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Coming out in Mainland China: A national survey of LGBTQ students

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ABSTRACT

This study examined the school experience and its association with the mental health of lesbian, gay, bisexual, transgender, and questioning (LGBTQ) students in Mainland China. From 29 Chinese provinces/municipalities, 732 LGBTQ students (M_{age} = 20.7 ± 2.5) completed an online survey based on the *Supporting LGBT Lives* study. The findings revealed that most Chinese schools were not inclusive for LGBTQ students. Despite the lack of support of very few LGBTQ-specific school policy, teacher training, and curriculum reported by students, the majority of LGBTQ youth felt safe living and learning at school. As well, most LGBTQ students felt comfortable about their sexual orientation and had come out to someone; however, the majority remained closeted with their siblings, parents, or teachers. Furthermore, Chinese LGBTQ students were at great risk for psychological distresses—about 85% of them felt depressed and around 40% had suicidal thoughts. Having a more inclusive school climate and more school resources, especially a positive LGBTQ role model, were significantly associated with the reduction of LGBTQ students' suicidal ideation. Given these findings, the authors strongly recommend further research, development, and implementation of robust LGBTQ-specific policy, training, and counseling be implemented immediately to improve the lives of Chinese LGBTQ youth.

在中国大陆出柜：全国**LGBTQ**学生问卷研究
摘要 本研究调查中国大陆的女同性恋、男同性恋、双性恋、跨性别和疑性恋（Lesbian, gay, bisexual, transgender, questioning, LGBTQ）学生的校园生活经历以及它与心理健康之间的关系。共有来自全国29个省市的732名LGBTQ学生（M_{age} = 20.7 ± 2.5）填写了基于*Supporting LGBT Lives* 研究的线上问卷。研究发现绝大多数中国学校都不是对LGBTQ学生友善和包容的。根据学生反馈, 尽管学校中缺乏与LGBTQ有关的校规、教师培训和课程的支持, 大多数学生仍在学校学习和生活感到安全。大多数学生也对于他们的性倾向感到舒适, 并曾对其他人出柜；不过, 大多数学生仍然没有对兄弟姐妹、父母和老师出

柜。另外, 中国LGBTQ学生存在高心理健康风险：大约有85%学生感到过抑郁和40%学生有过自杀想法。拥有一个更包容的校园氛围和更多学校资源, 尤其是LGBTQ学生榜样, 与LGBTQ学生自杀想法的减少显著相关。基于研究发现, 作者强烈建议与LGBTQ有关的有效政策、培训和咨询立即得到进一步的研究、发展和施行, 从而改善中国大陆LGBTQ青少年生活现状。

School climate has a profound impact on students' mental and physical health (Thapa, Cohen, Guffey, & Higgins-D'Alessandro, 2013). As Bronfenbrenner's social-ecological framework suggests, the immediate environments in which growing adolescents live are crucial to understanding healthy development for that individual (Bronfenbrenner, 1977). School is one of the most influential environments for youth (Wang & Holcombe, 2010). Students' mental health, academic achievements, self-concept, and social skills are highly relevant to school contextual factors (Ringeisen, Henderson, & Hoagwood, 2003).

Compared with a hostile school climate, where lesbian, gay, bisexual, transgender, and questioning (LGBTQ) students often report experiencing bullying, discrimination, and other negative events, an inclusive school climate, with protective social policies, teachers and Gay-Straight Alliances (GSA), more often promotes students' physical, social, and academic development (Hatzenbuehler, Birkett, Van Wagenen, & Meyer, 2014; Thapa et al., 2013). Among the youth of the Add Health Study, the very first nationally representative sample of LGB youths in the United States, 7.4% of boys and 5.3% of girls reported same-sex romantic attraction. Specifically, 0.7% of boys reported exclusively same-sex attraction and 6.5% reported being attracted to both sexes, while 1.5% of girls reported exclusively same-sex attraction and 3.8% reported being attracted to both sexes (Russell, Seif, & Truong, 2001). In Hong Kong, among a stratified random sample of 3,776 secondary students, the prevalence of homosexuality and bisexuality were 1.5 and 2.6% of boys and 1.8 and 3.7% of girls, respectively. A total of 10.7% of boys and 8.8% of girls were unsure of their sexual orientation (Zhang, Wong, Ip, Fan, & Yip, 2017). In addition, studies have found both teachers and students reported that more supportive school environments for LGBTQ students were associated with fewer depressive symptoms and fewer suicidality (Black, Fedewa, & Gonzalez, 2012; Denny et al., 2016). Furthermore, support from teachers and classmates were found to be protective factors which can predict fewer suicidal ideation of LGBTQ students (Eisenberg & Resnick, 2006; Hatzenbuehler et al., 2014; Poteat, Sinclair, DiGiovanni, Koenig, & Russell, 2013). Studies found that LGBTQ youths studying at schools with a GSA reported less truancy,

smoking, drinking, suicide attempts, and sex with casual partners than those in schools without a GSA (Toomey & Russell, 2013; Poteat et al., 2013). It has also been shown that the presence of a GSA positively affected all students' subjective experience of safety (Walls, Kane, & Wisneski, 2010). These results suggest that school climate plays an important role in providing a safe and supportive environment for LGBTQ students.

Unfortunately, many teachers are either undereducated and/or unsupportive of the psychological and social needs of their LGBTQ students (Guasp, Gavin, & Tasha, 2014), although LGBTQ students appear to suffer from more psychological problems, including depression and anxiety, than their non-LGBTQ peers (American Psychological Association, 2011; Birkett, Espelage, & Koenig, 2009; McGuire, Anderson, Toomey, & Russell, 2010). They are more inclined to have suicidal thoughts (Espelage & Holt, 2013; Haas et al., 2010; Mustanski & Liu, 2013) and have more depressive symptoms (Bennett & Douglass, 2013; Bockting, Miner, Swinburne Romine, Hamilton, & Coleman, 2013) due to minority stress, including poor social support, internalized heterosexism, identity concealment, interpersonal prejudice and discrimination (Meyer, 2003). A study examined mental health and adjustment of 876 LGB youth suggests that "feeling like a burden to 'people in their lives' is a critical mechanism in explaining higher levels of depression and suicidal ideation among LGB youths" (Baams, Grossman, & Russell, 2015, p. 688). Furthermore, despite the fact that teachers are essential school resources for LGBTQ students, most teachers don't know how to intervene: in a survey of 1,832 British school staffs, very few teachers in primary schools (8%) or secondary schools (17%) had received specific training on tackling homophobic bullying (Guasp et al., 2014).

While many LGBTQ youths remain closeted, others opt to deal with the stigma of having marginalized sexual orientation and gender identity by coming out of the closet, or publicly disclose their sexual orientation and gender identity. It is logical and reasonable to assume that when living in a more inclusive and LGBTQ-friendly environment and culture it is easier for LGBTQ students to come out. This, however, first requires consideration of the costs and benefits of self-disclosure (Corrigan & Matthews, 2003). Although students' greater openness of sexual orientation is linked with psychological well-being and positive affect (Kosciw, Palmer, & Kull, 2015; Mohr & Fassinger, 2003), coming-out stress was also found associated with depression and suicidal ideation (Baams et al., 2015).

