above .08). This shared perception may be because of teachers or particular groups of adolescents promoting discussions on social inequity in the classroom. Even more than the findings at the individual level, our findings at the classroom level support the idea that the classroom context matters for adolescents' critical consciousness.

Our findings can be situated within a larger body of critical consciousness scholarship that emphasizes the need to acknowledge and discuss the systemic nature of social inequities (Freire, 1970/2018; Watts et al., 2011). A mere focus on commonalities between different groups at school may neglect existing social inequity that affects the lives of all adolescents and especially those belonging to marginalized ethnic/racial/religious groups. Importantly, color-evasion was the approach that was most commonly perceived by the adolescents in our sample (Table 1), which is in line with other research in the German context (Civitillo et al., 2016). In Germany, the term "Rasse" (race) is strongly associated with the Holocaust and the racist ideologies of the Nazi era in which it was used as pseudo-scientific biological concept to

justify genocide. After World War II, the term was banned from daily and legal use and now is largely taboo. Against this background, many teachers may prefer to promote the idea that all humans are equal instead of highlighting group differences. However, a negative consequence of this development is that subtle, systemic, and other contemporary forms of racism are often ignored and not explicitly discussed (Juang et al., 2021). Our findings point to a need for schools in Germany to foster active discussions on contemporary social inequity. This also connects to arguments in social psychology highlighting that a mere focus on commonalities across social groups may not be enough to encourage individuals to recognize social inequities and work toward social change (Dovidio et al., 2016).

Our exploratory analyses revealed that a multiculturalism climate was largely unrelated to adolescents' critical reflection and intended action, even though it positively predicted critical action in robustness checks. Thus, there were few links between adolescents' reports of being encouraged to learn about their own or other heritage cultures at school and their critical reflection about societal Islamophobia or intentions for critical action. This result is in line with recent findings showing that communicating about group differences in power but not about group differences in culture, mediates the association between advantaged group members' contact with disadvantaged group members and their willingness to engage in collective action in solidarity with those who are disadvantaged (Tropp, Uluğ, & Uysal, 2021). It also lends support to critiques of multicultural approaches that focusing only on culture in educational contexts may ignore discrimination and inequity experienced by adolescents belonging to marginalized ethnic/racial/religious groups (Gorski, 2016; Sleeter, 2012). However, since a multiculturalism climate was positively associated with intended critical action in our robustness checks, multicultural approaches may have at least some potential to promote critical action. Along similar lines, a multicultural classroom climate was indirectly associated with increased prosocial behavior through ethnic identity exploration among Italian adolescents (Moscardino et al., 2019). Implications of multicultural approaches may depend on how they are implemented, for example, whether they are mainly implemented in a superficial way, which is often the case in German schools (Civitillo et al., 2016), or whether they encourage deeper understanding of the perspectives of different groups.

Hypothesis 2 was not supported, in that the association between a classroom climate of critical consciousness and adolescents' critical reflection and intended action was not moderated by a classroom climate of color-evasion. This does not support the assumption that color-evasion may create a sense of positive connection that frames unfair disparities as a threat to the larger group (Dovidio et al., 2016), and that thus a combination of color-evasion and critical consciousness climate may be conducive to critical consciousness. Potentially, different combinations of approaches may be relevant for different groups of students. For example, a combination of color-evasion (as in a focus on a common humanity) and critical consciousness climate may mainly affect more privileged students who do not feel close to marginalized groups. For these youth, discussions of social inequity may remain rather theoretical unless they identify and empathize with people who are disadvantaged by inequity. Another key aspect of critical consciousness education among more privileged youth may include promoting awareness that inequity fosters both oppression and privilege. Awareness of white privilege, for instance, has been examined as a necessary component of anti-racist identity development among white youth in the United States. (Moffitt, Rogers, & Dastrup, 2021). Thus, future research should explore how combinations of different approaches differentially affect different groups of students.

