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EMPIRICAL RESEARCH

Contextual Influence of School-Level Gender Role Attitudes and Sexual Prejudice on Allyship, Bullying, and Internalized Homonegativity

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Abstract
Previous studies have primarily used an individual differences approach to identify dispositional factors associated with bullying behavior, which often neglect the broader school context in which bullying occurs. The present study used a multilevel research design to examine the contextual influence of school normative climate on allyship, bullying, and internalized homonegativity. The study included 3020 students ($M = 15.83$ years, SD = 1.50) from ten secondary schools in China. The results showed that school-level gender role attitudes were positively associated with bullying perpetration among heterosexual students as well as bullying victimization and internalized homonegativity among LGBQA+ students. In addition, there was a negative association between school-level sexual prejudice and allyship among heterosexual students. The findings demonstrate the contextual influence of school normative climate and highlight the need for regular school climate assessments, so that appropriate instructions, policies, and practices can be implemented to address gender biases and homophobia and the resulting bullying behavior.

Keywords School normative climate · Gender role attitudes · Sexual prejudice · Bullying · Internalized homonegativity · Allyship

Introduction

Access to an equitable education is a fundamental human right, but recent studies have increasingly revealed that not every student has an equal chance for success (Kosciw et al., 2020). Particularly, lesbian, gay, bisexual, queer, questioning, asexual, and other non-heterosexual identifying (LGBQA+) students are often subjected to rejection and bullying in schools as a result of their sexual orientation and gender identity/expression (SOGIE) (Collier et al., 2013; Goldbach & Gibbs, 2017). Although previous studies identified individual attitudes as predictors of engaging in bullying behavior toward LGBQA+ students, they primarily adopted an individual differences approach to examine how personal endorsement of gender role attitudes and sexual prejudice contributes to bullying perpetration (Gereš et al., 2021; Orue & Calvete, 2018). Limited research has considered the school context in which SOGIE-based bullying occurs. To fill this important research gap, the present study estimated the contextual influence of school normative climate regarding gender roles and sexual prejudice and examined the extent to which the school context accounts for SOGIE-based bullying perpetration and allyship among heterosexual students and SOGIE-based bullying victimization and internalized homonegativity among LGBQA+ students.

Minority Stress Experiences during Adolescence

LGBQA+ individuals often begin to have intense experiences of minority stress in adolescence once they navigate their sexual identity (Goldbach & Gibbs, 2017). Such stressors are categorized according to a distal–proximal distinction, whereby objective prejudiced events and environmental conditions (e.g., violence, victimization, and discrimination) constitute distal stressors, while negative subjective perceptions and appraisals of sexual minority

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status (e.g., internalized homonegativity, sexual orientation concealment) constitute proximal stressors (Herek, 2007; Meyer, 2003).

Nonetheless, it is important to note that the minority stress experienced by LGBQA+ youth is likely to be different from that experienced by adults, and specific aspects of identity development processes in adolescence should be considered (Goldbach & Gibbs, 2017). First, adolescence is a critical life stage where youth start to explore their sexual identity and become aware of their sexual attraction. To figure out their sexual identity, they may experiment with a range of identity labels, which may be in and of itself a proximal stressor (Goldbach & Gibbs, 2017). Given their increased susceptibility to peer influence (Eder & Nenga, 2003), LGBQA+ youth are likely to accept negative attitudes toward their sexual minority status and develop internalized homonegativity (Mak & Cheung, 2010). Second, bullying victimization at school is a form of distal stress that is unique to adolescents, which may be further exacerbated by the lack of control adolescents have over their environment compared to adults (e.g., the legal requirement to attend school) (Kosciw et al., 2020). They are subject to various forms of bullying victimization based on their actual or perceived sexual orientation, including physical victimization, verbal victimization, social victimization (e.g., rumor spreading, being excluded from groups), and sexual victimization (e.g., sexual harassment, sexual assault, being raped) (Collier et al., 2013). These distal and proximal stressors may be particularly damaging for sexual minority youth, as their ability to achieve typical developmental milestones during adolescence may be hindered, which may lead to adverse outcomes in adulthood (Radkowsky & Siegel, 1997).

Gender role attitudes and sexual prejudice are factors contributing to distal stressors such as bullying in adolescence (Orue & Calvete, 2018; Valido et al., 2021). Gender role attitudes are widely held expectations concerning traits, behaviors, and responsibilities appropriate for men and women (Eagly, 1987), whereas sexual prejudice is negative attitudes and stereotypes directed toward sexual minorities (Herek, 2007). Personal endorsement of traditional gender role attitudes and sexual prejudice has been shown to be associated with traditional school bullying (Gereš et al., 2021) and homophobic bullying (Orue & Calvete, 2018; Valido et al., 2021). As sexual prejudice and traditional masculine ideologies establish and legitimize heterosexuality as the norm for sexual/social relations, individuals who endorse these ideologies are more inclined to engage in homophobic behavior. While previous studies have identified gender role attitudes and sexual prejudice as dispositional factors associated with bullying behavior toward LGBQA+ youth, such an individual differences approach ignores the school context in which bullying unfolds.

School Normative Climate of Gender Roles and Sexual Prejudice

Schools provide a social context in which norms for group-oriented attitudes and behaviors are established and maintained (Eder & Nenga, 2003). They are a primary place where socialization occurs, and youth learn and internalize the values, beliefs, and norms of society (Mollborn et al., 2014). School normative climate is reflected in the beliefs and attitudes shared by students in the school (Butler, 2005). It is the aggregate norms that exist independent of and apart from individual attitudes held by each student in the school (Warner et al., 2011). As school normative climate represents the collective perception of what is commonly approved or disapproved within the school, it may affect students' value systems and influence their behavior. The normative climate of schools may be particularly relevant in adolescence because youth spend the majority of their time in schools and are strongly influenced by the attitudes of their peers within their school environment (Poteat, 2007). They are likely to engage in a behavior when embedded in a school context in which their peers hold attitudes favorable toward the behavior (Prati, 2012).

Contextual influence of school normative climate on heterosexual students

Previous research has revealed the process by which students are influenced by their social context and internalize group norms to engage in SOGIE-based bullying perpetration (Poteat, 2008). Specifically, Birkett and Espelage (2015) found that students in peer groups with high traditional masculinity attitudes reported higher levels of homophobic name-calling. Similarly, peer-group-level homophobic attitudes and behavior predicted individual homophobic attitudes and behavior over time, even after controlling for initial individual attitudes and behavior (Poteat, 2007). Prati (2012) also found that class-level sexual prejudice toward gay men was associated with student engagement in homophobic aggression toward schoolmates perceived as gay. In addition, Poteat (2008) found that homophobic peer group social climate moderated individuals' engagement in homophobic banter, such that being called a homophobic epithet was more strongly associated with calling others these epithets for individuals in more homophobic peer groups. Taken together, this line of research suggests that peer context has a potent influence on homophobic behavior.

