Original Article

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Disparities in Stress Coping Strategies among High School Students, in Bangkok, with Various Sexual Orientations and Gender Identities

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Abstract

Objective: To ascertain any relationship between coping strategies, sexual orientation and gender diversity in regard to high school students in Bangkok, and to examine coping strategies among sexual and gender minority youths.

Material and Methods: This cross-sectional survey included 600 students across Bangkok, Thailand. Participants completed an online questionnaire, consisting of demographic data and the Adolescent Coping Scale (Thai version). Descriptive statistics, the Mann-Whitney U test, and the Kruskal-Wallis test were used for data analysis (p-value≤0.05).

Results: The participants included 301 males (50.2%), and 299 females (49.8%), with a mean age of 16.6. The sample identified as 83.7% cisgender, 16.3% non-cisgender (transgender, non-conforming, questioning/unspecified, and others), 64.8% heterosexual, and 35.2% non-heterosexual (homosexual, bisexual, asexual, pansexual, questioning/unspecified, and others). Females used more non-productive coping strategies than males (p-value=0.001), non-cisgender youths used more non-productive coping than cisgender youths (p-value<0.001), and non-heterosexual youths used more non-productive coping than heterosexual youth (p-value<0.001). Coping strategies mostly used by sexual and gender minority male youths were worrying, ignoring the problem, and wishful thinking, while coping strategies most used by sexual and gender minority female youths were worrying, not coping, and keeping to one's self.

Conclusion: Differences in regards to the sex assigned at birth, gender identity, and sexual orientation had a statistically significant correlation with different coping strategies, specifically in sexual and gender minority youths who used non-productive coping strategies.

Keywords: coping, LGBTQ, sexual and gender diversity, sexual and gender minority

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Introduction

Sex or sex assigned at birth is defined as the innate physiological and biological characteristics that distinguish between being male or female, such as chromosomes or genitalia, which can then be categorized into male, female, intersex, or hermaphrodite[1,2]. Gender is a social and cultural construct that differentiates men and women, including attitudes, feelings, and behaviors[1,3]. Gender identity is the feeling towards oneself in regard to gender, which might or might not be congruent with the sex assigned at birth. One might consider themselves a man, a woman, or neither but genderqueer, gender nonconforming, or gender neutral. Some categorize gender identity as cisgender, which describes those whose gender identity is congruent with their sex assigned at birth, and transgender and gender nonconforming (TGNC), which describes those whose gender identity is incongruent with the sex that was assigned at birth; also known as the third gender in Thailand[2–4]. Sexual orientation is sexual interest or sexual attraction of one towards another, which could be heterosexual (attracted to members of the opposite sex), homosexual (attracted to members of one's own sex), bisexual (attracted to members of both sexes), asexual (not attracted to any sex), or pansexual (attracted to people regardless of one's sex or gender)[1,2,4]. Sexual and gender diversity is the variety of expressions, identities, behaviors, or preferences related to sex and gender. Those whose gender identities, sexual orientations, or practices differ from the majority are considered as the sexual and gender minority (SGM)[2].

Psychological stress is a state of mind that people experience when they face a challenge they believe is more than they can handle or it is a threat to their quality of life. Coping is a thought and behavior process aiming to handle stress, requiring repetitive efforts to convert it into an automatic response. Coping consists of thoughts, feelings, and actions. The action one turns to in response to stress is called a coping action, which can be categorized under coping strategies. Coping strategies could be further divided into adaptive coping; such as relaxation, distraction, help-seeking, cognitive control, and affective release; and maladaptive coping; such as denial, withdrawal, confrontation, aggressive behavior, and substance abuse[5,6]. During time of stress, youths engage in either adaptive or maladaptive coping strategies, which can later affect their mental health. Maladaptive coping strategies are associated with multiple mental illnesses, such as depression and suicidal thoughts[7,8]. On the other hand, adaptive coping strategies were found to be associated with psychological well-being[9] and served as protective factors against substance use in youth[10].

