

## Original article

# Persistent and multisite homophobic harassment during childhood and adolescence and its association with school difficulties in gay and bisexual men in Taiwan

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## Abstract

**Background:** Homophobic harassment can compromise mental health of sexual minority youths. **Objectives:** This study examined the rates of persistent and multisite homophobic harassment and their associations with school difficulties during childhood and adolescence among gay and bisexual men in Taiwan. **Methods:** Participants were recruited through advertisements on the Facebook, Bulletin Board Systems, and the home pages of health promotion and counseling centers for the gay, lesbian, and bisexual community. The experiences of traditional and cyber harassment based on gender role nonconformity and sexual orientation of 500 gay or bisexual men were examined. The associations of multisite and persistent harassment victimization with school difficulties were evaluated. **Results:** A total of 239 (47.8%) and 131 (26.2%) participants experienced persistent and multisite harassment victimization, respectively. Harassment victimization was significantly associated with low satisfaction with academic performance in any stage of study. Moreover, the participants who were harassed in senior high schools were more likely to miss classes or be truant than those who were not harassed. The victims of multisite harassment at senior high schools were more likely to miss classes or be truant than those of school-only harassment. **Discussion:** Prevention and intervention programs are warranted to reduce homophobic harassment in sexual minority youths.

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**Keywords:** Sexual minority, homophobia, harassment, gender role nonconformity, sexual orientation.

## Introduction

Homophobia is defined as negative beliefs, attitudes, stereotypes, and behaviors directed toward sexual minorities, including lesbian, gay, bisexual, transgender, and questioning (LGBTQ) individuals<sup>1</sup>. Homophobic harassment of sexual minority children and adolescents based on gender role nonconformity and sexual orientation is a major global concern for mental health and educational professionals. The 2015 National School Climate Survey of the Gay, Lesbian, and Straight Education Network on secondary students from all 50 states and the District of Columbia in the United States reported that 85% of sexual minority students experienced verbal harassment based on a personal characteristic and 66% experienced sexual or gender-related discrimination at schools<sup>2</sup>. Furthermore, a survey on harassment among adolescents in Canada revealed that sexual minority students persistently reported higher victimization rates than heterosexual peers over time<sup>3</sup>. A 3.5-year follow-up study observed that prior experiences of homophobic harassment predicted subsequent psychological distress in LGBTQ adolescents, and higher victimization rates resulted in higher distress<sup>4</sup>. A 6-month follow-up study proved that homophobic harassment victimization significantly mediated the effects of sexual minority status on depressive symptoms and suicidality<sup>5</sup>. Therefore, the aforementioned study findings support public policy initiatives that reduce homophobic harassment and prevent victimization-related effects on the health and well-being of sexual minority youths.

In addition to mental health concerns and psychological distress, homophobic harassment may be associated with school difficulties in sexual minority youths. The minority stress hypothesis<sup>6</sup> suggested that homophobic harassment may partially account for disparities in

sexual minority youths. Studies have observed that sexual minority youths with prior harassment experiences are at an increased risk of low educational aspiration<sup>7</sup>, missing classes<sup>2</sup>, and truancy due to fear<sup>8</sup>. Low educational aspiration is a critical indicator of the ineffective school life of students. Moreover, high rates of missing classes may endanger students' school performance and increase the risk of deviant behaviors outside schools such as alcohol and drug abuse, aggression, and criminal behaviors. Therefore, efforts to prevent homophobic harassment-caused school difficulties are urgently required to ameliorate social and behavioral problems in sexual minority youths.

Several concerns regarding homophobic harassment and its association with school difficulties in sexual minority youths warrant additional investigation. Data on the prevalence of homophobic harassment and its adverse effects on the school life and mental health of sexual minority youths in Asia are limited compared with data from Western societies. A study found that people in completely industrialized Asian countries, such as Japan and South Korea, show much less tolerance for homosexuality than people in industrialized European and North American countries do<sup>9</sup>. A study on sexual minority men in Japan revealed that 83% and 60% of the men experienced school bullying and verbal harassment, respectively, because of their perceived homosexuality. In addition, a history of verbal harassment was significantly associated with the risk of attempted suicide<sup>10</sup>. Therefore, homophobic harassment victimization during childhood and adolescence and its association with school difficulties in sexual minority youths in Asian countries warrant further investigation.