Although schools are composed of smaller peer networks, it is important to note that peer group norms are not equivalent to the school normative climate as they may conform or conflict with the overarching normative context in schools (Mollborn et al., 2014). Schools remain a

significant component of students' norm reference systems and play a fundamental role in socializing and influencing students (Bao et al., 2015). School normative climate serves as a reference point to gauge their interaction with other students and provides validation or disapproval of bullying behavior (Eder & Nenga, 2003). Current research is limited in that very few studies have directly examined specific characteristics of the broader school environment that influence SOGIE-based bullying perpetration. Therefore, it is essential to move beyond the individual differences approach to investigate how school normative climate accounts for or moderates the perpetration of bullying against LGBQA+ students.

While homophobic bullying is an overtly hostile act, a more subtle manifestation of stigma is the absence of allyship (Goldstein & Davis, 2010; Grzanka et al., 2015). Allyship is the use of one's privileged position to actively support and advocate for people of oppressed groups (Goodman & Moradi, 2008). Previous research found that heterosexual individuals with lower levels of traditional gender role attitudes and sexual prejudice were more inclined to engage in allyship for sexual minorities (Fingerhut, 2011; Goodman & Moradi, 2008). However, there has been limited research considering the influence of school climate on allyship. Only one study found that heterosexual college students were more likely to sign lesbian, gay, bisexual, and transgender (LGBT) petitions if they perceived their campus as supportive of sexual diversity (Swank et al., 2013).

Contextual influence of school normative climate on LGBQA+ students

Prior research has presented solid empirical evidence indicating that the experience of a hostile school climate is pervasive among LGBQA+ students (Collier et al., 2013; Wang et al., 2020). The 2019 National School Climate Survey found that 60% of sexual minority students felt unsafe at school due to their sexual orientation (Kosciw et al., 2020). The widespread unacceptance and hostility in schools often escalate into bullying, as the study also indicated that over a quarter of respondents experienced physical harassment on the basis of sexual orientation, while nearly all heard homophobic remarks and slurs in school (Kosciw et al., 2020).

Bullying victimization experienced by LGBQA+ students may be influenced by various aspects of school climate, including the presence of gay–straight alliances (GSAs) (Marx & Kettrey, 2016), anti-bullying policies (Day et al., 2020), and the display of content specific to sexual orientation (e.g., bulletin boards, posters) (Gower et al., 2018). Specifically, greater school commitment to gender equality and intolerance of sexual harassment were associated with fewer experiences of homophobic name-calling (Rinehart & Espelage, 2016). This line of research suggests that the experiences of bullying victimization are not only explained by individual prejudice but also governed by collective prejudice within a social environment. Nevertheless, most of these studies assessed school climate by measuring the availability of supportive school practices (e.g., the presence of GSAs and anti-bullying policies) (Day et al., 2020; Gower et al., 2018; Marx & Kettrey, 2016) or assessing LGBQA+ students' perception of staff and peer support (Rinehart & Espelage, 2016). These measures only serve as a proxy for school acceptance of sexual and gender diversity, but do not accurately reflect the shared beliefs, values, and attitudes about gender and sexuality in schools. Attention to the general atmosphere in the school environment and differences among schools may yield a better understanding of the school context in which LGBQA+ students are victimized.

As a proximal minority stressor, internalized homonegativity also may be influenced by acceptance in the environment (Herek, 2007; Meyer, 2003). Internalized homonegativity often stems from negative perceptions and stereotypes about homosexuality that permeate mainstream society (Shidlo, 1994). Prior research has shown that higher levels of internalized homonegativity are associated with perceived stigma from family and peers (Lin et al., 2022) and society (Liu et al., 2021). In addition, sexual minority students were likely to report higher levels of internalized homophobia in college with lower levels of acceptance (as indicated by the absence of GSAs or similar groups) (Heiden-Rootes et al., 2020). However, most of these studies measured perceived acceptance in the environment rather than actual attitudes reported by other people in their environment, and very few have attempted to understand how school environments affect both distal and proximal stressors experienced by LGBQA+ students.

School climate for LGBQA+ students in China

Traditional gender roles and sexual prejudice are deeply embedded in Chinese culture. Under the influence of Confucianism and patriarchy, Chinese men and women are ascribed strict gender roles (Yu & Xie, 2010). Historically, women were taught to follow a set of basic moral principles, namely, the three obediences (i.e., obeying their father, husband, and son) and four virtues (i.e., morality, proper speech, modest manner, and diligent work) (Gao, 2003). Although these Confucian doctrines regarding male domination and female subordination have been gradually weakening following China's economic reform and opening up, traditional gender role attitudes continue to linger among Chinese adolescents (Wu et al., 2021). In addition,

Confucianism stresses the value of filial piety, where adult children are responsible for continuing the family line through procreation to show respect to their parents and honor the family name. As such, Chinese youth who are not heterosexual may be seen as directly contradicting this value and be subject to prejudice and stigmatization (Higgins et al., 2002).

Although there has been limited research on the school experiences of LGBQA+ students in China, the extant literature provides evidence that schools are not inclusive toward this group of students. LGBQA+ students are more likely to experience victimization at schools in China than their heterosexual peers (Wang et al., 2020). In a study examining the school experiences of sexual minority students in China (Wei & Liu, 2019), inclusive school resources (e.g., anti-homophobic bullying policies, support groups) were found to be severely lacking. Moreover, there is an absence of comprehensive sexuality education, which often incorporates themes of gender equality and violence prevention, due to the Chinese culture of not openly discussing sexuality issues (Sa et al., 2021). Even when put into practice, sexuality education often neglects important topics such as sexual and gender diversity but instead focuses on puberty, abstinence, and HIV prevention (Sa et al., 2021). Therefore, LGBQA+ students often feel that they cannot authentically be themselves and are not given the same amount of respect as their peers (Wei & Liu, 2019).

In addition, Chinese culture is characterized by collectivistic values, which prioritize group interests over individual interests. To maintain social order and harmony, Chinese people are often socialized to adhere to their socially assigned roles and identities and pressured to conform to traditional norms and rules (Yu & Xie, 2010). Such collectivistic values are entrenched in schools and impact the interaction between heterosexual and LGBQA + students in at least two ways. First, school norms and climate in China have a strong influence on individuals' behaviors, leading some students to adjust their behaviors to gain group acceptance and avoid social ostracism (Bao et al., 2015). Thus, there may be greater consideration of school normative climate than individual attitudes when making decisions to support or stigmatize LGBQA+ peers. Second, the emphasis on collectivistic values implies lower tolerance for deviance from gender roles and norms, which may create grounds for rejection and victimization (Smith & Robinson, 2019). This may be the case for Chinese LGBQA + students as they transgress the heteronormative boundaries in a highly collectivistic culture (Sun et al., 2021; Wei & Liu, 2019). Nevertheless, the majority of the studies on SOGIE-based bullying have been conducted in the West, whereas the school experiences of LGBQA+ students in other parts of the world have received very limited attention to date. Growing up in a collectivistic culture, Chinese students may be more prone to the influence of the climate and norms of the school environment than their counterparts in the United States and Europe (Smith & Robinson, 2019). It is therefore intriguing to consider how the school experiences and interactions of heterosexual and LGBQA+ students in China are shaped by their school normative climate.