Through extensive studies, it has been established that gender is related to coping strategies. When dealing with general stress, females reported using more verbal expressions to seek emotional support, positive self-talk, and rely on social support, problem-solving, and rumination than males[11–13], whereas males appeared to focus more on avoidant coping[14].

With greater awareness of sexual and gender diversity in the present generation, 11.9% of high school students in Thailand identified as LGBT youth[15]. These youths reported a higher incidence of bullying, substance use, suicidal thoughts and attempts, depression, and anxiety than cisgender heterosexual youth[15–19]. Apart from facing general stressors of daily life, this vulnerable group also faces additional minority stress, such as systemic oppression and micro-aggressions from family and community, which can trigger different forms, frequency, and intensity of coping strategies, compared to cisgender-heteronormative youths[20]. Studies on coping and sexual orientation-related minority stress, indicate that rumination and emotional suppression were commonly used in these minority youths[21], while involvement in lesbian, gay, bisexual, transgender,

and intersex (LGBTI) organizations or affiliations with the LGBTI community was found to be associated with better social adjustment and better performance in school[22,23].

Only a few studies have been conducted on coping strategies of sexual and gender minority youths worldwide. Most previous studies only focused on the relationship between coping and the sex assigned at birth, categorized as male or female[12-14,24]. A previous study on coping mechanisms in high school students in Bangkok reported a similar pattern[25]. To understand coping strategies in sexual and gender diversity, our study focused on various aspects of sexuality, particularly in regard to sexual and gender minority youths.

Material and Methods

Study design and setting

A total of 720 high school students (grade 10-12) were recruited through purposive sampling, or selecting a total of 3 schools (one school from each category: all boys, all girls, and co-ed schools). The selected schools were medium to large-sized public general education schools in Bangkok, under the administration of the Department of General Education, that taught grades 10-12 with approximately 1000 students in total. 240 high school students were recruited in each school, which was divided into 80 students in each class.

Study participants

The inclusion criteria included 10th-12th graders studying in high schools in Bangkok in 2021, who voluntarily participated in the study, and were able to read and understand Thai. The participants could withdraw if they felt uncomfortable due to any questions in the questionnaire.

Participant recruitment

Teachers from selected schools were contacted to give information about the study, then given a QR code linking to the online questionnaire. The QR code was distributed to students through teachers. The first page of the questionnaire described an overview of the study, with the next page asking participants if they would like to join the study. The participants could click "to participate" or "not to participate" voluntarily. If participants clicked "to participate", then the self-report questionnaire began.

Study variables and instrument

The survey was an online self-report questionnaire, administered as a Google form, with two parts:

1. Demographic data and sexual gender characteristics, consisting of the birth year; school grade; curriculum; GPA; sex assigned at birth, using the question "what is your sex at birth?", with the provided choices of "male", "female, and "intersex"; gender identity, using the question "what gender do you identify with", with the provided choices of "male", "female", "third gender/non-conforming", "unidentified/questioning", and "others, please specify", and sexual orientation, using the question "what sex do you feel attracted to?", with the provided choices of "attracted to the opposite sex", "attracted to the same sex", "attracted to both sexes", "not attracted to any sexes", "attracted regardless of sex", "unidentified/ questioning", and "others, please specify" Figure 1.
2. Adolescent Coping Scale (Thai version) consisted of 58 close-ended questions, which could be categorized into three coping styles (problem-focus coping, referencing others, and non-productive coping) and 18 coping strategies (seeking relaxing diversions, work and achievements, solving the problem, physical recreation, investing in close friends, focusing on the positives, seeking to belong, social support, spiritual support, professional help, social action, wishful thinking, keeping to self, self-blame, worrying, ignoring the problem, not coping, and tension reduction).