Compared with the traditional forms of homophobic harassment, including teasing, social exclusion, and physical assault<sup>11</sup>, cyber harassment in sexual minority youths has been less investigated.

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Cyber harassment is a new mode of harassment that has emerged in the digital age<sup>12</sup>. Almost one in two sexual minority youths experience online peer victimization compared with one in six heterosexual youths<sup>13</sup>. Because adolescent victims of cyber harassment are more likely to experience psychological problems, including depression<sup>14</sup>, anxiety<sup>14,15</sup>, suicidality<sup>15</sup>, and adjustment difficulties in schools<sup>15</sup>, than adolescent nonvictims, the cyber harassment experiences of sexual minority youths warrant further exploration.

A high proportion of bullying victims and perpetrators are persistently involved in bullying<sup>16</sup>. Persistent exposure to bullying is associated with mental health complaints and poor school performance<sup>17</sup>. However, data on the adverse effects of persistent homophobic harassment on sexual minority youths are limited.

Sexual minority youths may experience homophobic harassment not only at schools but also in other environments. Because most parents in Taiwan have long working hours and can only take care of their children after work during weekdays, their children are sent to afterschool classes to receive care and complete their homework after their daily study at primary schools. Just as in other East Asian countries with Confucian roots, people in Taiwan encourage children to pursue academic success, and therefore, many students continue studying in tutoring schools after finishing classes in primary (grades 1 to 6), junior high (grades 7 to 9), and senior high (grades 10 to 12) schools. Moreover, some senior high school students may start part-time work. According to our review of the relevant literature, no study has evaluated the experiences of homophobic harassment occurring at schools, afterschool classes, tutoring schools, and part-time workplaces simultaneously. However, whether the place of homophobic harassment (i.e., school-only or outside school [multisite] harassment) has variable effects on school difficulties requires further investigation.

The present study examined the victimization rates of traditional and cyber harassment, particularly persistent and multisite homophobic harassment, based on gender role nonconformity and sexual orientation of gay and bisexual men in Taiwan during their childhood and adolescence. In addition, we investigated the associations between homophobic harassment (any form, persistent, and multisite) victimization and school difficulties, including dissatisfaction with academic performance and the tendency of missing classes or truancy. We hypothesized that receiving homophobic harassment is significantly associated with school difficulties in gay and bisexual men. Furthermore, sexual minority youths who experience persistent and multisite homophobic harassment are more likely to have school difficulties than those who experience nonpersistent and school-only homophobic harassment.

## Methods

### Participants

Participants were recruited through advertisements on the Internet, including Facebook, Bulletin Board Systems, and the home pages of five health promotion and counseling centers for the gay, lesbian, bisexual, and transgender (LGBT) community. Individuals who exhibited any deficits (e.g., intellectual disability or substance use) that prevented them from understanding the study purpose or completing the questionnaires were excluded. A total of 500 gay or bisexual cis men aged between 20 and 25 years were recruited in this study. Informed consent was obtained from all participants prior to assessment. This study was approved by the Institutional Review Board of Kaohsiung Medical University Hospital (KMUHIRB-F(I)-20150026) and meets ethical guidelines in Taiwan.