Current Study

While previous studies identified gender role attitudes and sexual prejudice as motivations for engaging in bullying behavior toward LGBQA+ students (Gereš et al., 2021; Orue & Calvete, 2018), they were largely based on an individual differences approach, and limited attention has been given to the school context in which SOGIE-based bullying takes place. Moreover, the empirical literature on bullying has often relied on a single source of information to understand SOGIE-based bullying from either the perpetrator's (Birkett & Espelage, 2015; Poteat, 2007; Prati, 2012) or the victim's (Day et al., 2020; Kosciw et al., 2020) perspective, which fails to provide a comprehensive account of the incidence of bullying in schools. The current study aimed to (1) investigate the influence of individual attitudes and school normative climate on SOGIE-based bullying perpetration and allyship among heterosexual students, (2) examine the influence of school normative climate on SOGIE-based bullying victimization and internalized homonegativity among LGBQA+ students, and (3) determine whether school normative climate moderates the associations of individual attitudes with allyship, SOGIE-based bullying perpetration, and internalized homonegativity. Specifically, it was hypothesized that student-level gender role attitudes and sexual prejudice would be positively associated with SOGIE-based bullying perpetration and negatively associated with allyship among heterosexual students (Hypothesis 1). Given the strong influence of school normative climate on individual students in the collectivistic Chinese culture (Bao et al., 2015; Smith & Robinson, 2019), it was hypothesized that school-level gender role attitudes and sexual prejudice would be positively associated with SOGIE-based bullying perpetration and negatively associated with allyship among heterosexual students, above and beyond student-level gender role attitudes and sexual prejudice (Hypothesis 2). Similarly, it was hypothesized that school-level gender role attitudes and sexual prejudice would be positively associated with SOGIE-based bullying victimization and internalized homonegativity among LGBQA+ students (Hypothesis 3). In addition, it was hypothesized that school-level gender role attitudes and sexual prejudice would

moderate the associations of student-level gender role attitudes and sexual prejudice with SOGIE-based bullying perpetration, allyship, and internalized homonegativity (Hypothesis 4).

Methods

Study Design

This study was part of a larger research project on the school experiences of sexual minority students in China. Participant recruitment was conducted in ten secondary schools. The ten schools were selected using purposive sampling, so that the sample obtained would maximize diversity in terms of age, educational background, and urbanicity. Eight of the ten schools were regular public schools, whereas the other two were key public schools. Nine of the ten schools were general secondary schools, while the remaining school was a vocational secondary school. Three schools were located in cities, six schools were located in towns, and one school was located in a rural area. The number of students in each school ranged from 400 to 5000 students, with an average of 1980 students in each school. The students were asked to provide informed consent before being enrolled in the study. The participants who consented to the study were instructed to complete an online or paper-and-pencil questionnaire on their school experiences. It took approximately 30 min to complete the questionnaire. Those who did not consent to the study were asked to work on another task assigned by their teachers. All study procedures and materials were approved by the Human Research Ethics Committee of the corresponding author's institution.

Participants

A total of 3649 students were approached to participate in the study, and 3370 of them consented (92.4%). Of those invited to the study, 3020 completed the questionnaire, yielding an overall response rate of 82.8%. Most participants identified as heterosexual (73.3%, $n = 2212$), and 26.7% ($n = 805$) identified as LGBQA+. Among the heterosexual sample, 56.4% of the participants were assigned male at birth, and 43.5% were assigned female at birth. Their mean age was 15.83 years (SD = 1.50). The majority of the participants were Han Chinese (97.1%), and 2.8% were ethnic minorities. Among the LGBQA+ sample, approximately two-thirds of the participants (62.2%) were assigned female at birth, and approximately one-third (37.4%) were assigned male at birth. Their mean age was 15.34 years (SD = 1.63). Most were Han Chinese (97.1%), and 2.6% were ethnic minorities.

Measures

All participants were required to complete measures on demographics, gender role attitudes, and sexual prejudice. They were asked about their sex assigned at birth using the following response options: male, female, and other. Sexual orientation was assessed by asking participants whether they would describe themselves as heterosexual, gay/lesbian, bisexual, asexual, questioning, or other. The responses were recoded into two groups: heterosexual students and LGBQA+ students. The participants who identified as heterosexual were required to respond to questions on SOGIE-based bullying perpetration and allyship, whereas the participants who identified as LGBQA+ were asked to report their experiences of SOGIE-based bullying victimization and internalized homonegativity.

Gender role attitudes

The Gender Role Attitudes Scale (Lee, 2004) consists of 30 items measuring views and expectations regarding roles, responsibilities, and behaviors appropriate for men and women. Sample items include "After marriage, a wife should focus on the family" and "In romantic relationships, men should have higher incomes than women." The items were rated on a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). The scale was developed in Chinese and validated among Chinese populations (Lee, 2004). The Cronbach's alpha of the scale was 0.94 for the entire sample in the present study.

Sexual prejudice

The short version of the Attitudes Toward Lesbians and Gay Men Scale (Herek, 1998) consists of 10 items measuring sexual prejudice. Sample items include "Female homosexuality is a threat to many of our basic social institutions" and "Male homosexuality is a natural expression of sexuality in men" (reverse scored). The items were rated on a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). The scale was translated into Chinese and showed good psychometric properties in a sample of Chinese students (Wu & Kwok, 2012). The Cronbach's alpha of the scale was 0.87 for the entire sample in the present study.

SOGIE-based bullying perpetration

Heterosexual students were asked to respond to nine items about SOGIE-based bullying perpetration that were adapted from a measure of school victimization among sexual minority individuals in China (United Nations Development Programme, 2016). A sample item includes "physical

violence, such as hitting, kicking or pushing others." The items were rated on a 5-point Likert scale ranging from 1 (never) to 5 (always). Higher scores indicate higher levels of SOGIE-based bullying perpetration. The items of the scale were developed in Chinese (United Nations Development Programme, 2016). The Cronbach's alpha of the scale was 0.94 for the heterosexual sample in the present study.

Allyship

The 3-item private collective action subscale from the LGBT Collective Action Scale (Chan & Mak, 2021) was used to measure allyship among heterosexual students. Sample items include "Correct people when they use heterosexist language" and "Discuss LGBT issues with family and/or friends to raise their awareness of LGBT rights." The items were rated on a 5-point Likert scale ranging from 1 (never) to 5 (frequently). Higher scores indicate more frequent engagement in allyship. The items were developed in Chinese and showed good psychometric properties among Chinese populations (Chan & Mak, 2021). The Cronbach's alpha of the scale was 0.82 for the heterosexual sample in the present study.