Researchers have viewed the coming out process in ordered stages as critical to the development of sexual orientation identity (Cass, 1979; Troiden, 1989). D'Augelli (1994) provided an enhanced lifelong model with six independent stages developed to represent sexual orientation identity

development (D'Augelli, 1994) now updated to reflect the formation of transgender identity (Renn & Bilodeau, 2005), along with the transgender emergence model (Lev, 2004). Sexual orientation and gender identity were presented in some studies conducted in non-Western societies as more integrated identities, compared with the Western medical and psychiatric tradition of segmenting sexual orientation and gender identity into distinctive categories (Bilodeau & Renn, 2005).

In addition to the challenge of coming out, bullying is a systemic problem in schools, which has often been targeted toward LGBTQ youth (Berlan, Corliss, Field, Goodman, & Austin, 2010; Wernick, Kulick, & Inglehart, 2013). It occurs repeatedly over time, aims to harm or disturb, and involves power imbalance (Nansel et al., 2001). Numerous studies have denoted that LGBTQ students are far more likely to report being victimized and discriminated against than their non-LGBTQ peers at school (Birkett et al., 2009; Martin-Storey & Crosnoe, 2012; Toomey, Ryan, Diaz, Card, & Russell, 2010), and those who have been victimized and discriminated against demonstrate increased depressive symptoms and suicidal thoughts (Espelage & Holt, 2013; Kosciw, Greytak, Palmer, & Boesen, 2014; Russell & Toomey, 2013). Furthermore, longitudinal research over 3.5 years found that greater psychological distress of LGBTQ adolescents was related to prior experiences of victimization (Birkett, Newcomb, & Mustanski, 2015). Even when LGBTQ students have not been physically bullied, they are exposed to psychological/homophobic bullying such as name calling and social exclusion, which can result in anxiety, depression, and isolation (Birkett et al., 2009; Poteat & Digiovanni, 2010). Considering that 99% of British gay pupils have heard homophobic phrases such as "that's so gay' or 'you're so gay" at school (Guasp, 2012), more research is needed to comprehend the cultural impact of pervasive derogatory social norms on sexual and gender diverse students. In support of this call, large numbers of LGBTQ students reported being verbally harassed in America (85%) and Israel (55.6%) (Kosciw et al., 2014; Pizmony-Levy, Kama, Shilo, & Lavee, 2008; Pizmony-Levy & Kosciw, 2016). In Taiwan, a survey of 500 homosexual and bisexual students found that 56.4% of them had experienced any type of bullying victimization, including verbal bullying, physical bullying, relational bullying, and cyber bullying (Wang et al., 2018). In Hong Kong, 60.3% of 614 LGB respondents reported being victims of nonphysical forms of violence (Stotzer & Lau, 2013). In Mainland China, 40.7% of 751 LGBTQ students reported hearing slanderous names related to their sexual orientation and/or gender identity, which was the most prevalent form of homophobic bullying (Wei & Liu, 2015).

Given the extensive number of studies exploring influential school contextual factors for the healthy development of LGBTQ students conducted

in Western countries, it is essential that explorations and applications be made to Chinese school climates as well. In Mainland China, although homosexuality was removed from the 3rd version of *Chinese Diagnostic Criteria of Mental Disorders (CCMD-3)* in 2001 (The Ministry of Health of the People's Republic of China, 2001), the public generally holds a negative attitude towards people with same-sex attractions (Hon et al., 2005; Neilands, Steward, & Choi, 2008). A recent report of United Nations Development Programme (UNDP) found that there is no legislation that specifically mentions transgender people in Mainland China; however, they often confront significant challenges to access education, employment, health and other public services (UNDP, 2018). In addition, despite the legalization of same-sex marriage in many regions, there is no specific policy for similar rights and protection of Chinese LGBTQ individuals. Even in Taiwan, where same-sex partnership exists in some cities, many people still hold a view that homosexuality is curable (Hsu & Yen, 2017).

Given that the country with the largest population in the world (over 1.3 billion), China is likely to also have the largest LGBTQ population. Based on the finding that approximately 15% of secondary students self-identified along the LGBTQ spectrum in Hong Kong (Zhang et al., 2017), it would be reasonable to hypothesize that over twelve and half million LGBTQ secondary students live in Mainland China, based on the data from United Nations Educational, Scientific and Cultural Organization Institute for Statistics (UIS) that 83,407,925 Chinese students enrolled in secondary education (UIS, 2017). Despite the significance of such a vast statistical projection, little is documented or known about the school experience and psychological well-being of LGBTQ youth in Mainland China. In response to such a need, we undertook this study to investigate Chinese LGBTQ students' school experience, such as coming out status, perceived school climate and available school resources, along with their psychological well-being. In addition, we sought to examine the impact of inclusive school climate and resources on predicting their mental health, and our hypothesis was that having more inclusive school climate and resources at school would predict positively their enhanced mental health.

Methods

Procedure

Like other countries' research protocols, privacy considerations for LGBTQ students in Mainland China were respected and as such, online survey links were distributed through four channels, during the period from May to July of 2014. The survey was launched in 2014 on the International Day Against Homophobia, Transphobia, and Biphobia on Sina Weibo (a

Chinese version of Twitter), one of the most popular social media networks in Mainland China, as an academic initiative from the Laboratory of Comprehensive Sexuality Education at Beijing Normal University. Its purpose was to support LGBTQ youths by investigating their school experiences and promoting inclusive educational institutions. The research team first reached out to various relevant community Weibo accounts who had hundreds of thousands of followers and asked them to forward the solicitation to friends and associates. Second, the solicitation was disseminated through LGBTQ community-based groups. These groups sent messages to LGBTQ individuals through e-mails, and/or social media networks (e.g., WeChat). Third, the solicitation was posted on Internet bulletin boards that targeted LGBTQ communities. Fourth, the solicitation was forwarded to self-identified LGBTQ individuals through researchers' personal contacts who were encouraged to share the solicitation with their community of friends.

Participation in the online survey was voluntary, confidential, and with no monetary incentive and was conducted by using either a mobile phone or a computer. The study was funded by the Institute for Sexuality and Gender at Renmin University of China, after being reviewed and approved by a committee of scholars who have expertise in teaching and studying issues around sexuality and gender in Mainland China. The institute also organized a 2-day academic seminar in which the researchers' survey and study procedure were refined.

Measures

The survey was based upon the *Supporting LGBT Lives Survey* (Mayock, Bryan, Carr, & Kitching, 2009), which was translated into Chinese by the authors and adapted with inputs from LGBTQ NGOs and professionals to ensure the accuracy and fluency of expression. The questionnaire was pretested with 120 LGBTQ students, which helped us to adapt the survey better to reflect the Chinese context.