### Measures

Chinese version of the School Bullying Experience Questionnaire

We used six items from the self-reported Chinese version of the School Bullying Experience Questionnaire (C-SBEQ) to evaluate

participants' retrospective experiences of traditional harassment in primary (grades 1 to 6), junior high (grades 7 to 9), and senior high (grades 10 to 12) schools<sup>18</sup> based on their gender role nonconformity and sexual orientation at schools, afterschool classes, tutoring schools, and part-time workplaces. Two forms of traditional harassment victimization were evaluated, including verbal ridicule and relational exclusion (three items for experiencing social exclusion, mean name-calling, and ill-speaking; for example: "How often have others spoken ill of you because they thought of you as a sissy [they found you homosexual or bisexual]?") and physical aggression and theft of belongings (three items for experiencing physical abuse, forced work, and confiscation of money, school supplies, and snacks; for example: "How often have others beaten you up because they thought of you as a sissy [they found you homosexual or bisexual]?"). The responses for these six items were graded on a 4-point Likert scale range as follows: 0 = never, 1 = just a little, 2 = often, and 3 = all the time. A previous study on C-SBEQ psychometrics revealed that the C-SBEQ has acceptable reliability and validity<sup>18</sup>. The Cronbach's  $\alpha$  of the scale for evaluating two forms of harassment based on gender role nonconformity and sexual orientation ranged from 0.70 to 0.86. In the present study, the participants who answered 1 on any item were identified as self-reported victims of mild traditional harassment and those who reported 2 or 3 on any item were identified as self-reported victims of traditional bullying. Furthermore, the place and time of harassment of all participants who did not answer 0 on any item were investigated. Harassment that occurred both inside and outside schools was defined as multisite harassment and that persisted from primary to high schools or from junior high to senior high schools was defined as persistent harassment.

### Cyberbullying Experiences Questionnaire

We used three items of the Cyberbullying Experiences Questionnaire to assess participants' retrospective experiences of cyber harassment in primary, junior high, and senior high schools<sup>19</sup> based on their gender role nonconformity and sexual orientation. The three items addressed the experiences of posting mean or hurtful comments; posting upsetting pictures, photos, or videos; and online rumor-spreading through emails, blogs, social media (Facebook/Twitter/Plurk), and pictures or videos; for example: "How often have other students posted mean or hurtful comments on you through e-mails, blogs, or social media because they thought of you as a sissy (they found you homosexual or bisexual)?" The responses to these items were graded using a 4-point Likert scale, ranging from 0 (never) to 3 (all the time). The Cronbach's  $\alpha$  values of the scales for evaluating cyber harassment victimization due to gender role nonconformity and due to sexual orientation were 0.71 and 0.86, respectively. In the present study, the participants who answered 1 on any item were identified as self-reported victims of mild cyber harassment and those who reported 2 or 3 on any item were identified as self-reported victims of cyberbullying. Furthermore, the time of cyber harassment or cyber bullying of all participants who did not answer 0 on any item was investigated. Cyber harassment that persisted from primary to high schools or from junior high to senior high schools was defined as persistent cyber harassment.

### School difficulties

We invited the participants to label retrospectively their subjective satisfaction with their academic performance in primary, junior high, and senior high schools using an item on the 4-point Likert scale, ranging from 0 (very satisfied) to 3 (not satisfied at all). In the present study, participants who answered 2 or 3 were classified as dissatisfied with their academic performance. The tendencies of missing classes or truancy in primary, junior high, and senior high schools were evaluated using an item on the 4-point Likert scale, ranging from 0 (never) to 3 (very frequent). In the present study, all

participants who did not answer as 0 on any item were classified as having a tendency of missing classes or truancy.

### Procedure and statistical analysis

Research assistants explained the procedures and methods for completing the research questionnaires to the participants individually. The research assistants resolved any difficulties encountered by the participants while completing the questionnaires. Data analysis was performed using SPSS 20.0 statistical software (SPSS Inc., Chicago, IL, USA).

The ratios of the participants with victimization of two types (verbal ridicule and relational exclusion and physical aggression and theft of belongings) of mild traditional harassment and traditional bullying, mild cyber-harassment and cyber-bullying due to gender non-conformity and sexual orientation were calculated. The proportion of the participants who were dissatisfied regarding their academic performance and had missed classes or engaged in truancy were also calculated.