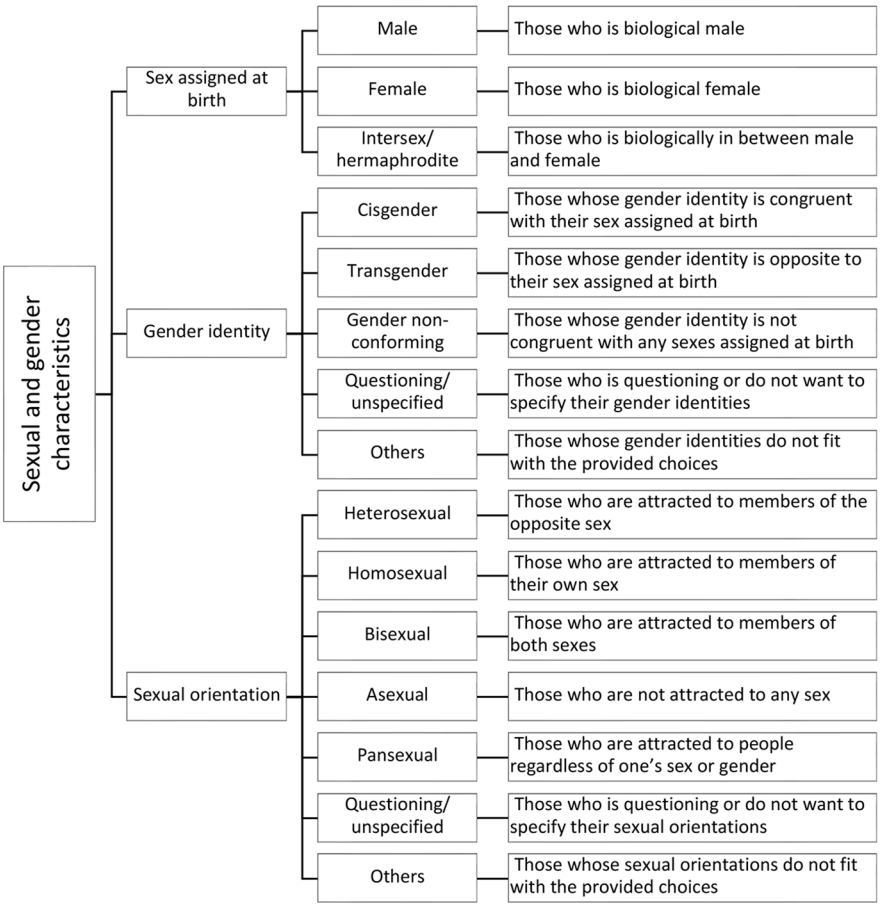

Figure 1 Description of sexual and gender characteristic terms in the study

The questions; for example, "when I face a problem, I meet up with friends"; were rated by frequency, ranging from "I have never done this" (score one) to "I have often done this" (score four). Cronbach's coefficient alpha=0.83[26].

Data collection and management

The questionnaire was completed individually and anonymously via participants' mobile phones or tablets. None of the answers could identify the participants' identities. With the exclusion of those who voluntarily clicked "not to participate", a total of 600 completed questionnaires were used in data analyses.

Data analyses

Demographic data were analyzed using descriptive statistics, reported as frequency and percentage. Due to non-normal distributions, associated factors were analyzed using the Mann-Whitney U test and the Kruskal-Wallis test.

Table 1 Demographic data (n=600)

Demographic data	Number (%)
Age (years)	
14	1 (0.2)
15	86 (14.3)
16	201 (33.5)
17	173 (28.8)
18	133 (22.2)
19	6 (1.0)
School grade	
Grade 10	235 (39.2)
Grade 11	135 (22.5)
Grade 12	230 (38.3)
Curriculum	
Sci-Math	402 (67.0)
Art-Math	68 (11.3)
Art-Language	121 (20.2)
Others	9 (1.5)
Grade point average (GPA)	
<2.00	10 (1.7)
2.00 - 2.49	42 (7.0)
2.50 - 2.99	86 (14.3)
3.00 - 3.49	191 (31.8)
3.50 - 4.00	271 (45.2)

Table 2 Sexual and gender characteristics (n=600)