Demographics

The questionnaire included the participants' age, educational background, sexual orientation and gender identity. Their sexual orientation was assessed by using the question: "How do you describe your sexual orientation: (a) homosexual; (b) heterosexual; (c) bisexual; (d) questioning; (e) other(s), please specify (with a write-in option)." Regarding their gender identity, three items were used to identify: "What was the gender assigned to you at birth: (a) male; (b) female; (c) other(s), please specify (with a write-in option)"; "You identify yourself as: (a) male; (b) female; (c) other(s), please specify (with a write-in option)"; "Do you identify yourself

as a transgender: (a) yes; (b) no." Transgender students encompass those who identified themselves as transgender and whose gender assigned at birth was incongruent with reported gender identity (e.g., a person was assigned male at birth but now reported as either female or others). The respondent's age of initial awareness of sexual orientation and gender identity were determined by the question: "At what age did you first become aware that you might be LGBT?." The degrees of comfort concerning sexual orientation and transgender identity were included in two separate questions: "How comfortable do you feel about your sexual orientation; how comfortable do you feel about your transgender identity: (a) very comfortable; (b) comfortable; (c) neutral; (d) uncomfortable; (e) very uncomfortable.

Coming out

Four questions were used to assess coming out: "How old were you when you first realized you are one of the LGBT community members?"; "Did you ever come out to someone: (a) yes; (b) no"; "If yes, how old were you when you first came out to someone?", and "Who did you come out to? Friends, siblings, parents, relatives, schoolmates, school teachers: (a) none; (b) some; (c) all; (d) not apply". Coming out was translated into "Chu Gui" in Chinese, which literally means coming out of the closet ("Chu" means out and "Gui" means the closet) for Chinese LGBTQ community.

Inclusive school climate

Inclusive school climate, as indicated by the following examples, was measured by using multiple items. *School safety* included: "I feel safe living and learning in my current school." *School inclusiveness* included four questions about whether they felt accepted at school, such as: "I think LGBT students can be who they really are" and "People at my current school are friendly to LGBT students": (a) strongly agree; (b) agree; (c) neutral; (d) disagree; (e) strongly disagree" (Cronbach's alpha = 0.83). *School belonging* included: "I like my current school", "I feel belonged to my school" (Cronbach's alpha = 0.90). *Freedom of expression* included five questions about expressing themselves at school, such as: "Talking to your teacher(s), one-on-one, about LGBT issues" and "Setting up or being part of a club or group that addresses LGBT issues": (a) very comfortable; (b) comfortable; (c) neutral; (d) uncomfortable; (e) very uncomfortable" (Cronbach's alpha = 0.83). Overall, the Cronbach's alpha for all 12 questions was 0.86. For each factor, individual questions were re-coded so all were in a uniform direction. The total score of the included questions constituted the score for the *inclusive school climate* variable. Higher scores indicate a more inclusive and positive school climate for LGBTQ students.

In addition to inclusive school climate, inclusive school resources were collected from respondents, and respondents were also asked to choose three most important things for building an inclusive school climate among 10 items, including a written protective policy, supportive school staffs, LGBT role model students, supportive group, access to LGBT-related information, positive imagery representation, open discussion, relationship and sexuality education, workshops for students and teachers, and counseling center.

Mental health and well-being

Subjective well-being was assessed by the following two questions: "All things considered, how satisfied are you with your life as a whole nowadays?"; "Taking all things together, how happy would you say you are?" Participants rated their feelings from 0 (extremely dissatisfied) to 10 (extremely satisfied). Questions on *suicidal thoughts* included: "Before last year, I had seriously considered committing suicide"; "During last year, I had seriously considered committing suicide: (a) never; (b) rarely; (c) sometimes; (d) often; (e) very often." The total score of two questions constituted the score for subjective well-being and suicidal thoughts, respectively. Suicidal ideation was also dichotomized to know its percentage among LGBTQ students (participants were considered to have no suicidal thoughts if they had reported "never"). *Depressive feeling* was measured by an item - "Have you ever had a spell of feeling depressed in the last year: (a) yes; (b) no." *Self-esteem* was assessed by the widely-used Self-Esteem Scale (Rosenberg, 1965) (Cronbach's alpha = 0.88). *Social support* was assessed by the Perceived Social Support Scale (Zimet, Dahlem, Zimet, & Farley, 1988) (Cronbach's alpha = 0.91).

Sample

The full online sample consisted of 810 respondents from 29 Chinese provinces/municipalities; however, there was no respondent from Tibet region and Qinghai province. For the purposes of the current study, 78 (9.6%) respondents were excluded, including those who were not students in Mainland China ($n = 23$, 2.8%), or identified as heterosexual ($n = 6$, 0.7%, except for those who were also transgender). Participants were also excluded due to small cases: they were younger than 16 years old ($n = 25$, 3.1%); they described their own sexual orientations as 'other(s)' ($n = 19$, 2.3%); and they were elementary school students ($n = 5$, 0.6%), resulting in a sample of 732 LGBTQ students. Sample demographics are shown in Table 1. Males, females and transgender students differed across the three

sexual orientation groups (χ^2 (4, $n = 732$) $= 47.97$, $p < 0.001$). Students' ages differed significantly within various educational levels.

For the purpose of analyzing coming out, two participants were excluded in the analysis of initial awareness because they reported becoming aware at age 0, which is likely to mean they thought they were born into their LGBTQ identity. One participant was excluded in the analysis of the age of first coming out because he reported he had come out to someone at age 0, which may mean that he had never lived in the "closet" after birth or had come out to this world by his presence. Nonetheless, exact explanations of these answers require further investigation in a separate study. Although they may have different understanding about the initial awareness and age of first coming out, these three participants had answered all the other questions and therefore were included in all the other analyses.

Statistical analysis

The analysis was conducted in three parts using SPSS 25.0 software (Chicago, IL, SPSS Inc.). First, descriptive statistics were conducted to provide the demographics, perceived inclusive school climate and school resources, and mental health of students by gender identity, sexual orientation, and educational level. Second, group differences of coming out states, perceived inclusive school climate, and mental health were examined by using a series of ANOVA tests. Regression analyses were used to confirm the significant main effects found by the ANOVA tests and provide the variance of the variables, after controlling for age. Third, we used correlational analyses to examine the associations between inclusive school climate, school resources and psychological well-being, as well as hierarchical multiple regression models to assess if inclusive school resources have significantly beneficial impacts on LGBTQ students' mental health.

Results

Coming out

To what degree were Chinese LGBTQ students comfortable being with their sexual orientation and/or transgender identity? Findings show that 484 (66.1%) LGBTQ students felt comfortable or very comfortable about their sexual orientation, and 14 (30.4%) transgender individuals felt comfortable or very comfortable about their transgender identity.

Overall, 651 (89.0%) LGBTQ students had come out to someone; however, the majority of them remain closeted with their siblings ($n = 478$, 65.3%), parents ($n = 532$, 72.7%), relatives ($n = 591$, 80.7%), or school teachers ($n = 553$, 75.6%), whereas many of them did come out to their friends

Table 1. Demographics and Profiles of Chinese LGBTQ Students.