SOGIE-based bullying victimization

LGBQA+ students were asked to respond to six items about SOGIE-based bullying victimization that were adapted from a measure of school victimization among sexual minority individuals in China (United Nations Development Programme, 2016). A sample item includes "being reminded to watch the way in which they speak or dress." The items were rated on a 5-point Likert scale ranging from 1 (never) to 5 (always). Higher scores indicate higher levels of SOGIE-based bullying victimization. The items of the scale were developed in Chinese (United Nations Development Programme, 2016). The Cronbach's alpha of the scale was 0.90 for the LGBQA+ sample in the present study.

Internalized homonegativity

LGBTQA+ students were also asked to complete the 3-item internalized homonegativity subscale from the Lesbian, Gay, and Bisexual Identity Scale (Mohr & Kendra, 2011). A sample item includes "If it were possible, I would choose to be straight." The items were rated on a 6-point Likert scale ranging from 1 (strongly disagree) to 6 (strongly agree). Higher scores indicate higher levels of internalized homonegativity. The items were translated into Chinese and showed good internal consistency in a sample of sexual minorities in Hong Kong (Chan et al., 2022). The Cronbach's alpha of the scale was 0.73 for the LGBQA+ sample in the present study.

Data Analysis

Prior to testing the multilevel model, missing data were checked, and skewness and kurtosis were calculated to evaluate the normality of the major variables. Less than 0.01% of data were missing at the item level. The measures of SOGIE-based bullying perpetration and SOGIE-based bullying victimization were positively skewed (>3.0; Weston & Gore, 2006) and were therefore log-transformed to reduce skewness before the main analyses. As students were nested within schools, the size of the design effect (*deff*) was estimated based on the intraclass correlation coefficients (ICC). A *deff* value larger than two indicates the necessity for accounting for clustered structure in the data and using multilevel modeling (Muthén & Satorra, 1995).

After examining the size of the design effect, centering and aggregation approaches were used to compute the individual- and school-level variables. To differentiate the variances of student-level and school-level gender role attitudes and sexual prejudice, group-mean centering and aggregation were used to calculate the student-reported scores of gender role attitudes and sexual prejudice into Level 1 (student-level gender role attitudes and student-level sexual prejudice) and Level 2 variables (school-level gender role attitudes and school-level sexual prejudice), respectively. Following the recommendation by Yaremych et al. (2021), student-level covariates (i.e., sex assigned at birth, ethnicity, and age) also were group-mean centered to isolate and control for their within-cluster effects.

To estimate student- and school-level effects of gender role attitudes and sexual prejudice on heterosexual students' SOGIE-based bullying perpetration and allyship and LGBQA+ students' SOGIE-based bullying victimization and internalized homonegativity, three steps of multilevel models were conducted. Model 1 is an unconditional model with SOGIE-based bullying perpetration, allyship, SOGIE-based bullying victimization, and internalized homonegativity as outcome variables to estimate the ICC, which represents the proportion of variance in these variables explained at both the student and school levels. The ICC also can be used to calculate the design effect. Demographic variables (i.e., sex assigned at birth, ethnicity, and age) and student-level gender role attitudes and sexual prejudice were included in Model 2 concurrently. School-level gender role attitudes and sexual prejudice were added in Model 3 to examine their effects on the outcome variables. Multilevel modeling was conducted using the maximum likelihood parameter estimation with standard errors (MLR). Model fit was assessed by comparing the −2 log likelihood (−2LL) values of each model when adding new predictors, with smaller values indicating a better

Table 1 Descriptive statistics and correlations of major variables among heterosexual and LGBQA+ students

	M	SD	1	2	3	4
Heterosexual students						
1. Gender role attitudes	2.30	0.59	–			
2. Sexual prejudice	2.15	0.78	0.57***	–		
3. SOGIE-based bullying perpetration	0.08	0.12	0.33***	0.30***	–	
4. Allyship	2.12	1.17	−0.19***	−0.27***	0.15***	–
LGBQA+ students						
1. Gender role attitudes	2.14	0.65	–			
2. Sexual prejudice	1.85	0.77	0.67***	–		
3. SOGIE-based bullying victimization	0.09	0.14	0.37***	0.30***	–	
4. Internalized homonegativity	2.96	1.16	0.22***	0.20***	0.17***	–

***$p < 0.001$

Table 2 Parameter estimates of multilevel main effects and cross-level interaction effects for SOGIE-based bullying perpetration among heterosexual students

	Parameter estimate (SE)				
	M1	M2	M3	M4a	M4b
Intercepts	0.07 (0.01)	0.07 (0.01)	−0.33 (0.11)	−0.33 (0.11)	−0.32 (0.11)
Demographic variables					
Sex assigned at birth		0.02 (0.01)**	0.02 (0.01)**	0.02 (0.01)**	0.02 (0.01)**
Ethnicity		−0.01 (0.01)	−0.01 (0.01)	−0.01 (0.01)	−0.01 (0.01)
Age		0.01 (0.003)**	0.01 (0.003)**	0.01 (0.003)*	0.01 (0.003)*
Individual attitudes					
Student-level gender role attitudes		0.04 (0.01)***	0.04 (0.01)***	−0.10 (0.11)	0.04 (0.01)***
Student-level sexual prejudice		0.03 (0.004)***	0.03 (0.004)***	0.03 (0.004)***	−0.04 (0.05)
School normative climate					
School-level gender role attitudes			0.31 (0.10)*	0.30 (0.10)*	0.30 (0.10)*
School-level sexual prejudice			−0.14 (0.07)	−0.14 (0.07)	−0.13 (0.07)
Cross-level interactions					
Student-level gender role attitudes × School-level gender role attitudes				0.06 (0.05)	
Student-level sexual prejudice × School-level sexual prejudice					0.03 (0.02)
R^2 at level 1 (within schools)		0.11	0.14	0.15	0.15
R^2 at level 2 (between schools)		−0.08	0.52	0.52	0.53

*$p < 0.05$; **$p < 0.01$; ***$p < 0.001$

fitting model. The proportions of variance explained at the student and school levels (R^2) were calculated using the formula by Snijders and Bosker (1999). All analyses were conducted using SPSS 28.0.

To examine whether school normative climate moderates the effects of individual attitudes on SOGIE-based bullying perpetration, allyship, and internalized homonegativity, cross-level interaction terms were included and tested in the following models: student-level gender role attitudes × school-level gender role attitudes (Model 4a) and student-level sexual prejudice × school-level sexual prejudice (Model 4b). The moderating effect of school normative climate on SOGIE-based bullying victimization was not estimated because it was not expected that school normative climate would moderate the effects of individual attitudes on bullying victimization among LGBQA+ students. The significant interaction was probed by estimating simple slopes for the effects of individual attitudes (i.e., student-level gender role attitudes and student-level sexual prejudice) at low, medium, and high levels of school normative climate (i.e., school-level gender role attitudes and school-level sexual prejudice). Simple slopes analysis was conducted using the simple slopes calculator by Preacher et al. (2006), which considers the nested nature of the data.