The associations between harassment victimization during primary, junior high, and senior high schools and dissatisfaction with academic performance and the tendency of missing classes or truancy were examined using the chi-squared test. In addition, the associations between persistent and multisite harassment victimization and dissatisfaction with academic performance and the tendency of missing classes or truancy were investigated using the chi-square test. A *p* value of 0.05 was considered statistically significant for all tests.

### Results

A total of 500 gay (*n* = 371) or bisexual (*n* = 129) men participated in this study. Their mean age was 22.9 years (standard deviation: 1.6 years, range: 20–25 years).

### Forms of harassment

Table 1 presents the rates of verbal ridicule and relational exclusion, physical aggression and theft of belongings, and cyber harassment based on gender role nonconformity and sexual orientation of

**Table 1.** Harassment based on gender role nonconformity and sexual orientation (N = 500)

	Gender role nonconformity <i>n</i> (%)	Sexual orientation <i>n</i> (%)	Either <i>n</i> (%)
Victims of traditional harassment			
Verbal ridicule and relational exclusion			
Mild harassment	247 (49.4)	183 (36.6)	250 (50)
Bullying	161 (32.2)	79 (15.8)	179 (35.8)
Total	408 (81.6)	262 (52.4)	429 (85.8)
Physical aggression and theft of belongings			
Mild harassment	137 (27.4)	53 (10.6)	138 (27.6)
Bullying	46 (9.2)	20 (4)	51 (10.2)
Total	183 (36.6)	73 (14.6)	189 (37.8)
Any form of traditional harassment			
Mild harassment	240 (48)	181 (36.2)	245 (49)
Bullying	174 (34.8)	85 (17)	190 (38)
Total	414 (82.8)	266 (53.2)	435 (87)
Victims of cyber harassment			
Mild harassment	135 (27)	112 (22.4)	163 (32.6)
Bullying	27 (5.4)	30 (6)	38 (7.6)
Total	162 (32.4)	142 (28.4)	201 (40.2)

the participants. A total of 438 (87.6%) participants experienced traditional harassment (*n* = 435, 87%) or cyber harassment (*n* = 201, 40.2%) during their childhood and adolescence. Of the 414 (82.8%) participants who experienced traditional harassment based on gender role nonconformity, 408 (81.6%) experienced verbal ridicule and relational exclusion, and 183 (36.6%) experienced physical aggression and theft of belongings. Of the 266 (53.2%) participants who experienced traditional harassment based on sexual orientation, 262 (52.4%) experienced verbal ridicule and relational exclusion, and 73 (14.6%) experienced physical aggression and theft of belongings. Of the 201 (40.2%) participants who experienced cyber harassment, 162 (32.4%) experienced harassment based on gender role nonconformity, and 142 (28.4%) experienced harassment based on sexual orientation.

### Time and place of harassment

Table 2 presents the time and place of harassment and school difficulties. In this study, 199 (39.8%), 309 (61.8%), and 230 (46%) participants experienced harassment during primary, junior high, and senior high schools, respectively. Of the participants who experienced harassment at primary schools, 166 (33.2%) and 84 (16.8%) experienced persistent harassment in junior high and senior high schools, respectively. Of the participants who experienced harassment at junior high schools, 147 (29.4%) experienced persistent harassment in senior high schools. A total of 239 (47.8%) participants experienced persistent harassment.

Of the 435 participants who reported traditional harassment, 58 (11.6%), 68 (13.6%), and 56 (11.2%) experienced harassment at afterschool classes, tutoring schools, and part-time workplaces, respectively. Furthermore, 92 (18.4%), 27 (5.4%), and 12 (2.4%) participants experienced traditional harassment at one, two, and three places outside schools, respectively. A total of 131 (26.2%) participants reported multisite harassment victimization.