Variable	N (%)	Age (M ± SD)	Age of Initial Awareness (N = 730)	Age of First Coming Out (N = 652)	Had Come Out to Someone N (%)	Inclusive School Climate (M ± SD)	Subjective Well-being (M ± SD)	Self-esteem (M ± SD)	Social Support (M ± SD)	Suicidal Thoughts (M ± SD)	Suicidal Thoughts N (%)	Depressive Feelings N (%)
Total or Range	732 (100)	16.0 - 38.0	2.0 - 25.0	0.0 - 29.0	0 - 100	15.0 - 60.0	0 - 20.0	10.0 - 40.0	12.0 - 84.0	2.0 - 10.0	0 - 100	0 - 100
Gender identity												
1 = Male	512 (69.9)	20.9 ± 2.56	14.9 ± 3.16	18.2 ± 2.64	449 (87.7)	34.9 ± 8.00	11.3 ± 4.73	28.3 ± 5.10	58.3 ± 14.60	3.5 ± 2.03	165 (32.2)	438 (85.5)
2 = Female	174 (23.8)	20.3 ± 2.43	15.4 ± 3.07	17.5 ± 2.36	164 (94.3)	37.9 ± 7.87	11.6 ± 4.33	27.9 ± 5.00	56.6 ± 14.86	3.7 ± 2.13	66 (37.9)	141 (81.0)
3 = Transgender	46 (6.3)	20.4 ± 1.96	15.3 ± 3.89	17.4 ± 2.65	39 (84.8)	37.6 ± 8.69	10.9 ± 4.70	27.8 ± 5.83	59.0 ± 15.25	4.1 ± 2.14	23 (50.0)	39 (84.8)
F/X^2		3.5*	2.36	6.28**	6.7*	10.4***	.6	.4	1.0	2.1	6.9*	2.0
Post-hoc		1 > 2		1 > 2	2 > 1	2,3 > 1					3 > 1	
Sexual orientation												
1 = Gay	441 (60.2)	20.9 ± 2.48	14.7 ± 3.21	18.2 ± 2.64	397 (90.0)	35.4 ± 8.07	11.3 ± 4.82	28.3 ± 5.23	58.4 ± 15.07	3.5 ± 2.04	141 (32.0)	378 (85.7)
2 = Lesbian	123 (16.8)	20.3 ± 2.41	14.7 ± 3.16	17.1 ± 2.27	119 (96.7)	36.7 ± 8.76	11.3 ± 4.44	28.2 ± 5.41	56.1 ± 14.98	4.0 ± 2.37	49 (39.8)	103 (83.7)
3 = Bisexual	126 (17.2)	20.4 ± 2.32	15.9 ± 3.00	18.2 ± 2.45	105 (83.3)	37.0 ± 7.50	12.0 ± 4.11	28.4 ± 4.52	58.1 ± 13.51	3.5 ± 1.87	48 (38.1)	100 (79.4)
4 = Questioning	42 (5.7)	20.9 ± 3.33	16.6 ± 2.88	18.7 ± 2.95	31 (73.8)	34.3 ± 8.04	10.3 ± 4.54	26.1 ± 4.48	57.5 ± 13.30	3.6 ± 1.88	16 (38.1)	37 (88.1)
F/X^2		2.5	7.9***	6.5***	–	2.4	1.6	2.4	.8	1.6	3.7	3.5
Post-hoc			3,4 > 1,2;	1,3,4 > 2;								
Educational level												
1 = High school	97 (13.3)	17.4 ± 1.05	13.6 ± 2.23	15.5 ± 1.34	85 (87.6)	35.9 ± 8.91	10.5 ± 4.79	27.0 ± 4.98	58.0 ± 16.45	4.0 ± 2.28	42 (43.3)	85 (87.6)
2 = Vocational school	35 (4.8)	19.3 ± 2.67	15.1 ± 2.28	17.4 ± 2.29	472 (89.2)	36.1 ± 7.70	10.4 ± 3.92	26.8 ± 4.92	55.5 ± 15.88	4.2 ± 2.58	14 (40.0)	28 (80.0)
3 = College/University	529 (72.3)	20.8 ± 1.57	15.2 ± 3.14	18.1 ± 2.31	33 (94.3)	36.0 ± 7.90	11.6 ± 4.67	28.3 ± 5.14	58.0 ± 14.58	3.6 ± 2.01	179 (33.8)	450 (85.1)
4 = Graduate school	71 (9.7)	25.0 ± 2.62	15.8 ± 4.38	20.8 ± 2.92	62 (87.3)	33.9 ± 8.71	11.7 ± 4.35	29.4 ± 4.91	58.6 ± 12.48	3.21 ± 1.74	19 (26.8)	55 (77.5)
F/X^2		279.8***	8.5***	65.8***	–	1.6	2.0	4.1**	.4	2.9*	5.7	4.1
Post-hoc		2,3,4 > 1; 3,4 > 2; 4 > 3	2,3,4 > 1	2,3,4 > 1; 4 > 2,3				3 > 1; 4 > 1, 2		1,2 > 4		

Note. Due to small cases on coming out two *F*s were missing. *p < .05. **p < .01. ***p < .001 (two tailed test).

($n = 681$, 93.1%), and schoolmates ($n = 575$, 78.5%). Among those who had not come out to someone yet ($n = 80$, 10.9%), 63 (78.8%) were male students, 10 (12.5%) were female students, and 7 (8.8%) were transgender students.

Table 1 presents the participants' age of initial awareness and first coming out, as well as the percentage of participants who had come out to someone. The post hoc tests found that male students' initial awareness was earlier than females', at an average of 14.9 vs. 15.4, but female students came out earlier than male at an average of 17.5 vs. 18.2. Furthermore, bisexual and questioning students realized their sexual orientation(s) at an average of 16.6 and 15.9, respectively, which are later than both gay and lesbian students ($M = 14.7$). The post hoc also found lesbian students came out the earliest. Equally important, high school students realized their sexual orientation or gender identity and came out to others earlier than all the other three groups of students within various educational levels—that is, vocational students, college/university students, and graduate students.

Inclusive school climate and resources

How did Chinese LGBTQ students feel at their schools? In general, 484 (66.1%) Chinese LGBTQ students felt safe living and learning at school, and 266 (36.4%) felt a sense of belonging to their school. However, 309 (42.2%) disagreed or strongly disagreed that LGBTQ students can be who they really are at school, and 241 (32.9%) disagreed or strongly disagreed that LGBTQ students are treated with as much respect as other students. If they had a problem, 310 (42.4%) of them agreed or strongly agreed that LGBTQ students can talk to at least one teacher/other adult, although 405 (55.3%) felt uncomfortable or very uncomfortable in terms of discussing LGBTQ issues with their teachers in person.

The school resources presented in Table 2 show that most schools were not inclusive for LGBTQ students in Mainland China. Of note, only 9 (1.2%) students reported their schools have specific rules protecting them from homophobic bullying or other forms of discrimination, while 42 (5.7%) students witnessed positive imagery of LGBTQ students, and 130 (17.8%) of them experienced positive discussion of LGBT issues in class. Although 170 (23.2%) students reported that they had supportive teachers at school, very few of them ($n = 21$, 2.9%) reported their teachers had access to workshops about addressing and understanding LGBTQ issues and very few students ($n = 64$, 8.7% to $n = 74$, 10.1%) received relevant education at their schools, such as comprehensive sexuality education, building relationships, and coping with LGBTQ-related discrimination or

Table 2. Inclusive School Resources Reported by Chinese LGBTQ Students.