Table 3 Parameter estimates of multilevel main effects and cross-level interaction effects for allyship among heterosexual students

	Parameter estimate (SE)				
	M1	M2	M3	M4a	M4b
Intercepts	2.10 (0.06)	2.12 (0.07)	3.39 (0.59)	3.54 (0.59)	3.53 (0.60)
Demographic variables					
Sex assigned at birth		−0.03 (0.06)	−0.02 (0.06)	−0.02 (0.05)	−0.03 (0.05)
Ethnicity		−0.25 (0.15)	−0.25 (0.15)	−0.25 (0.14)	−0.27 (0.14)
Age		0.06 (0.03)*	0.06 (0.03)*	0.07 (0.03)*	0.06 (0.03)*
Individual attitudes					
Student-level gender role attitudes		−0.08 (0.05)	−0.09 (0.05)	−2.76 (0.60)**	−0.09 (0.05)
Student-level sexual prejudice		−0.34 (0.04)***	−0.34 (0.04)***	−0.34 (0.04)***	−1.41 (0.31)***
School normative climate					
School-level gender role attitudes			0.62 (0.61)	0.52 (0.62)	0.50 (0.62)
School-level sexual prejudice			−1.28 (0.46)*	−1.24 (0.46)*	−1.22 (0.46)*
Cross-level interactions					
Student-level gender role attitudes × School-level gender role attitudes				1.19 (0.26)**	
Student-level sexual prejudice × School-level sexual prejudice					0.52 (0.15)***
R^2 at level 1 (within schools)		0.06	0.09	0.09	0.09
R^2 at level 2 (between schools)		−0.15	0.66	0.66	0.65

*$p < 0.05$; **$p < 0.01$; ***$p < 0.001$

Results

The means, standard deviations, and intercorrelations of the major variables are summarized in Table 1. For the heterosexual sample, gender role attitudes and sexual prejudice were positively correlated with SOGIE-based bullying perpetration (*r*s ranged from 0.30 to 0.33, *p*s < 0.001) and negatively correlated with allyship (*r*s ranged from −0.19 to −0.27, *p*s < 0.001). For the LGBQA+ sample, all variables were positively correlated with each other (*r*s ranged from 0.17 to 0.67, *p*s < 0.001). Regression analyses also showed that there were no multicollinearity issues between the group-mean centered scores of gender role attitudes and sexual prejudice for the heterosexual sample (VIF = 1.45) and the LGBQA+ sample (VIF = 1.59).

The calculated ICC values based on the unconditional model indicated that 4.07% of the variance in SOGIE-based bullying perpetration, 2.30% of the variance in allyship, 5.31% of the variance in SOGIE-based bullying victimization, and 3.10% of the variance in internalized homonegativity could be explained by factors at the school level. Based on these ICC values, the design effect was 9.95 for SOGIE-based bullying perpetration, 6.07 for allyship, 5.22 for SOGIE-based bullying victimization, and 3.46 for internalized homonegativity, which supported the use of multilevel analysis.

Effects of Individual Attitudes on SOGIE-based Bullying Perpetration and Allyship (Hypothesis 1)

The results of Model 2 showed that the positive associations of student-level gender role attitudes ($b = 0.04$, $p < 0.001$) and sexual prejudice ($b = 0.03$, $p < 0.001$) with SOGIE-based bullying perpetration were significant (see Table 2). Within their schools, heterosexual students possessing higher levels of traditional gender role attitudes and sexual prejudice were more likely to perpetrate SOGIE-based bullying. In addition, student-level sexual prejudice was negatively associated with allyship among heterosexual students ($b = -0.34$, $p < 0.001$) (see Table 3). Compared to other students at the same school, those who had higher levels of sexual prejudice were less likely to engage in allyship. The addition of student-level gender role attitudes and sexual prejudice resulted in a better fitting model compared to the unconditional model in estimating the variance of SOGIE-based bullying perpetration ($\Delta -2LL = 270.55$, $df = 5$, $p < 0.001$) and allyship ($\Delta -2LL = 164.82$, $df = 5$, $p < 0.001$).

Effects of School Normative Climate on SOGIE-based Bullying Perpetration and Allyship (Hypothesis 2)

The results of Model 3 revealed a significant positive association between school-level gender role attitudes and

Table 4 Parameter estimates of multilevel main effects for SOGIE-based bullying victimization among LGBQA+ students

	Parameter estimate (SE)		
	M1	M2	M3
Intercepts	0.09 (0.01)	0.10 (0.01)	−0.32 (0.11)
Demographic variables			
Sex assigned at birth		0.01 (0.01)	0.01 (0.01)
Ethnicity		0.06 (0.03)*	0.06 (0.03)*
Age		0.001 (0.01)	0.002 (0.01)
Individual attitudes			
Student-level gender role attitudes		0.05 (0.01)***	0.05 (0.01)***
Student-level sexual prejudice		0.01 (0.01)	0.01 (0.01)
School normative climate			
School-level gender role attitudes			0.23 (0.10)*
School-level sexual prejudice			−0.04 (0.07)
R^2 at level 1 (within schools)		0.12	0.16
R^2 at level 2 (between schools)		0.29	0.73

*$p < 0.05$; ***$p < 0.001$

SOGIE-based bullying perpetration ($b = 0.31$, $p = 0.01$), after controlling for student-level attitudes. Heterosexual students attending schools with high levels of traditional gender role attitudes were more likely to engage in SOGIE-based bullying perpetration. In addition, the results indicated that the negative association between school-level sexual prejudice and allyship was significant ($b = -1.28$, $p = 0.01$), after controlling for student-level sexual prejudice. Specifically, heterosexual students attending schools with a homophobic school climate were less likely to engage in allyship. The addition of school-level gender role attitudes and sexual prejudice contributed to a better fitting model compared to Model 2 (student-level gender role attitudes and sexual prejudice) in estimating the variance of SOGIE-based bullying perpetration ($\Delta -2LL = 8.54$, $df = 2$, $p = 0.001$) and allyship ($\Delta - 2LL = 15.71$, $df = 2$, $p < 0.001$).

Effects of School Normative Climate on SOGIE-based Bullying Victimization and Internalized Homonegativity (Hypothesis 3)

Among LGBQA+ students, the results showed that school-level gender role attitudes were positively associated with SOGIE-based bullying victimization ($b = 0.23$, $p = 0.04$) and internalized homonegativity ($b = 2.42$, $p = 0.04$) (see Tables 4 and 5). LGBQA+ students attending schools with higher levels of traditional gender role attitudes were more likely to experience SOGIE-based bullying victimization and internalized homonegativity. On the other hand, school-level sexual prejudice was not significantly related to SOGIE-based bullying victimization and internalized homonegativity ($ps > 0.05$). The addition of school-level gender role attitudes and sexual prejudice significantly improved the fit of the model for SOGIE-based bullying victimization ($\Delta - 2LL = 11.68$, $df = 2$, $p = 0.003$), but not for internalized homonegativity ($\Delta - 2LL = 4.58$, $df = 2$, $p = 0.10$).