Sexual and Gender characteristics	Number (%)
Sex assigned at birth	
Male	301 (50.2)
Female	299 (49.8)
Intersex	0 (0.0)
Gender identity	
Cisgender	502 (83.7)
Transgender	8 (1.3)
Third gender/ nonconforming	46 (7.7)
Questioning/ unspecified	39 (6.5)
Others	5 (0.8)
Sexual orientation	
Heterosexual	389 (64.8)
Homosexual	30 (5.0)
Bisexual	157 (26.2)
Asexual	6 (1.0)
Pansexual	8 (1.3)
Questioning/ unspecified	8 (1.3)
Others	2 (0.3)

Ethical considerations

The Siriraj Institutional Review Board approved this cross-sectional study (COA no. Si 948/2020). The study did not require consent documentation due to privacy issues regarding participants' sexualities.

Results

Demographic data and sexual and gender characteristics

As shown in Table 1, 600 high school students in Bangkok participated in the study, with a mean age of 16.6. Participants were in grades 10 to 12, with 11th graders participating the least (22.5%). Most participants took the sci-math curriculum (67%). In regards to GPA, participants mostly reported a high GPA.

As presented in Table 2, out of all the 600 participants, 301 were males (50.2%), and 299 were females (49.8%). The participants identified as follows: 83.7% cisgender, 16.3% non-cisgender (transgender, non-conforming, questioning/unspecified, and others), 64.8% heterosexual and 35.2% non-heterosexual (homosexual, bisexual, asexual, pansexual, questioning/unspecified, and others).

The association between coping strategies and sexual and gender characteristics

Based on the Mann-Whitney U test in Table 3, males relied on physical recreation (p-value<0.001) and

Table 3 Comparison gof coping mechanisms and coping strategies in each sexual and gender characteristic

Coping mechanisms	Frequency of using coping mechanisms and coping strategies in each sexual and gender characteristic Median (P25,P75)								
	Sex assigned at birth		p-value	Gender identity		p-value	Sexual orientation		p-value
	Male	Female		Cisgender	Non-cisgender		Heterosexual	Non-heterosexual	
1. Problem-focus coping	High 65 (60,71)	High 65 (60,70)	0.758	High 65 (60,70)	High 64.5 (59,71)	0.771	High 65 (61,71)	High 65 (59,70)	0.127
1.1) Seek relaxing deversion	High 6 (5,6)	High 6 (5,7)	0.498	High 6 (5,7)	High 6 (4,7)	0.930	High 6 (5,7)	High 6 (5,7)	0.895
1.2) Work and achieve	High 13 (11,14)	High 13 (12,15)	0.006	High 13 (12,15)	High 13 (12,14)	0.763	High 13 (12,15)	High 13 (12,14)	0.558
1.3) Solving the problem	High 16 (15,18)	High 16 (15,18)	0.369	High 16 (15,18)	High 16 (14.75,18)	0.558	High 16 (15,18)	High 16 (15,18)	0.609
1.4) Physical recreation	High 6 (5,7)	Low 5 (4,6)	<0.001	High 6 (5,7)	Low 5 (4,6)	0.024	High 6 (5,7)	Low 5 (4,6)	<0.001
1.5) Investing in close friend	High 6 (5,7)	High 6 (4,7)	0.065	High 6 (4,7)	High 6 (4,7)	0.720	High 6 (4,7)	High 6 (4,7)	0.776
1.6) Focus on positive	High 6 (6,8)	High 6 (5,7)	0.189	High 6 (6,7)	High 6 (5,8)	0.881	High 6 (6,8)	High 6 (5,7)	0.017
1.7) Seek to belong	High 13 (12,15)	High 13 (12,15)	0.073	High 13 (12,15)	High 13 (12,15)	0.855	High 13 (12,14)	High 13 (12,15)	0.476
2. Reference to others	High 25 (21,28)	High 26 (21,28)	0.418	High 25 (21,28)	High 24 (19.75,28)	0.274	High 25 (22,28)	High 24 (20,27)	0.005
2.1) Seeking social support	High 6 (5,7)	High 6 (5,7)	0.830	High 6 (5,7)	High 6 (4,7)	0.283	High 6 (5,7)	Low 5 (4,7)	0.012
2.2) Seeking spiritual support	Low 4 (2,6)	Low 4 (3,6)	0.001	Low 4 (3,6)	Low 4 (3,6)	0.500	Low 4 (3,6)	Low 4 (3,5)	0.140
2.3) Seeking professional help	High 9 (7,10)	High 9 (7,10)	0.240	High 9 (7,10)	High 8 (7,10)	0.141	High 9 (7,11)	High 9 (7,10)	0.005