Indicator	N (%)
A written policy protecting LGBT students from homophobic bullying and/or other forms of discrimination	9 (1.2)
Teacher(s) or other school staff member(s) supportive of LGBT students	170 (23.2)
Other LGBT student(s) who you could look up to or who could act as a role model	416 (56.8)
A club or support group for LGBT students	141 (19.3)
Relationship and sexuality education including LGBT-specific information	64 (8.7)
Workshops for students addressing LGBT issues	74 (10.1)
Workshops for teachers about how to address and understand LGBT issues	21 (2.9)
Positive imagery (such as posters, books etc.) representing LGBT people/issues	42 (5.7)
Positive discussion of LGBT issues in class	130 (17.8)
Counseling center which provides mental health services	356 (48.6)

victimization. Lastly, 416 (56.8%) students had seen LGBTQ students who could act as a role model for them at their school.

When asked to choose three most important things for building an inclusive school climate, the Chinese LGBTQ students chose: a club or support group for LGBT students ($n = 455$, 62.2%); a written policy protecting LGBT students from homophobic bullying and/or other forms of discrimination ($n = 362$, 49.5%); and positive images (such as posters, books etc.) representing LGBT people/issues ($n = 320$, 43.7%).

Table 1 also presents the perceived inclusive school climate comparisons for the student groups of different gender identity, sexual orientation, and educational level. First, there was a significant main effect found for gender identity ($F = 10.4$, $p < .0001$), and post hoc tests found that male students perceived the lowest inclusive school climate when compared with female and transgender students. Specifically, male students felt less included and had less freedom to express themselves at school than female students but similar to transgender students, as the ANOVA test and post-hoc test showed that their perceived school inclusiveness and freedom of expression were both significantly lower than female students ($F = 9.9$, $p < .0001$; $F = 12.6$, $p < .0001$, respectively). Furthermore, regression models were conducted to confirm the association between inclusive school climate and gender identity after controlling for the effect of age. The results indicated that gender identity significantly explained a small proportion of variance in inclusive school climate, R^2 change $= .02$, $F (2, 729) = 9.47$, $p < .0001$. In addition, college/university students perceived more inclusive school climate than graduate school students; however, this did not reach a statistically significant level.

Considering the different school experiences at various educational settings, further ANOVAs and post hoc tests were used to compare the differences of inclusive school climate and mental health for students from different educational levels, by sexual orientation and gender identity. Although no significant findings were found for students of different sexual orientations, significant findings were found for students of different gender identities at college/university level. Male students perceived

significantly less inclusive school climate at universities than either female or transgender students ($F = 9.8$, $p < .0001$). However, male students reported more social support at vocational schools than either female or transgender students ($F = 4.3$, $p = .023$).

Mental health and well-being

As can be seen in Table 1, suicidal thoughts and depressive feelings were prevalent among Chinese LGBTQ students. Overall, the percentage of those who suffered from depressive feelings (about 85%) was higher than those who experienced suicidal thoughts (around 40%). Specifically, both high school and vocational school students had significantly more frequent suicidal thoughts than graduate students but similar to undergraduate students ($F = 2.9$, $p = .033$). However, after controlling for age in the regression models, educational level did not explain a significant proportion of variance in suicidal thoughts, R^2 change $= .01$, $F (3, 727) = 2.34$, $p = .07$. In addition, transgender students had the highest percentage of suicidal thoughts, significantly higher than male students but similar to female students ($F = 6.9$, $p = .031$). The differences in the percentage of depressive feelings across the different cohorts did not reach a statistically significant level.

In terms of self-esteem, the ANOVA tests revealed that graduate school students had higher levels of confidence than both high school students and vocational school students; undergraduate university/college students also had higher levels of self-esteem than high school students, $F (3,727) = 4.1$, $p = .007$). Furthermore, regression models were conducted to confirm the association between educational level and self-esteem in order to control for the effect of age. The results of the regression models indicated that educational level significantly explained a small proportion of variance in self-esteem scores, R^2 change $= .01$, $F (3, 727) = 3.34$, $p < .05$. Lastly, no statistically significant differences of social support and subjective well-being were found across the different cohorts.

Inter-correlations

Table 3 presents the association between inclusive school climate and mental health factors among students of different sexual orientation, gender identity, and educational level after controlling for age. Table 4 presents means, ranges, standard deviations, and correlations of the variables of interest that were adjusted for age. Overall, LGBTQ students with higher self-esteem, subjective well-being, and social support reported a lower level of suicidal thoughts. In addition, a more inclusive school climate was positively associated with positive psychological outcomes—that is, higher subjective well-

Table 3. Associations between Inclusive School Climate and Mental Health Variables by Demographic Characteristics, Adjusting for Age.

	Coming Out	Depressive Feelings	Suicidal Thoughts	Subjective Well-being	Self-esteem	Social Support
Sexual orientation						
Gay	.1**	−.2***	−.2***	.3**	.4***	.2***
Lesbian	.3**	−.1	−.3**	.3**	.2*	.3***
Bisexual	.1	−.1	−.0	−.1	.1	.2
Questioning	.2	−.3	.1	−.1	.0	.1
Gender identity						
Male	.1**	−.2***	−.2***	.3***	.3***	.2***
Female	.1	−.1	−.2**	.3***	.2**	.3***
Transgender	.3*	−.1	−.1	.1	.1	.1
Educational level						
High school	.2*	−.2*	−.2*	.2	.3**	.3*
Vocational school	−.0	−.3	−.2	−.1	.1	−.2
College/university	.1**	−.2***	−.2***	.3***	.3***	.3***
Graduate school	.1	−.1	−.0	.2	.1	.0

*p < .05.
**p < .01.
***p < .001 (two tailed test).

Table 4. Associations Inclusive School Climate and Mental Health Variables, Adjusting for Age.

	1	2	3	4	5
1. Subjective well-being	—				
2. Self-esteem	.4***	—			
3. Social support	.2***	.3***	—		
4. Suicidal thoughts	−.3***	−.3***	−.2***	—	
5. Inclusive school climate	.3***	.3***	.2***	−.2***	—
M	11.4	28.1	57.9	3.6	35.8
SD	4.63	5.12	14.70	2.06	8.05
Range	0-20.0	10.0-40.0	12.0-84.0	2.0-10.0	15.0-60.0

*p < .05.
**p < .01.
***p < .001 (two tailed test).

being; higher self-esteem; more social support; fewer suicidal thoughts. However, the impact of an inclusive school climate on mental health was not found among the groups of bisexual students, questioning students, transgender students, vocational school students, and graduate students.