Moderating Role of School Normative Climate (Hypothesis 4)

The results of Model 4a showed a significant cross-level interaction effect between student-level and school-level gender role attitudes on allyship ($b = 1.19$, $p = 0.002$). The simple slopes analysis revealed a negative relationship between student-level gender role attitudes and allyship at low levels of school-level gender role attitudes ($b = -0.29$, $p < 0.001$), but the negative relationship was weaker at medium levels of school-level gender role attitudes ($b = -0.09$, $p = 0.009$) and was not significant at high levels of school-level gender role attitudes ($b = 0.10$, $p = 0.14$). The results suggested that for students in schools with more traditional gender role attitudes, individual attitudes were not significantly related to allyship. Similarly, the results of Model 4b indicated that school-level sexual prejudice moderated the association between student-level sexual prejudice and allyship ($b = 0.52$, $p < 0.001$). The simple slopes analysis showed that there was a stronger negative association between student-level sexual prejudice and allyship at low levels of school-level sexual prejudice ($b = -0.44$, $p < 0.001$) than at medium ($b = -0.33$, $p < 0.001$) and high ($b = -0.22$, $p < 0.001$) levels of school-level sexual prejudice. The findings indicated that students' endorsement of sexual prejudice was less strongly related to allyship in schools with higher levels of sexual prejudice. The addition of the cross-level interactions between student-level and school-level gender role attitudes ($\Delta - 2LL =$

Table 5 Parameter estimates of multilevel main effects and cross-level interaction effects for internalized homonegativity among LGBQA+ students

	Parameter estimate (SE)				
	M1	M2	M3	M4a	M4b
Intercepts	2.92 (0.08)	3.01 (0.08)	0.28 (1.08)	0.89 (1.06)	0.72 (1.24)
Demographic variables					
Sex assigned at birth		0.003 (0.09)	−0.002 (0.09)	−0.02 (0.09)	−0.01 (0.09)
Ethnicity		−0.18 (0.25)	−0.17 (0.25)	−0.15 (0.25)	−0.15 (0.25)
Age		0.03 (0.05)	0.03 (0.05)	0.04 (0.05)	0.04 (0.05)
Individual attitudes					
Student-level gender role attitudes		0.24 (0.09)**	0.25 (0.09)**	3.09 (1.10)*	0.27 (0.09)**
Student-level sexual prejudice		0.18 (0.07)*	0.17 (0.08)*	0.19 (0.07)*	1.33 (0.70)
School normative climate					
School-level gender role attitudes			2.42 (0.99)*	2.09 (0.96)	2.22 (1.10)
School-level sexual prejudice			−1.31 (0.66)	−1.23 (0.64)	−1.28 (0.72)
Cross-level interactions					
Student-level gender role attitudes × School-level gender role attitudes				−1.23 (0.48)*	
Student-level sexual prejudice × School-level sexual prejudice					−0.55 (0.33)
R^2 at level 1 (within schools)		0.06	0.08	0.09	0.09
R^2 at level 2 (between schools)		0.02	0.44	0.49	0.34

*$p < 0.05$; **$p < 0.01$

21.82, df = 2, $p < 0.001$), and between student-level and school-level sexual prejudice ($\Delta - 2LL = 11.75$, df = 2, $p = 0.003$) resulted in a better fitting model compared to Model 3 in estimating the variance of allyship. However, the moderating role of school normative climate on the associations of individual attitudes with SOGIE-based bullying perpetration among heterosexual students was not significant.

Furthermore, the results of Model 4a showed a significant cross-level interaction effect between student-level and school-level gender role attitudes on internalized homonegativity ($b = -1.23$, $p = 0.03$). The simple slopes analysis revealed a positive relationship between student-level gender role attitudes and internalized homonegativity at low levels of school-level gender role attitudes ($b = 0.51$, $p < 0.001$), but the positive relationship was weaker at medium levels of school-level gender role attitudes ($b = 0.29$, $p = 0.002$) and was not significant at high levels of school-level gender role attitudes ($b = 0.08$, $p = 0.47$). The results indicated that LGBQA+ students' gender role attitudes were highly related to their internalized homonegativity in schools where gender roles were less rigid. On the other hand, school normative climate might override individual attitudes in schools with highly traditional gender roles in that personal endorsement of gender role attitudes was not related to internalized homonegativity.

Discussion

Schools, as a primary agent of socialization during adolescence, play a significant role in shaping the values, attitudes, and behaviors of youth (Eder & Nenga, 2003). While schools provide an opportunity for youth to master essential developmental skills and engage in prosocial interactions with others, it is important to note that they also may perpetuate established hierarchies and oppressive norms, including gender stereotypes and heteronormativity (Poteat, 2008; Prati, 2012). The present study adds to the growing body of evidence on the contextual influence of school normative climate on SOGIE-based bullying, allyship, and internalized homonegativity in secondary schools in China.

The research design and analytic approach make several novel contributions to the literature. First, this study used multilevel data to examine how school normative climate accounts for bullying behavior against LGBQA+ students above and beyond individual attitudes. While previous studies mainly used an individual differences approach and considered individual attitudes as predictors of bullying behavior (Gereš et al., 2021; Orue & Calvete, 2018), the present study investigated the broader normative climate, which comprises gender role attitudes and sexual prejudice shared by students in schools. Second, the present study operationalized school normative climate as the aggregation of individual student attitudes toward gender and sexuality.

Specifically, aggregated scores on gender role attitudes and sexual prejudice were used to represent the normative climate of the school environment in which students interact. The analysis presents an opportunity to obtain a glimpse into the shared attitudes held by students in schools and estimate how collective beliefs and norms may regulate individual behavior (Butler, 2005; Warner et al., 2011). The study overcomes the limitations of prior studies that have mostly relied on school policies and practices as an approximation of school climate (Day et al., 2020; Gower et al., 2018; Marx & Kettrey, 2016). Third, the present study adopts a multi-informant approach by examining the perspectives of perpetrators and victims simultaneously. Much of the research on SOGIE-based bullying has been based on a single source of information: either heterosexual students (Birkett & Espelage, 2015; Poteat, 2007; Prati, 2012) or LGBQA+ students (Day et al., 2020; Kosciw et al., 2020). Such an approach often underestimates or overestimates the incidents of SOGIE-based bullying, which may offer an incomplete picture of bullying in schools. The present study therefore draws on data from multiple sources to triangulate the findings on bullying perpetration/victimization, which may improve the validity of the results and reduce self-report bias. Fourth, previous studies considered SOGIE-based bullying as the only manifestation of a hostile school climate, but other negative consequences have rarely been investigated. As such, the present study expands the scope of this literature by considering allyship and internalized homonegativity as possible outcomes of school normative climate. Fifth, it is noteworthy that the data of the study were gathered in Chinese educational settings. Previous studies on SOGIE-based bullying have been conducted in the United States and Europe (Collier et al., 2013; Kosciw et al., 2020), whereas the school normative climate for LGBQA+ students in China remains largely unknown despite the widespread stigma and prejudice associated with homosexuality in traditional Chinese culture (Wei & Liu, 2019). The present study adds to the paucity of research in Confucianist and collectivistic cultures, where people are prone to the influence of norms and values in their social environment (Bao et al., 2015; Smith & Robinson, 2019). The results provide robust evidence on how distal and proximal stressors manifest in a hostile normative climate.