Table 3 (continued)

Coping mechanisms	Frequency of using coping mechanisms and coping strategies in each sexual and gender characteristic Median (P25,P75)								
	Sex assigned at birth		p-value	Gender identity		p-value	Sexual orientation		p-value
	Male	Female		Cisgender	Non-cisgender		Heterosexual	Non-heterosexual	
2.4) Social action	High 6 (5,7)	High 6 (5,7)	0.390	High 6 (5,7)	High 6 (5,7)	0.113	High 6 (5,7)	High 6 (5,7)	0.140
3. Non-productive coping	Low 70 (61.5,80.5)	High 74 (66,82)	0.001	High 72 (63,80.25)	High 77.5 (67.75,87)	<0.001	Low 70 (62,80)	High 76 (68,84)	<0.001
3.1) Wishful thinking	Low 12 (10,14)	Low 12 (11,14)	0.123	Low 12 (11,14)	Low 12 (10,14)	0.771	Low 12 (10,14)	Low 12 (11,14)	0.236
3.2) Keep to self	High 9 (7,10)	High 9 (8,10)	0.003	High 9 (7,10)	High 9 (8,11)	0.001	High 9 (7,10)	High 9 (8,11)	<0.001
3.3) Self blame	Low 10 (8,12)	High 11 (8,13)	0.097	Low 10 (8,12)	High 12 (9,14)	<0.001	Low 10 (8,12)	High 11 (8,13)	<0.001
3.4) Worry	High 15 (13,18)	High 17 (15,19)	<0.001	High 16 (14,18)	High 18 (14,20)	0.002	High 15 (13,18)	High 17 (15,19)	<0.001
3.5) Ignoring the problem	Low 9 (8,11)	Low 8 (7,10)	0.001	Low 9 (7,10)	Low 9 (7,11)	0.574	Low 9 (7,10)	Low 9 (7,10)	0.920
3.6) Not coping	Low 9 (7,11)	Low 9 (8,11)	<0.001	Low 9 (7,11)	High 10 (8,12)	<0.001	Low 9 (7,10)	High 10 (8,12)	<0.001
3.7) Tension reduction	Low 7 (5.5,9)	Low 7 (6,9)	<0.001	Low 7 (6,9)	High 8 (6,10)	0.001	Low 7 (6,9)	High 8 (6,9)	0.002

Mann-Whitney U

ignoring the problem (p-value=0.001), significantly more so versus females. Meanwhile, females relied on work and achievements (p-value=0.006), spiritual support (p-value=0.001), non-productive coping (p-value=0.001) such as keeping to themselves (p-value=0.003), worrying, (p-value<0.001), not coping (p-value<0.001), and tension reduction (p-value<0.001) significantly more than males.

Cisgenders relied significantly more on physical recreation (p-value=0.024) than non-cisgenders, who instead focused on non-productive coping (p-value<0.001) such as keeping to one's self, (p-value=0.001), self-blame (p-value<0.001), worrying (p-value=0.002), not coping (p-value<0.001), and tension reduction (p-value=0.001) significantly more than cisgenders.

Heterosexual youth relied on physical recreation (p-value<0.001), focusing on the positives (p-value=0.017), and referencing others (p-value=0.005) such as seeking social support (p-value=0.012) and professional help (p-value=0.005) significantly more than non-heterosexual youth. Meanwhile, non-heterosexual youth relied on non-productive coping (p-value<0.001) strategies such as keeping to one's self (p-value<0.001), self-blame (p-value<0.001), worrying (p-value<0.001), not coping (p-value<0.001), and tension reduction (p-value=0.002) significantly more than heterosexual youth.