Furthermore, to examine the effects of students' characteristics, school climate, and school resources on psychological well-being outcomes, hierarchical multiple regression analyses were conducted (Table 5). In model 1, psychological well-being variables and students' characteristics were included. In model 2, inclusive school climate, five different school resources were added to test if they have significant impacts on LGBTQ students' mental health, in addition to the effect of model 1. Explanations of the model effects on psychological well-being outcomes are presented as follows.

Self-esteem
According to model 1, LGBTQ students had higher self-esteem when they were more comfortable with their sexual orientation, having more social

Table 5. Hierarchical Multiple Regression models on Self-esteem, Subjective Well-being, Social Support, and Suicidal Thoughts.

	Self-esteem		Subjective Well-being		Social Support		Suicidal Thoughts	
	Model 1	Model 2	Model 1	Model 2	Model 1	Model 2	Model 1	Model 2
Age	.03	.04	−.02	−.03	−.02	−.02	−.01	−.01
Gender identity	−.02	−.04	−.01	−.01	−.08	−.10*	.09	.11*
Sexual orientation	−.02	−.01	.04	.03	.02	.01	−.02	−.03
Educational level	.05	.06	.02	.02	−.01	−.00	−.03	−.03
Coming out	−.00	−.01	.06	.04	.00	−.01	.08*	.09*
Comfortable with sexual orientation	.15***	.13***	.08*	.05	.05	.03	−.02	−.01
Comfortable with Transgender identity	−.02	−.00	−.04	−.02	.11**	.13**	−.01	−.02
Self-esteem	–	–	.33***	.32***	.15***	.14**	−.20***	−.19***
Subjective well-being	.30***	.28***	–	–	.10*	.07	−.15***	−.14***
Social support	.12**	.11**	.09*	.06	–	–	−.11**	−.10**
Suicidal thoughts	−.18***	−.16***	−.14***	−.14***	−.11**	−.10**	–	–
Depressive feelings	−.16***	−.15***	.00	.00	−.05	−.05		.13***
School climate and resources								
Inclusive school climate		.10**		.12**		.13**		−.05
LGBTQ role model(s)		.01		−.02		.01		−.12**
A written policy protecting LGBTQ students		−.08*		.03		.02		.03
A club or support group for LGBTQ students		−.04		.05		−.02		.03
Supportive teachers for LGBTQ students		.04		.03		.03		.07
A counseling center		−.04		.05		.08*		−.03
R^2 change		.02**		.02**		.02**		.02*
Intercept	21.4***	19.4***	.34	−.08	50.14***	46.39***	6.56***	6.74***
R^2	.30***	.32**	.22***	.24**	.11***	.13**	.18***	.20*

*$p < .05$.
**$p < .01$.
***$p < .001$ (two tailed test).

support, more subjective well-being, fewer suicidal thoughts, and less depressive feelings ($\beta = .15$, $\beta = .12$, $\beta = .30$, $\beta = −.18$, $\beta = −.16$, respectively). As presented in model 2, studying within a more inclusive school climate and having more school resources improved the mode fit by 6.7% (R^2 change $= .20$). However, a written policy protecting LGBTQ students had significantly negative association with self-esteem ($\beta = −.08$), meaning more protective school policies were related to lower self-esteem of LGBTQ students. This might be a result of small sample because only 9 students (1.2%) responded that there was a written policy protecting LGBTQ students from homophobic bullying and/or other forms of discrimination at their school.

Subjective well-being
According to model 1, LGBTQ students had more subjective well-being when they felt more comfortable with their sexual orientation, having higher self-esteem, more social support, and fewer suicidal thoughts ($\beta = .08$,

$\beta = .33$, $\beta = .09$, $\beta = -.14$, respectively). As shown in model 2, studying at a more inclusive school environment and having more school resources increased the model fit by 9.1% (R^2 change $= .20$). Inclusive school climate had significantly positive association with students' subjective well-being ($\beta = .12$).

Social support

According to model 1, LGBTQ students had more social support when they felt more comfortable about their transgender identity (if they are transgender), had higher self-esteem, more subjective well-being, and fewer suicidal thoughts ($\beta = .11$, $\beta = .15$, $\beta = .10$, $\beta = -.11$, respectively). As displayed in model 2, gender identity had a significant association with social support ($\beta = -.10$) so we tested another three models by replacing gender identity variable with three different gender identity variables separately—male, female, and transgender variables, which found male students perceived significantly more social support ($\beta = .09$, $p = .046$, in model 2), as opposed to female and transgender students. Furthermore, studying within an inclusive school climate and having multiple school resources improved the model fit by 18.2% (R^2 change $= .20$). Having a counseling center at school was significantly associated with more social support for LGBTQ students ($\beta = .08$).

Suicidal thoughts

According to model 1, LGBTQ students had more frequent suicidal thoughts when they had come out to someone, had lower self-esteem, less subjective well-being, less social support, and more depressive feelings ($\beta = .08$, $\beta = -.20$, $\beta = -.15$, $\beta = -.11$, respectively). In model 2, gender identity had a significant association with suicidal thoughts ($\beta = .11$) so we conducted another three models by replacing gender identity variable with three different gender identity variables—male, female, and transgender variables— separately, which found transgender students had more frequent suicidal thoughts ($\beta = .11$, $p = .037$, in model 2), relative to both male and female students. Moreover, adding variables of school climate and resources increased the model fit by 11.1% (R^2 change $= .20$). Suicidal thoughts were negatively predicted by having LGBTQ role models at school ($\beta = -.12$). It indicates that LGBTQ students had fewer suicidal thoughts when they could see a role model at school.

Overall, the findings confirmed the hypothesis that the impact of having more inclusive school climate and resources would predict positively Chinese LGBTQ students' enhanced mental health.

Discussion

This is the first comprehensive study examining the school experiences as perceived by LGBTQ students in Mainland China, and how school climate affected their psychological well-being. The research found that most Chinese schools were not inclusive or supportive for LGBTQ students. Despite the fact that "a club or support group for LGBT students" was chosen by the most participants when asked to choose three most important things for building an inclusive school climate, only a fifth of students ($n = 141$) reported a supportive group or club dedicated to LGBTQ students existed in their schools. According to previous studies, LGBTQ youths reported less truancy, suicidality, and risky sexual behaviors when studying at schools with a supportive group (e.g., Gay-Straight Alliance), as opposed to their peers without this group (Toomey & Russell, 2013; Poteat et al., 2013). Moreover, while this study found the majority of Chinese LGBTQ students ($n = 484$, 66.1%) felt safe studying and living at school, 42% of students disagreed that they could be authentically themselves, and nearly one-third disagreed that they were respected as much as their peers. As well, very few students ($n = 9$, 1.2%) reported their schools had rules against homophobic bullying or other forms of discrimination. This discrepancy shows that the perceived safety among Chinese LGBTQ students could be a result of 'erasure' or absence of a LGBTQ presence in school environments (its own socio-cultural closet). A qualitative study conducted in Hong Kong found that Chinese LGBTQ students felt excluded and stigmatized in a heteronormative school environment where heterosexism was considered critical and correct (Kwok, 2016). Hence, the absence of inclusive school policy and supportive staffs for LGBTQ students could affect their sense of safety, belonging, as well as physical and mental well-being.