**Table 2.** Time and place of harassment and school difficulties (N = 500)

	<i>n</i> (%)
Time of traditional or cyber harassment	
Primary school	199 (39.8)
Persistent up to junior high school	166 (33.2)
Persistent up to senior high school	84 (16.8)
Junior high school	309 (61.8)
Persistent up to senior high school	147 (29.4)
Senior high school	230 (46)
Persistent harassment victimization	239 (47.8)
Place of traditional harassment	
School	435 (87)
Afterschool class	58 (11.6)
Tutoring school	68 (13.6)
Workplace	56 (11.2)
Number of places outside school at which harassment occurred	
One	92 (18.4)
Two	27 (5.4)
Three	12 (2.4)
Multisite harassment victimization	131 (26.2)
Low satisfaction with academic performance	
Primary school	99 (19.8)
Junior high school	164 (32.8)
Senior high school	190 (38.0)
Tendency of missing classes or truancy	
Primary school	44 (8.8)
Junior high school	86 (17.2)
Senior high school	141 (28.2)

### Associations between harassment and school difficulties

Table 3 shows the associations between harassment and satisfaction with academic performance and the tendency to miss classes or to engage in truancy. Harassment victimization was significantly associated with low satisfaction with academic performance in primary ( $p < 0.01$ ), junior high ( $p < 0.01$ ), and senior high ( $p < 0.001$ ) schools. Moreover, the participants who were harassed in senior high schools were more likely to miss classes or be truant than those who were not harassed ( $p < 0.01$ ).

### Associations between multisite and persistent harassment and school difficulties

Table 4 presents the associations between multisite and persistent harassment and dissatisfaction with academic performance and the tendency of missing classes or truancy. The senior high school students victimized by multisite harassment were more likely to miss classes or engage in truancy than the senior high school students who were harassed only at schools ( $p < 0.01$ ), whereas no significant association was observed between multisite harassment and the

tendency of missing classes or truancy at primary and junior high schools. Furthermore, multisite harassment and dissatisfaction with academic performance were not significantly associated at primary, junior high, or senior high schools.

A significant association was not observed between persistent harassment from primary to junior high schools and school difficulties at junior high schools. Furthermore, no significant association was found between persistent harassment from junior high to senior high schools and the tendency of missing classes or truancy at senior high schools. However, the participants who experienced persistent harassment from junior high to senior high schools were more likely to be satisfied their academic performance at senior high schools than those who experienced harassment only at senior high schools but not at junior high schools.

### Discussion

In the present study, a high proportion (87.6%) of gay and bisexual men experienced homophobic harassment during their childhood and adolescence. Almost half (47.8%) and more than one-fourth (26.2%) of the gay and bisexual men experienced persistent and

**Table 3.** Associations between harassment and satisfaction with academic performance and the tendency of missing classes or truancy

	Satisfaction with academic performance			Tendency of missing classes or truancy		
	High <i>n</i> (%)	Low <i>n</i> (%)	$\chi^2$	No <i>n</i> (%)	Yes <i>n</i> (%)	$\chi^2$
Harassment in primary school						
No ( <i>n</i> = 301)	254 (84.4)	47 (15.6)	8.343**	280 (93.0)	21 (7.0)	3.133
Yes ( <i>n</i> = 199)	147 (73.9)	52 (26.1)		176 (88.4)	23 (11.6)	
Harassment in junior high school						
No ( <i>n</i> = 191)	146 (76.4)	45 (23.6)	11.971**	166 (86.9)	25 (13.1)	3.668
Yes ( <i>n</i> = 309)	190 (61.5)	119 (38.5)		248 (80.3)	61 (19.7)	
Harassment in senior high school						
No ( <i>n</i> = 270)	189 (70)	81 (30)	15.944***	209 (77.4)	61 (22.6)	9.115**
Yes ( <i>n</i> = 230)	121 (52.6)	109 (47.4)		150 (65.2)	80 (34.8)	

\*\*  $p < 0.01$ ; \*\*\*  $p < 0.001$ .