Effects of Individual Attitudes on SOGIE-based Bullying Perpetration and Allyship

Personal endorsement of gender role attitudes and sexual prejudice was predictive of SOGIE-based bullying perpetration among heterosexual students. The results showed that compared to other students at the same school, those who endorsed higher levels of traditional gender role attitudes and sexual prejudice were more likely to engage in SOGIE-based bullying perpetration. This is consistent with the extensive literature reporting the association of SOGIE-based bullying perpetration with traditional gender role attitudes (Poteat et al., 2011; Valido et al., 2021; Whitley, 2001) and sexual prejudice (Franklin, 2000; Orue & Calvete, 2018) at the individual level.

In addition, the results revealed that heterosexual students who endorsed lower levels of sexual prejudice were more likely to engage in allyship, which echoes the findings in previous studies (Fingerhut, 2011; Mereish & Poteat, 2015). Nonetheless, it is important to note that a lack of sexual prejudice is necessary but may not be sufficient to encourage allyship, as this may indicate that individuals are merely tolerant or accepting of sexual minorities (Fingerhut, 2011; Mereish & Poteat, 2015). Engaging in allyship can be unrewarding due to a lack of trust from the LGBQA+ community (Duhigg et al., 2010) and backlash from the heterosexual community resulting from stigma by association (Goldstein & Davis, 2010; Grzanka et al., 2015). Thus, individuals who merely tolerate or accept sexual minorities may not think the trouble is worth it. Indeed, prior research showed that a lack of prejudice was only associated with allyship when these attitudes were strongly held (Mereish & Poteat, 2015) or when individuals also had high levels of allophilia (Fingerhut, 2011).

Effects of School Normative Climate on SOGIE-based Bullying Perpetration and Allyship

Most importantly, the present study found evidence that gender normative climate in schools could account for more frequent engagement in SOGIE-based bullying behavior over and above students' personal endorsement of gender role attitudes. Specifically, heterosexual students were more likely to report having engaged in SOGIE-based bullying when their school normative climate disapproved of gender role violations. Students interacting in this climate might internalize traditional gender norms and feel pressured to respond in a homophobic manner (Birkett & Espelage, 2015). Nevertheless, the results showed that school-level sexual prejudice was not associated with SOGIE-based bullying perpetration among heterosexual students. A possible reason is that SOGIE-based bullying perpetration in Chinese secondary schools is often driven by deviance from gender norms, as most LGBQA+ students do not come out at school (Wei & Liu, 2019). Thus, bullying perpetration is motivated by non-conformity to gender-typed behavior but not based on actual sexual orientation. As a result, gender role attitudes may play a more significant role than sexual prejudice in shaping bullying perpetration among heterosexual students. In addition, Poteat (2008) suggested that the use of homophobic epithets might serve alternative

purposes. It is possible that students feel the need to engage in homophobic bullying as a means to validate their masculinity and fit in with their peers in an environment where traditional gender role attitudes are pervasive, rather than because they hold any negative attitudes toward sexual minorities per se. Another possible reason why school-level sexual prejudice did not predict bullying perpetration is the conflation of attitudes toward gay men and attitudes toward lesbian women into a single score. Past research has consistently indicated that attitudes toward gay men are often more hostile than attitudes toward lesbian women (Kite & Whitley, 1996; Prati et al., 2011).

The contextual influence of school normative climate was also observed in allyship among heterosexual students. The results revealed that students in schools with higher levels of sexual prejudice were less likely to engage in allyship to support their LGBQA+ peers, suggesting that a homophobic school climate may discourage allyship. Prior studies have focused on the individual characteristics of heterosexual allies (e.g., personal values) as predictors of allyship (Swank et al., 2013) while neglecting the social environment in which allyship takes place. The present study fills an important gap in the literature by demonstrating that widespread sexual prejudice in schools was detrimental to engagement in allyship. As shown in prior studies (Goldstein & Davis, 2010; Grzanka et al., 2015), fear of stigma by association may be a significant barrier to becoming a heterosexual ally, and this fear is likely to be intensified in a homophobic school climate.

Furthermore, the study highlights the moderating role of school normative climate on allyship. Particularly, student-level gender role attitudes and sexual prejudice were more strongly related to allyship in schools with lower levels of gender role attitudes and sexual prejudice. In other words, students who endorsed liberal gender role attitudes or less sexual prejudice were more inclined to engage in allyship when the school normative climate was less hostile (Swank et al., 2013). When the school climate was more gender normative or homophobic, these students were not as likely to engage in allyship. The results demonstrate that school normative climate, as reflected by the aggregate of individual gender role attitudes and sexual prejudice in schools, has the ability to override personal beliefs and values. The findings are consistent with the literature on heterosexual allies (Goldstein & Davis, 2010; Grzanka et al., 2015), which indicated that a major obstacle to allyship is the fear of negative reaction from other heterosexual individuals due to stigma by association. When the school climate is gender normative or homophobic, this fear becomes more salient and is likely to deter allyship even among students who are accepting of sexual minorities.

Effects of School Normative Climate on SOGIE-based Bullying Victimization and Internalized Homonegativity

The results showed that LGBQA+ students in schools with highly traditional gender roles reported higher rates of SOGIE-based bullying victimization, which aligned with the findings in heterosexual students that school-level gender role attitudes predicted SOGIE-based bullying perpetration. Particularly, widespread gender stereotypes in schools may reinforce normative masculinity and femininity among students, and those who deviate from gender norms would be seen as a legitimate target for harassment and violence (Gereš et al., 2021). It is therefore likely that SOGIE-based bullying victimization is condoned and tolerated in schools where traditional gender roles are deeply rooted. On the other hand, the non-significant association between school-level sexual prejudice and bullying victimization may suggest that victimization experiences may be triggered by LGBQA+ students' violation of gender roles and expectations, as Chinese students are less likely to disclose their sexual orientation at school (Wei & Liu, 2019). Considering the findings from both heterosexual and LGBQA+ student samples, it is reasonable to suggest that there are more incidents of SOGIE-based bullying in schools where traditional gender role attitudes are pervasive.