As demonstrated in this study and previous studies (Hatzenbuehler et al., 2014; Thapa et al., 2013), a more inclusive school climate and multiple school resources were significantly linked to the psychological well-being of LGBTQ students. However, very few ($n = 21$, 2.9%) students reported that their teachers—an important part of school climate—were trained to understand LGBTQ issues and support LGBTQ students. This was reflected by the fact that very few students acknowledged receiving LGBTQ-specific information, which meant that either relevant training opportunities were possibly not available for most teachers or that homophobia overrode any training that teachers might have received. As one of the results, more than half of respondents ($n = 405$, 55.3%) felt uncomfortable or very uncomfortable about discussing LGBTQ issues with their teachers in person. Furthermore, the correlational pattern between an inclusive school climate and variables of mental health among the groups of bisexual, questioning, transgender, vocational, and graduate students did not reach a statistically

significant level, after adjusting for age. This could be related to the small sample size of these groups or other factors that affected these groups' mental health more intensively than school climate in Mainland China, including internalized heterosexism, and homophobic bullying. Regardless, it is vital for future researchers to study different practices and outcomes related to the impact of inclusive school climate on subgroups of Chinese LGBTQ students.

In terms of coming out, this study found that younger LGBTQ students (high school students) in Chinese schools realized their sexual orientation and gender identity earlier and came out to others earlier than all the other age groups (such as university and graduate students). One plausible explanation is that young individuals are more exposed to contents of sexual and gender diversity on the Internet or social media, which both educate them and link them to resources they might need, such as LGBTQ non-governmental organizations. Further studies can explore what is the primary content of online information about sexual and gender identities for young generations (e.g., main source and language) and how this availability of information shapes Chinese LGBTQ youths' attitude toward their identities differently between generations. However, while coming out provides advantages to the individual, there are also costs, such as being more exposed to homophobia and/or being excluded by peers. These costs were shown by the regression analyses in this study that having come out to someone had a low association with more frequent suicidal thoughts for Chinese LGBTQ students, especially transgender students. This could mean coming out to non-accepting people which in turn could trigger threats, bullying and subsequent poor self-esteem. According to another study conducted among 18,088 Chinese LGBTQ individuals, the majority of participants made "a direct correlation between 'coming out' and experiencing discrimination," and this "may be the reason why so very few people decide to come out" (UNDP (2016), p. 8). Given this, it is apparent that school intervention, such as counseling services, is needed to support all LGBTQ students. In fact, having a counseling center at school was significantly associated with more social support for LGBTQ students, according to the regression models.

Furthermore, this study revealed two similar findings regarding coming out which are in-line with previous studies. Chinese LGBTQ students chose to disclose their sexual orientation and/or gender identity to friends and schoolmates, siblings rather than to teachers and parents, which is similar to the findings of an earlier study that Chinese youths who have same-sex attraction were more likely to disclose their sexual orientation to their siblings than to their parents (Wong & Tang, 2004). Family was found as the place, for Chinese LGBTQ individuals, with the most frequent rejection

and discrimination followed by schools and the workplace (UNDP, 2016). This can also be explained by the five 'cardinal relationships' (*wu lun*) in Chinese culture, which denote clear roles, responsibilities, bonding, and support of five cardinal social relationships (*wu* literally means five), such as parent-child relationships and sibling relationships (Wong & Tang, 2004). Children are required to obey authorities, such as parents within family and teachers at schools, all of which often render a distance between parents and children as well as between teachers and students. Another plausible reason is that most teachers are not trained to deal with LGBTQ issues and individuals, thus may in fact hold negative attitudes toward them because heterosexism is prevalent in Chinese schools. Moreover, this study found that male students' initial awareness of their sexual orientation and/or gender identity was earlier than females', at an average of 14.9 vs. 15.4 respectively, which are in line with studies in North America (D'Augelli, Grossman, & Starks, 2008; Grov, Bimbi, NaníN, & Parsons, 2006). However, Chinese female students came out earlier than male at an average of 17.5 vs. 18.2, which might be associated with the gender difference of perceiving an inclusive school climate as follows.

There was a gender difference in perception of inclusive school climate among Chinese LGBTQ students in this study. Specifically, male students felt less included in the Chinese heteronormative school culture (especially at the college/university level) as they perceived lower inclusive school climate than female students, with lower school inclusiveness and less freedom of expressing themselves. In Chinese cultural context, the fidelity to family and heterosexual marriage shape the core of social expectations. As a result, men shoulder an intense burden from their family, especially their parents, if they are not married to women and have no children to continue the family line. This expectation inevitably affects many homosexual and bisexual men's psychological well-being. Lastly, educational settings, important parts of the cultural ecological system, still manifest heterosexism and homophobia through general practices, such as assuming every student is heterosexual and cisgender at school and allowing homophobic language (Kwok, 2016). Moreover, at the vocational school level, male students perceived more social support than female and transgender students. Future research is needed to investigate contextual reasons behind this gender difference at various school levels.

This study also underscored the prevalence of negative psychological outcomes of LGBTQ students, and confirmed previous research about the mental health disparities of LGBTQ youths as compared to their counterparts. It is noteworthy that about 85% of Chinese LGBTQ students experienced depressive feelings and around 40% had suicidal thoughts in the past year. Notably, transgender students had the highest percentage of suicidal

thoughts, relative to male and female students. Regardless, there is no national study conducted to investigate the different prevalence of depressive feelings and suicidality between LGBTQ students and non-LGBTQ students in Mainland China. However, this compares with a prevalence of depression among all Chinese high school students (both LGBTQ and non-LGBTQ students) of 23.7%, found from an epidemiological study with a stratified sample of 12,408 high school students in Yunnan Province (Li & Huang, 2014). Another study investigated 4,789 Chinese college freshmen students and found that the prevalence of depression was 8.2% (Wu et al., 2016). This discrepancy might be due to the maladaptive attributional style of Chinese students. A cross-cultural study found Chinese students accepted more responsibility for interpersonal and non-interpersonal failures than did U.S. students, which accounted for much of their relatively higher scores on depression and loneliness (Anderson, 1999). Living in a collective society highly influenced by Confucian and heteronormative ideology, most Chinese LGBTQ students find it unbearable to enter a heterosexual marriage and bear children so as to satisfy parental and societal expectations. As such, stress, guilt, and shame are common outcomes. Another study also found that depression and low self-esteem in the family context were independently associated with suicide ideation and attempts (Wild, Flisher, & Lombard, 2004). Further studies and interventions are highly needed to address the psychological distress of LGBTQ students in Mainland China.

Furthermore, high school students reported lower self-esteem when compared with the university and graduate students. This may be due to the likelihood that older LGBTQ students had gained more life experiences and became more self-sufficient, thus were less dependent on others for their self-esteem and confidence. Lastly, this study found that having a LGBTQ role model at school was associated with fewer suicidal thoughts for Chinese LGBTQ students. However, only 56.8% of respondents had seen LGBTQ students who could feasibly act as a role model for them at their school. Therefore, cultivating an inclusive school climate that encourages the visibility of LGBTQ students and provides mentorship by trained adults and LGBTQ peers are significant for preventing suicidality.