**Table 4.** Associations between multisite and persistent harassment and satisfaction with academic performance and the tendency of missing classes or truancy

	Satisfaction with academic performance			Tendency of missing classes or truancy		
	High <i>n</i> (%)	Low <i>n</i> (%)	$\chi^2$	No <i>n</i> (%)	Yes <i>n</i> (%)	$\chi^2$
Multisite harassment						
Primary school						
No ( <i>n</i> = 134)	95 (70.9)	39 (29.1)	1.880	117 (87.3)	17 (12.7)	0.511
Yes ( <i>n</i> = 65)	52 (80)	13 (20)		59 (90.8)	6 (9.2)	
Junior high school						
No ( <i>n</i> = 257)	159 (61.9)	98 (38.1)	0.093	206 (80.2)	51 (19.8)	0.010
Yes ( <i>n</i> = 52)	31 (59.6)	21 (40.4)		42 (80.8)	10 (19.2)	
Senior high school						
No ( <i>n</i> = 166)	88 (53.0)	78 (47.0)	0.039	117 (70.5)	49 (29.5)	97.289**
Yes ( <i>n</i> = 64)	33 (51.6)	31 (48.4)		33 (51.6)	31 (48.4)	
Persistent harassment						
From primary school to junior high school						
No ( <i>n</i> = 143)	90 (62.9)	53 (37.1)	0.150	103 (72.0)	40 (28.0)	0.167
Yes ( <i>n</i> = 166)	108 (65.1)	58 (34.9)		123 (74.1)	43 (25.9)	
From junior high school to senior high school						
No ( <i>n</i> = 83)	36 (43.4)	47 (56.6)	4.442*	54 (65.1)	29 (34.9)	0.001
Yes ( <i>n</i> = 147)	85 (57.8)	62 (42.2)		96 (65.3)	51 (34.7)	

\* $p < 0.05$ ; \*\* $p < 0.01$ .

multisite harassment, respectively. Harassment victimization was significantly associated with dissatisfaction with academic performance at all stages of school life. Furthermore, harassment victimization was significantly associated with the tendency of missing classes or truancy in senior high schools. The victims of multisite harassment at senior high schools were more likely to miss classes or be truant than those of school-only harassment, whereas the victims of persistent harassment were more likely to be satisfied with their academic performance than those of nonpersistent harassment at senior high schools.

The present study observed that nearly 9 in 10 gay and bisexual men experienced harassment based on gender role nonconformity or sexual orientation during their childhood and adolescence, which is similar to the results of a study in the United States<sup>2</sup>. Taiwan is considered to be one of the most LGBTQ-friendly countries in Asia. An analysis of attitudes toward homosexuality revealed that the overall social tolerance toward homosexuality among people in Taiwan has increased progressively from 1995 to 2012<sup>20</sup>. Moreover, Taiwan has made the most progress in terms of attitudinal shifts toward a higher acceptance of homosexuality between 1995 and 2012 than China, Japan, and South Korea<sup>20</sup>. However, the high rate of homophobic harassment in sexual minority youths in the present study indicates that homophobic harassment remains prevalent and warrants intervention of educational and health professionals.

The present study revealed that harassment in the form of verbal ridicule and relational exclusion was more common than physical aggression and theft of belongings in gay and bisexual men. These results are consistent with the experiences of general but not homophobic harassment in general population<sup>21</sup>. Compared with physical aggression, verbal ridicule and relational exclusion are less detectable by school personnel and parents. Similar to physical aggression, verbal ridicule and relational exclusion can also compromise victims' mental health<sup>21</sup>. Therefore, parents and school personnel should focus on the active and early detection of verbal and social harassment in sexual minority youths.

Notably, in this study, harassment based on gender role nonconformity was more prevalent than that based on sexual orientation. Studies have reported that the negative effects of victimization based on the sexual minority status are not limited to individuals who actually identify as a sexual minority. Cross-sectional and longitudinal studies have observed that boys can be bullied for being perceived as gay because of their gender role nonconformity, regardless of their actual sexual identity; in addition, bullying victimization increases the severity of psychosocial stress<sup>22-24</sup>. The aforementioned results indicate that challenging gender-stereotyped perceptions and promoting gender equality concepts are fundamental to prevent homophobic harassment.