Coping strategies in each subgroup

Based on the Kruskal Wallis Test in Table 4, coping strategies most used among cisgender heterosexual male youth were physical recreation, and ignoring the problem whereas cisgender heterosexual female youth focused on seeking spiritual support, professional help, and work and achievements.

Coping strategies most used among sexual and gender minority male youth were worrying, ignoring the problem, and wishful thinking. Meanwhile, sexual and gender minority female youth turned to worrying, not coping, and keeping to one's self.

Discussion

In our survey, we ascertained the relationship between coping strategies and multiple aspects of sexuality and compared coping strategies among various sexual orientations and gender identities. We found that differences in sex assigned at birth, gender identity, and sexual orientation had a statistically significant correlation with coping strategies, specifically in regard to sexual and gender minority youths who used more non-productive coping strategies than their cisgender heterosexual counterparts. Thus, LGBTI-specific interventions should be considered, in order to promote healthy coping by sexual and gender minority youths.

In this study, participants only reported their sexes assigned at birth as male and female, but none as intersex. It is possible that this was due to the fact that the sample size was too small as the incidence rate is merely 0.018%[27], those who were intersex might not be aware of their own biological sex, or they might not want to report it. In the gender identity questionnaire, some participants chose 'others' and specified their sexual orientation as bisexual, so the question may have been misleading or participants may have misunderstood. From this, sex education, specifically in regards to an awareness of gender identity and sexual orientation, for high school students should be supported and added as part of the basic curriculum.

In terms of sex or sex assigned at birth, the result of this study correlated with a previous study on high school students in Bangkok[25]. Males tended to focus on physical recreation, while females focused on work and achievements, and seeking spiritual support. Moreover, females focus more on non-productive coping strategies than males. This could make females more vulnerable to

Table 4 Comparison of coping strategies in each sexuality group

Coping strategies	Mean rank of coping strategies score in each sexuality group				p-value
	Cisgender heterosexual male	Cisgender heterosexual female	Sexual and gender minority male	Sexual and gender minority female	
1. Problem-focus coping					
1.1) Seek relaxing deversion	289.38	317.53	326.03	295.46	0.289
1.2) Work and achieve	278.23	345.85	295.60	299.29	0.004
1.3) Solving the problem	302.65	298.69	326.08	290.61	0.618
1.4) Physical recreation	348.05	289.97	241.41	256.96	<0.001
1.5) Investing in close friend	311.39	275.47	322.15	297.24	0.189
1.6) Focus on positive	305.57	316.28	327.93	271.79	0.054
1.7) Seek to belong	283.17	320.83	310.83	306.89	0.184
2. Reference to others					
2.1) Seeking social support	303.24	328.27	279.25	281.22	0.086
2.2) Seeking spiritual support	278.19	350.37	276.07	301.96	0.001
2.3) Seeking professional help	309.88	320.66	303.25	269.78	0.047
2.4) Social action	307.44	307.81	301.46	284.10	0.521
3. Non-productive coping					
3.1) Wishful thinking	275.73	319.42	355.26	304.95	0.007
3.2) Keep to self	267.19	294.29	339.08	342.63	<0.001
3.3) Self blame	277.49	280.80	342.03	337.06	0.001
3.4) Worry	236.47	325.92	371.25	353.04	<0.001
3.5) Ignoring the problem	316.07	263.95	358.87	287.74	0.002
3.6) Not coping	261.29	296.84	344.14	347.77	<0.001
3.7) Tension reduction	264.37	319.44	318.02	333.63	<0.001

Kruskal Wallis Test

mental illnesses than males. In terms of gender identity, sexual orientation, and sexuality, this study found that sexual and gender minorities, which included those who identified as anything other than cisgender and heterosexual, collectively tended to significantly focus more on non-productive coping strategies than the cisgender heterosexual youths. The coping strategies most used by sexual and gender minority youths were all non-productive, which correlates to results from other studies that reported that avoidant coping was commonly found in sexual and gender minorities[28-30].