Based on both the literature review and the findings of this study, the authors make the following four recommendations. First, anti-discrimination legislation regarding sexual orientation and gender identity should be enacted in Mainland China. With the legislation, social stigma around an "abnormal" sexuality for LGBTQ individuals will be mitigated by diminishing homophobic and transphobic language in all public arenas. Importantly, since Chinese "LGBT community groups are restricted by

their lack of legal status, as well as the government's belief that LGBT NGOs are illegitimate or 'sensitive' groups and general unwillingness to allow their registration" (UNDP, 2014, p. 52) a coordinated effort to provide a supportive school environment may be challenged. Tailored legislation is needed to address this challenge. Additionally, social and cultural services supporting psychological needs of LGBTQ individuals should be encouraged—for example, counseling service. Second, anti-discrimination rules based on sexual orientation and gender identity should be implemented at educational institutions, supporting LGBTQ students. This includes a message of zero tolerance of discriminative language and harassment by teachers, counselors, social workers, medical staffs, and other students (Kwok, 2016). Third, professional trainings regarding sexual and gender diversity should be mandatory in Chinese educational institutions. Notably, not only should teachers and peers be trained to support LGBTQ students, key actors and decision-makers, such as headmasters, school counselors, social workers, and medical staffs should be trained and monitored to advocate for and provide education about LGBTQ youth in schools and to provide direct support to this population and their parents and siblings. Fourth, comprehensive sexual education curriculum concerning sexual orientation and gender diversity should be integrated in the curricula system of compulsory education. Fortunately, comprehensive sexuality education curriculum is now taught at primary schools in different cities (e.g., Beijing, Hefei) in Mainland China (Liu & Su, 2014). It promotes gender equality and reduces discrimination against LGBTQ community by teaching students to respect everyone regardless of their sexual orientation. As part of the curriculum, teachers accept relevant trainings to teach such a curriculum and guide students' development in their everyday school lives (below is the Chinese translation of this paragraph).

基于文献综述和本研究的发现, 作者提出以下四条建议。第一, 在中国颁布关于性倾向和性别认同的反歧视法律法规。通过法制建设消除所有公共渠道中的恐同和恐跨言论, 这样围绕LGBTQ群体是"变态"的社会污名也将会随之得到缓解。由于"中国的LGBT民间组织被它们法律地位的缺失所制约, 也被政府的有限认识（如认为其是不合法的、'敏感的'团体）而掣肘", （UNDP （2016）, 52页）, 通过多部门合作来建设一个支持性的校园环境的方式受到了挑战, 这需要得到相应法律的支持。另外, 支持性少数个体心理需求的社会和文化服务应该受到鼓励, 比如心理咨询服务。第二, 教育机构应该施行基于性倾向和性别认同的反歧视规定来支持LGBTQ学生, 包括对于来自教师、咨询师、社会工作者、医务工作者和其他学生的歧视性言论和骚扰的零容忍（Kwok,2016）。第三, 包含性倾向和性别多元的专业培训应该成为教育机构内的必修培训。值得强调的是, 不仅是教师和同伴需要接受培训来学习如何支持LGBTQ学生, 重要的利益攸关方和政策制定者, 比如校长、学校咨询师、社会工作者 和

医务工作者也应该接受培训和监测，从而为学校的LGBTQ青少年及其家人提供倡导、教育和服务。第四，把包含性倾向和性别多元内容的全面性教育课程纳入义务教育课程体系。幸运的是，全面性教育课程目前已在中国不同城市（如北京、合肥）的小学开展（Liu & Su, 2014），通过教育学生尊重不同性倾向的人来提倡社会性别平等和减少对于LGBTQ社群的歧视。作为课程开展的一部分，教师接受相关培训来进行授课，并指导学生的日常校园生活。

Several limitations of this study, however, restricted the generalizability of its results. The first limitation is its nonprobability sample, with more male students, and university students. The wide age range of LGBTQ students in this study also shaped the findings. Even though online surveys are effective in reaching otherwise isolated Chinese LGBTQ students, without a wider random and national level sample, results of this present study cannot be applicable to all LGBTQ students living in Mainland China, especially those who live with a low level of Internet connectivity. To improve our understanding of LGBTQ students across Mainland China, items collecting information about sexual orientation and gender identity should be included in other nationwide surveys. Another limitation of this study is that was contingent solely on self-reports of participants that might be subject to self-selection and recall bias. Students might not be informed of some school resources, that is, school policy or teachers' training requirements, and therefore a tailored questionnaire for teachers or principals is needed to understand inclusive school climate from another important perspective. Furthermore, this study also did not question the background and training of teachers, who if interviewed, might provide a different view of training and curriculum. Additionally, in the Chinese Confucian culture, students might tend to choose the midpoint rather than extremes in responding to survey questions. This would certainly affect some findings, for example, the comfort of sexual orientation and transgender identity. And although three questions were asked to identify gender identities, only one question was used to identify sexual orientation, which might oversimplify respondents' sexual diversity, especially for questioning adolescent students. Lastly, the assessments of depressive feelings (one item) and suicidal thoughts (two items) were not comprehensive enough to reach a clinical assessment, even though they had served as important predictors for the mental health of Chinese LGBTQ students.

Despite these limitations, this study has significant service and policy implications. First, this research expanded our knowledge of the demographics and psychological well-being of the LGBTQ student/population in Mainland China. Second, this research provided policymakers with descriptions and suggestions for the implementation of factors that represent an

inclusive school climate. It provided them with data to consider interventions in building an inclusive education system and society in Mainland China. Thirdly, considering the large number of LGBTQ students in Chinese schools, the negative psychological state of many, and the lack of policy and sensitivity training in the schools, this study shed light on the need for school administrators to take immediate action to implement policy and programs addressing such issues as homophobia, bullying, lack of professional training for teachers, and counseling service for LGBTQ students. Lastly, this study laid a solid foundation for future researchers to expand upon what we know to be factors that support an inclusive school climate within Chinese schools.

In conclusion, most schools were not inclusive for Chinese LGBTQ students in Mainland China, reflected by the fact that very few LGBTQ-specific school policy, teacher training, and curriculum were reported by students, while the majority of them felt safe living and learning at school. Overall, most LGBTQ students felt comfortable about their sexual orientations and had come out to someone; however, most of them remained closeted with their siblings, parents, relatives, or school teachers. Male students perceived the lowest inclusive school climate, compared with female and transgender students. In addition, Chinese LGBTQ students were at great risk for mental health problems—about 85% of them felt depressed and around 40% had suicidal thoughts. Having more inclusive school resources, especially a positive LGBTQ role model, were significantly associated with the reduction of LGBTQ students' suicidal thoughts. Given this, a more inclusive and positive school climate is necessary for students' ability to thrive both in school and later in life. Applied LGBTQ-specific policy, training, and counseling should be implemented now in order to improve the lives of LGBTQ youth, and by extension all youth, in Mainland China.

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