In the present study, 40% of the sexual minority men experienced cyber harassment based on gender role nonconformity or sexual orientation during their childhood and adolescence. According to Urie Bronfenbrenner's ecological system perspective<sup>25</sup>, homophobic bullying is established and perpetuated gradually due to complex interactions between individuals and multilevel social systems<sup>26</sup>, whereas social support is a protective factor for homophobic harassment in schools<sup>27</sup>. Because of the presence of numerous peers who have hostile attitudes in schools and communities, the Internet is an important source of social support for sexual minority youths. However, adolescent victims of highly severe traditional bullying are more likely to experience cyberbullying<sup>19</sup>. The results of the present study support the claim that both in-person harassment and cyber harassment should be the targets of prevention and intervention programs for homophobic harassment in sexual minority youths.

The present study found that harassment victimization was significantly associated with low satisfaction with academic performance in all stage of school life. According to the psychological mediation model, peer harassment increases psychological distress in sexual minority individuals and negatively influences cognitive, regulatory, and social mechanisms associated with the development

of psychopathology<sup>28,29</sup>. Furthermore, studies have observed that homophobic harassment victimization predicts psychological distress, depressive symptoms, and suicidality in sexual minority individuals<sup>4,5</sup>. Moreover, mental health concerns further compromise academic outcomes in bullying victims<sup>30</sup>. The study participants who were harassed in senior high schools were more likely to miss classes or be truant than those who were not harassed. Missing classes and truancy may be coping strategies adopted by sexual minority youths to avoid persistent homophobic harassment as senior high school students. However, low school attendance may further jeopardize their performance. The present results indicate that parents and educational and mental health professionals should routinely investigate the experiences of homophobic harassment in sexual minority youths who miss classes frequently, have low academic success, or are truant.

Multisite homophobic harassment at senior high schools was significantly associated with the tendency of missing classes or truancy in the present study. According to the minority stress hypothesis<sup>6</sup>, sexual minority youths who experience multisite harassment must endure continuous homophobic harassment outside schools, which may adversely affect their morale and aggravate psychological distress. Victims of multisite harassment may run away from schools to ameliorate the source of homophobic harassment. The present results support that prevention and intervention programs for homophobic harassment should be established not only at schools but also in other environments, such as tutoring schools and part-time workplaces.

In contrast to our hypothesis, sexual minority youths who experienced persistent homophobic harassment from junior high to senior high schools were more likely to be satisfied with their academic performance than those who were harassed only at senior high schools. Persistent bullying can result in more severe mental health and school-related problems than nonpersistent bullying<sup>17</sup>. One possible explanation for discrepancies in the present and previous study results is that pursuing academic success might be a method adopted by sexual minority youths to earn respect from others and develop self-esteem, which may mitigate the distress caused by harassment. However, additional studies are warranted to replicate the present results and examine the possible mechanisms.

The present study has several limitations. First, this study obtained data on participants' homophobic harassment victimization and school difficulties retrospectively, and therefore, recall bias might have been introduced. However, bullying victims may have strong emotional reactions to such events and develop vivid and lasting memories of such experiences, reducing the possibility of recall bias<sup>31</sup>. Second, this study could not determine the causal relationship between homophobic harassment victimization and school difficulties. Third, study data were exclusively self-reported. Therefore, the use of only a single data source could have influenced our findings and may have resulted in shared-method variances.

## Conclusion

A high proportion of gay and bisexual men experience homophobic harassment, in the forms of verbal, social, physical, and cyber harassment, during their childhood and adolescence. Furthermore, homophobic harassment victimization, particularly multisite harassment, is significantly associated with school difficulties. The present findings support public policy initiatives that curtail homophobic harassment because decreasing harassment victimization may reduce school difficulties in sexual minority youths.

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## Ethical approval

This study was approved by the Institutional Review Board of Kaohsiung Medical University (KMUHIRB-F(I)-20150026).

## Competing interests

None declared.

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