Among countries in Southeast Asia, Thailand has less negative attitude toward sexual minorities[31]. Yet, the bullying of sexual and gender minority youths is common in grade schools across Thailand. Compared to cisgender heterosexual youths, students who identify as sexual and gender minorities tend to be victims of various forms of abuse (physical, verbal, social and sexual) from peers of the same age. The majority of those who are bullied fight back or consult with friends. Only a small percentage chooses to consult with the authorities[15]. Correspondingly, this study

outlined that sexual and gender minority youth in Bangkok sought less general social support, but instead relied on non-productive coping strategies, such as worrying, ignoring the problem, not coping, and keeping to themselves. Thus, there should be a proactive plan to improve these youths' mental health by providing social support, specifically from members of the LGBTI community, either in a school or community setting; and reaching out to those in need instead of waiting for them to ask for help, since this youth group may tend to be less assertive.

Limitations

First, the study was a self-reported online questionnaire. Some students may not have clearly understood the questions and could not answer accurately, especially in regard to the questions concerning gender identity and sexual orientation. Second, the samples were drawn from the general population, of which the majority were cisgender heterosexual youths. This made the samples in each category, of sexual and gender minorities, too small to be analyzed on their own and was grouped to be analyzed under the terms "non-cisgender" and "non-heterosexual". Third, the fact that the study was conducted on high school students in Bangkok, could have made the study's findings not generalizable to other demographics or other regions of Thailand, especially in some regions, in which being sexual and gender minorities is taboo. Fourth, in terms of sexual and gender characteristics, our study only asked the participants to identify sex assigned at birth, gender identity, and sexual orientation, yet no romantic identity nor gender expression was identified. The authors recommend that future studies add questions regarding the topics, to cover all aspects of sexual and gender characteristics.

Conclusion

Sex assigned at birth, gender identity, sexual orientation, and sexuality are all associated with coping strategies. Sexual and gender minority youths tend to focus on non-productive coping, which makes them more vulnerable to psychopathology[7,8], compared to their cisgender heterosexual counterparts. More adaptive coping strategies, such as providing support from other sources, should be introduced to prevent unfavorable outcomes.

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Conflict of interest

All authors declare that they have no conflicts of interest

References

1. American Psychological Association. APA dictionary of psychology. 2nd ed. Washington, DC: American Psychological Association; 2015.
2. Kittiteerasack P, Matthews AK. Definitional issues in the study of sexual/gender diversity among sexual/gender minoity populations in Thailand. J Psychiatr Nurs Ment Health 2017;31:1-15.