The lack of interaction effects does not preclude that a combination of different dimensions of the classroom cultural diversity climate may have the most beneficial effects overall. Color-evasion, as in highlighting commonalities, may promote social cohesion within a classroom. Multiculturalism may encourage perspective-taking and learning about different cultures (Schwarzenthal, Schachner, Juang, & van de Vijver, 2019). To acknowledge social inequity and strive for social change, a critical consciousness climate may be the most suitable approach. All three types of climate were positively associated with each other in our study, showing that they may go hand in hand. Thus, all three may contribute uniquely to achieve social cohesion, understanding of the perspectives of different groups, as well as social justice in diverse societies.

Critical Consciousness Among Muslim and non-Muslim Adolescents

We found that Muslim and non-Muslim adolescents did not differ in their critical action intentions

but that Muslim adolescents showed higher critical reflection. The similar levels of critical action intentions are in line with other studies in the German context that found no differences in political engagement between non-immigrant descent and Turkish-heritage adolescents (Jugert et al., 2018). This result is encouraging, as it shows that despite the inequities they are facing, adolescents from highly stigmatized groups show high intentions to actively engage and contribute to change in society. The different levels of critical reflection that we observed are in line with theoretical expectations and some previous research (Godfrey & Grayman, 2014). Adolescents belonging to stigmatized groups are often more aware of their minoritized identities and experience more discrimination, both of which can stimulate critical consciousness development (Mathews et al., 2019; Tyler et al., 2020). The fact that other studies did not find group differences in critical reflection (Bañales et al., 2019; Diemer et al., 2019) may be explained by their use of measures capturing rather broad perceptions of social inequity, while our measure assessed a very specific type of social inequity (Islamophobia) among two groups of adolescents that are either directly (Muslims) or not directly (non-Muslims) negatively affected by this inequity.

Although the group difference we found is in line with theoretical expectations, it may also point to differential functioning of the perceived societal Islamophobia measure (Kunst et al., 2013) across groups. The measure we used did not show scalar measurement invariance across the two groups of adolescents. While this may also be a statistical artifact (Welzel et al., 2021), correlation patterns suggest that the measure indeed functioned slightly differently among Muslim versus non-Muslim adolescents. Among Muslim adolescents, critical reflection was unrelated with intended critical action, while among non-Muslim adolescents, higher critical reflection went along with lower intentions for critical action. Associations between critical reflection and action have also been inconsistent in previous research (Heberle et al., 2020). However, in our case, the negative association in the group of non-Muslim adolescents may also indicate that even when they perceive that Muslims are being portrayed negatively in the media, this does not automatically imply that they disagree with this portrayal. As more privileged adolescents do not develop critical consciousness about their own oppression, but about the oppression of others and about their own privilege (Diemer et al., 2016), fully capturing critical consciousness among these

populations may require additional, or alternative, measures, such as measures capturing solidarity or perceptions of one's own privilege.

In exploratory analyses, we found that the associations between the classroom cultural diversity climate and adolescents' critical consciousness did not vary across Muslim versus non-Muslim adolescents. This is in line with previous research that has identified similar associations between the cultural diversity climate and students' intercultural competence among adolescents with and without a family history of immigration (Schwarzenthal et al., 2019). As creating more equitable societies should not only rest on the shoulders of groups experiencing marginalization, it is particularly important that a critical consciousness climate was similarly associated with critical reflection and intended action among Muslim and non-Muslim adolescents.

Limitations and Suggestions for Future Research

There are some limitations of the study. Our dataset was cross-sectional, thus we cannot make any claims about causality or development. Based on theoretical considerations, we assumed that the classroom cultural diversity climate would affect adolescents' critical reflection and intended action, but opposite directionality is possible. For example, adolescents with higher critical reflection may be more open and receptive to teachers discussing social inequity in class and thus perceive a stronger critical consciousness climate. Moreover, these processes may look different among younger versus older adolescents based on sociocognitive development.