The findings from this investigation also indicated the need to consider school normative climate in accounting for internalized homonegativity among LGBQA+ students. Specifically, LGBQA+ students in schools with highly traditional gender roles reported higher levels of internalized homonegativity. The school normative climate of traditional gender roles represents the rejection of diverse gender expression in schools and may exert a strong influence on LGBQA+ students (Heiden-Rootes et al., 2020). Attitudes toward gender and sexuality are acquired through social interaction with other students and are incorporated into LGBQA+ students' belief systems (Eder & Nenga, 2003). They may accept and internalize the inferiority of their sexual minority status and consequently harbor negative thoughts and feelings about their sexual identity. The results of cross-level interactions further revealed that personal endorsement of gender role attitudes was only relevant for LGBQA+ students in schools where gender roles were less strictly adhered to. Alternatively, the contextual influence of school normative climate on internalized homonegativity may supersede the effect of individual attitudes in schools with highly traditional gender roles. In such a circumstance, the extent to which LGBQA+ students held gender biases and expectations would no longer be related to their internalized homonegativity

because the detrimental effect of gender normative climate was highly salient.

While previous studies used structural measures (e.g., GSAs, anti-bullying policies) as a proxy for school climate (Day et al., 2020; Gower et al., 2018; Marx & Kettrey, 2016; Rinehart & Espelage, 2016), the present study aggregated individual students' attitudes to approximate the normative climate to which they are attuned. Taken together with the current findings, it is plausible that interventions such as anti-bullying policies may reduce victimization to some extent, but they may not address the root cause of the problem, which is the core beliefs held by students. As such, school climate interventions targeting students' gender role attitudes are needed to eradicate SOGIE-based bullying and internalized homonegativity.

Practical Implications

The present study highlights the contextual influence of school normative climate and provides several implications for school curriculum and instruction in China. The findings suggest that the school experiences of LGBQA+ students can be drastically improved if there is a school-wide commitment to address traditional gender roles and sexual prejudice. Considering the stereotypical attitudes toward gender and sexuality commonly held by Chinese students (Sa et al., 2021), there is a strong need to introduce comprehensive sexuality education into the school curriculum to cultivate awareness of gender equality and sexual diversity. Despite the fact that education on gender and sexuality has not been emphasized in the recent Five-Year Plan for the Development of National Education, there should be some refinement of the current school-based sex education (Leung et al., 2019). Topics including the social construction of gender, stereotypes and biases, sexual orientation, and gender-based violence should be covered in the classroom, so that students can be equipped with accurate and developmentally appropriate knowledge about gender and sexuality. Although LGBQA+ issues are still a controversial topic in Chinese educational settings, teachers may start classroom conversations by engaging students to reflect on traditional Chinese cultural norms that affect how they view gender roles, recognize how gender norms and expectations relating to masculinity and femininity can be harmful to themselves and others, and rehearse strategies to counter their own and others' gender biases (UNESCO, 2018). Such attitudes and skills are essential to nurturing an inclusive normative climate in schools, which could be protective against SOGIE-based bullying and internalized homonegativity, as shown in the present study.

Teachers and school administrators should be mindful of the prevalence of traditional gender roles and sexual prejudice in their campus environment, so that appropriate school policies and practices can be formulated to address gender stereotypes and homophobia and the resulting bullying incidents (Day et al., 2020; Gower et al., 2018; Marx & Kettrey, 2016). Regular monitoring is the key to gathering data on student attitudes toward gender and sexuality and LGBQA+ students' school experiences, which allows school administrators to critically evaluate their school's normative climate. Based on the results of school climate assessments, specific measures can be taken to promote the safety and acceptance of LGBQA+ students. For instance, supportive school policies and practices (e.g., access to LGBQA-inclusive materials and resources, anti-bullying school interventions, and professional development training for school personnel) can be introduced to create an affirming campus environment in which LGBQA+ students feel welcome and respected. Furthermore, as the absence of sexual prejudice is necessary but not sufficient to foster allyship, it is important to ensure that opportunity structures are available to provide potential avenues for heterosexual students to create positive changes and offer solidarity to LGBQA+ students. Previous studies have shown that youth-led clubs and organizations such as GSAs provide a space for LGBQA+ students and their heterosexual allies to meet and provide emotional support (Marx & Kettrey, 2016). They also can be a vehicle to organize and engage in actions to raise awareness about gender and sexuality issues, which are essential to making schools more inclusive for LGBQA+ students (Kosciw et al., 2020).

Limitations

There are several limitations in the present study. First, the cross-sectional design of the study precludes any conclusions about the directionality of the associations of school normative climate with SOGIE-based bullying perpetration/victimization, allyship, and internalized homonegativity. Future studies should adopt a longitudinal approach to determine the directionality of the relationships. Second, all the data were collected via student self-reports and may be subject to social desirability bias. Students may respond in a socially desirable manner by underreporting their negative behavior (e.g., bullying perpetration) and exaggerating their positive behavior (e.g., allyship). Third, although the study includes a large sample of secondary school students in China, a non-probability sampling approach was employed, which might limit the generalizability of the results. There could be a sampling bias, as students with negative attitudes toward sexual minorities might not consent to participate in the study. Fourth, given the sensitivity of sexual and gender diversity in Chinese educational settings, the study was unable to obtain a larger sample size of schools, and thus, the effects of school-level covariates cannot be estimated.

The participating schools might not be truly representative of secondary schools nationally because they might be more aware of the school experiences of LGBQA+ students and consented to join the study. Therefore, the results of the study should be interpreted with caution.

Conclusion

The normative climate of schools is salient in adolescence because youth are particularly susceptible to the influence of similarly aged others in their social environment. As a critical developmental context during adolescence, schools may provide values and norms that influence youth's belief systems and personal assessments of what constitutes permissible behavior. Youth may pick up attitudes from others in their schools and engage in behavior that conforms to the norms of the schools. The present study adds to the literature by showing the contextual influence of school normative climate in Chinese educational settings. The results showed that widespread traditional gender role attitudes in schools might contribute not only to SOGIE-based bullying perpetration and victimization, but also to internalized homonegativity among LGBQA+ students. Additionally, heterosexual students in schools with higher levels of sexual prejudice were less likely to engage in allyship to support their LGBQA+ peers. The findings also revealed the significant moderating role of school normative climate, which suggested that individual attitudes might be less predictive of allyship and internalized homonegativity in schools with a hostile climate. It is plausible that the influence of personal beliefs and values would be overridden by overwhelming gender biases and homophobia expressed by fellow students in these school environments. The results underline the need for regular school climate assessments, so that evidence-informed instructions, policies, and practices can be formulated and implemented to reduce traditional gender role attitudes and sexual prejudice and thereby prevent SOGIE-based bullying.

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Data Sharing and Declaration The datasets generated and/or analyzed during the current study are not publicly available due to concerns regarding confidentiality and data protection.

Compliance with Ethical Standards

Conflict of Interest The authors declare no competing interests.

Ethical Approval The study was approved by the Human Research Ethics Committee of the authors' institution. All procedures performed in studies involving human participants were in accordance with the 1964 Helsinki declaration and its later amendments or comparable ethical standards.

Informed consent Informed consent was obtained from all individual participants included in the study.

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