3. American Psychological Association. Guidelines for psychological practice with lesbian, gay, and bisexual clients. Am Psychol 2012;67:10–42.
4. American Psychological Association. Guidelines for psychological practice with transgender and gender nonconforming people. Am Psychol 2015;70:832–64.
5. Baqutayan SMS. Stress and coping mechanisms: a historical overview. Mediterr J Soc Sci 2015;6:479–88.
6. Garcia C. Conceptualization and measurement of coping during adolescence: a review of the literature. J Nurs Scholarsh 2010;42:166–85.
7. Horwitz AG, Hill RM, King CA. Specific coping behaviors in relation to adolescent depression and suicidal ideation. J Adolesc 2011;34:1077–85.
8. Suzuki M, Furihata R, Konno C, Kaneita Y, Ohida T, Uchiyama M. Stressful events and coping strategies associated with symptoms of depression: a Japanese general population survey. J Affect Disord 2018;238:482–8.
9. Freire C, Ferradas MD, Valle A, Nunez JC, Vallejo G. Profiles of psychological well-being and coping strategies among university students. Front Psychol 2016;7:1554.
10. Brady SS, Tschann JM, Pasch LA, Flores E, Ozer EJ. Cognitive coping moderates the association between violent victimization by peers and substance use among adolescents. J Pediatr Psychol 2009;34:304–10.
11. Nolen-Hoeksema S. Emotion regulation and psychopathology: the role of gender. Annu Rev Clin Psychol 2012;8:161–87.
12. Tamres LK, Janicki D, Helgeson V. Sex differences in coping behavior: a meta-analytis review and an examination of relative coping. Pers Soc Psychol Rev 2002;6:2–30.
13. Hampel P, Petermann F. Age and Gender Effects on Coping in Children and Adolescents. J Youth and Adolesc 2005;34:73–83.
14. Eschenbeck H, Kohlmann C-W, Lohaus A. Gender differences in coping strategies in children and adolescents. J Individ Differ 2007;28:18–26.
15. Bullying targeting secondary school students who are or are perceived to be transgender or same-sex attracted: Types, prevalence, impact, motivation and preventive measures in 5 provinces of Thailand. Bangkok: Mahidol University, Plan International Thailand; UNESCO Bangkok. 2014.
16. Sopitarchasak S, Kihara M, Min Soe K, Ono-Kihara M. Disparities in mental well-being between non-minority and sexual minority male youth in Bangkok, Thailand: quantitative findings from a mixed method study. J Popul Soc Stud 2017;25:83–98.
17. Jones A, Robinson E, Oginni O, Rahman Q, Rimes KA. Anxiety disorders, gender nonconformity, bullying and self-esteem in sexual minority adolescents: prospective birth cohort study. J Child Psychol Psychiatry 2017;58:1201–9.
18. Guadamuz TE, Cheung DH, Boonmongkon P, Ojanen TT, Damri T, Samoh N, et al. Illicit drug use and social victimization among thai sexual and gender minority adolescents. Subst Use Misuse 2019;54:2198–206.
19. Ploderl M, Tremblay P. Mental health of sexual minorities. A systematic review. Int Rev Psychiatry 2015;27:367–85.
20. Meyer IH. Prejudice, social stress, and mental health in lesbian, gay, and bisexual populations: conceptual issues and research evidence. Psychol Bull 2003;129:674–97.
21. Hatzenbuehler ML, McLaughlin KA, Nolen-Hoeksema S. Emotion regulation and internalizing symptoms in a longitudinal study of sexual minority and heterosexual adolescents. J Child Psychol Psychiatry 2008;49:1270–8.
22. Toomey RB, Ryan C, Diaz RM, Russell ST. Coping with sexual orientation-related minority stress. J Homosex 2018;65:484–500.
23. Goldbach JT, Gibbs JJ. Strategies employed by sexual minority adolescents to cope with minority stress. Psychol Sex Orientat Gend Divers 2015;2:297–306.
24. Kelly MM, Tyrka AR, Price LH, Carpenter LL. Sex differences in the use of coping strategies: predictors of anxiety and depressive symptoms. Depress Anxiety 2008;25:839–46.
25. Sawasdisutha P, Hongsanguansri S. Coping mechanisms among high school students in Bangkok. J Psychiatr Assoc Thailand 2016;61:41–52.
26. Mingmaung W. The effect of group reality therapy on coping strategies of low academic achievement mathayom suksa three students [master education (counseling psychology)]. Bangkok: Chulalongkorn University; 1997.
27. Sax L. How common is intersex? a response to Anne Fausto-Sterling. J Sex Res 2002;39:174–8.
28. Pendragon DK. Coping behaviors among sexual minority female youth. J Lesbian Stud 2010;14:5–15.
29. Sandfort TG, Bakker F, Schellevis F, Vanwesenbeeck I. Coping styles as mediator of sexual orientation-related health

differences. Arch Sex Behav 2009;38:253-63.
30. Riley TJ, Kirsch AC, Shapiro JB, Conley CS. Examining stress and coping as a mediator for internalizing symptomatology: A comparison between sexual minority and majority first-year college students. J Adolesc 2016;49:124-33.
31. Manalastas EJ, Ojanen TT, Torre BA, Ratanashevorn R, Hong BCC, Kumaresan V, et al. Homonegativity in Southeast Asia: attitudes toward lesbians and gay men in Indonesia, Malaysia, the Philippines, Singapore, Thailand, and Vietnam. Asia-Pacific Soc Sci Rev 2017;17:25-33.