The data for this study were collected before most of the recently developed critical consciousness scales (such as Diemer, Rapa, Park, & Perry, 2017) were published. Thus, we employed proxy measures of critical reflection and action, which is a common practice in critical consciousness research (Heberle et al., 2020). The items we used bear many similarities to the critical consciousness scale developed by Diemer et al. (2017) (for the full list of items, see Supplemental Materials A: Appendix S1), with our critical reflection scale capturing recognition of one specific type of social inequity (Islamophobia), which is highly salient in the German context. However, similar to the Diemer et al. (2017) scale, our critical action scale captures rather broad political behaviors, which may not necessarily be aimed at addressing social inequity.

Future research should employ alternative measures and include different groups of students to confirm our findings. For example, future research should use more specific scales capturing critical action by focusing, for example, on anti-racism action (as in Bañales et al., 2019). Additionally, the role that critical motivation plays for the association between the classroom cultural diversity climate and adolescents' critical consciousness should be explored. Moreover, future research could capture how discussing social inequity at school is associated with adolescents' perceptions of different types of social inequity (e.g., racism, sexism, and classism), as well as their intersections, and how these perceptions may vary across youth experiencing different intersections of marginalization and privilege (e.g., with regards to ethnicity/ race, gender, social class) (Moffitt, Juang, & Syed, 2020). This would also entail investigating important within-group heterogeneity within the groups of Muslim versus non-Muslim adolescents, which we did not explore in our study. This could include, for instance, differential expressions of critical consciousness among female and male Muslims, which may result from different stereotypes and expressions of Islamophobia faced by female and male Muslims.

Conclusion and Implications

Our findings show that a critical consciousness classroom climate, but not a color-evasive climate or a multicultural climate, are positively associated with critical reflection and intended action among Muslim adolescents and non-Muslim adolescents. These findings suggest that to encourage adolescents to address social inequity, schools may need to look beyond approaches of emphasizing a common humanity and celebrating cultural diversity, and explicitly discuss societal inequity. Understanding how adolescents' critical consciousness can be promoted at school can contribute to improving the lives of adolescents in at least two ways: (1) Recognition that systemic factors contribute to marginalization may prevent adolescents experiencing marginalization from locating deficits within themselves and instead encourage them to challenge oppressive systems. This may contribute to positive adjustment, as researchers found that critical consciousness was positively related to academic engagement and achievement, higher levels of enrolment in higher education, and initiation of social change efforts among adolescents experiencing marginalization (for a review, see Heberle

et al., 2020). (2) Among adolescents from both marginalized and privileged groups, critical consciousness may encourage active engagement in social change efforts that may contribute to a more equitable society for everyone.

The importance of discussing social inequity at school is highlighted even more by recent developments in Germany and worldwide that have taken place since the data for the present study were collected in 2016. During this time, Germany has experienced an increase in hate crimes, including an attack on a Jewish synagogue in Halle in 2019, killing of politicians who support refugees and immigration, and a mass shooting of people of immigrant descent in Hanau in 2020. Along with the killing of unarmed Black individuals in the United States, these events have inspired nationwide protests against racism and discrimination all around Germany (Tagesschau, 2020). These developments demonstrate the urgency of addressing social inequity and of preventing its harmful consequences on the lives of adolescents and adults worldwide.

Despite the importance of addressing social inequity at school, many teachers, the majority of whom tend to belong to the ethnic/racial/religious majority, avoid addressing issues such as social inequity or power relations in class (Sincer, Severiens, & Volman, 2019). For teachers to foster their students' critical consciousness, teachers first need to develop this critical consciousness themselves. Research in teacher education has identified several aspects that may contribute to this goal, such as facilitated class discussions and experiential learning opportunities (Bradley-Levine, 2012). Moreover, youth organizations, which often have a longer tradition of focusing on social inequity, could be involved in efforts to promote adolescents' critical consciousness at school (Bañales et al., 2019). If through these measures students can be encouraged to reflect on social inequity in the classroom, schools have the potential to make a significant contribution to creating more cohesive and equitable societies.

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Supporting Information

Additional supporting information may be found online in the Supporting Information section at the end of the article.

Appendix S1. Items, measurement invariance tests, intraclass correlations, and robustness check