Journal of Adolescent Health xxx (2024) 1–9

ELSEVIER

JOURNAL OF ADOLESCENT HEALTH

www.jahonline.org

Original article

Asian Rainbow Youth in New Zealand: Protective Factors

How Koh, M.B.Ch.B. [a], Bridget Farrant, M.B.Ch.B., M.P.H. [a,b,*], John Fenaughty, Ph.D. [c], Shanthi Ameratunga, M.B.Ch.B., Ph.D. [d,e], Roshini Peris-John, M.B.B.S., Ph.D. [d], and Lynda Bavin, Ph.D. [d]

[a] *Kidz First, Te Whatu Ora Counties Manukau, New Zealand*
[b] *Department of Paediatrics, Faculty of Medical Health Sciences, University of Auckland, Auckland, New Zealand*
[c] *School of Counselling, Human Services and Social Work, Faculty of Education and Social Work, University of Auckland, Auckland, New Zealand*
[d] *Section of Epidemiology and Biostatistics, School of Population Health, University of Auckland, Auckland, New Zealand*
[e] *Te Whatu Ora – Service Improvement & Innovation, Population Health Gain Team, Counties Manukau, New Zealand*

Article history: Received October 26, 2023; Accepted May 29, 2024
Keywords: Asian Rainbow; LGBTQIA+; Mental health; Protective factors; Rainbow youth

A B S T R A C T

Purpose: To explore the impacts of double minority status (ethnic and sexual/gender minority) and protective factors associated with the emotional wellbeing and mental health of Asian Rainbow (sexual/gender minority) youth in New Zealand.
Methods: The data were extracted from the Youth19 Rangatahi survey, which surveyed 7,374 students from 45 mainstream secondary schools. The comparison groups were Asian non-Rainbow youth and Pākehā (New Zealand European) Rainbow youth. A secondary analysis was performed examining the associations between postulated protective factors and the emotional wellbeing and mental health outcomes of Asian Rainbow youth.
Results: Asian Rainbow youth had higher odds of depressive symptoms, anxiety, and suicidal thoughts and attempts and lower odds of good emotional wellbeing compared to Asian non-Rainbow youth. However, Asian Rainbow youth had lower odds of anxiety compared to Pākehā Rainbow youth. Among Asian Rainbow youth, family acceptance and feeling safe at school were associated with higher odds of good emotional wellbeing, and lower odds of depressive symptoms, anxiety, and suicidal thoughts. Several other protective factors were also associated with 1 or more (but not all) of the emotional wellbeing and mental health indicators.
Discussion: This study suggests that family acceptance and feeling safe at school may serve as important buffers mitigating risks of adverse emotional wellbeing experienced by Asian Rainbow youth.

IMPLICATIONS AND CONTRIBUTION

Asian Rainbow youth in New Zealand experienced worse emotional well-being and mental health outcomes compared to Asian non-Rainbow youth. In this context, being accepted by their family and having a safe school environment served as protective factors. Further work is needed to explore the extent to which these factors mitigate risks of adverse outcomes. Policy makers, school staff, and health practitioners should consider these protective factors while also addressing discriminatory social norms that undermine the emotional wellbeing of Asian Rainbow youth.

The term Rainbow is commonly used in New Zealand as an inclusive term for sexual and gender minority communities [1]. Sexual and gender minority (referred to as Rainbow) adolescents experience poorer health outcomes compared to majority

Conflicts of interest: The authors have no conflicts of interest to disclose.

* Address correspondence to: Bridget Farrant, M.B.Ch.B., M.P.H., 95 Wiri Station Road, Manukau, Auckland, New Zealand.
E-mail address: Bridget.Farrant@middlemore.co.nz (B. Farrant).

1054-139X/
https://doi.org/10.1016/j.jadohealth.2024.05.026

counterparts both locally in New Zealand [2–5] and globally [6]. Of concern, Rainbow young people experience higher rates of violence and self-harm and lower levels of support than cisgender (those whose gender identity matches their sex assigned at birth) [3] and heterosexual students [4,5]. Unsurprisingly, such young people are at a heightened risk for mental health challenges such as depression [7], post-traumatic stress disorder, and suicide attempts [8].

From the lens of ethnicity, previous research has identified an association between ethnic minority adolescents who have experienced racial/ethnic discrimination and increased depressive symptoms and risky behaviors compared to their White ethnic majority peers [9]. In New Zealand, rates of emotional and mental distress are significantly higher among Asian youth compared with their New Zealand European/Pākehā (White ethnic majority) peers [10].

The Asian population is approximately 15% of New Zealand's total population [11], positioning Asian Rainbow youth in New Zealand as a group with double minority identities (being from both an ethnic minority group and a sexual/gender minority group). Using data from the American Youth Risk Behaviour Surveys, researchers have found that youth who identify as both sexual and ethnic minorities often have poorer health outcomes, particularly relating to substance use, sexual risk behaviors, violence, and suicidality, than ethnic majority heterosexual youth [12,13]. A previous study focusing on Asian American sexual minorities, reported a significant increase in rates of suicidality over the last 20 years [14]. Two earlier cross-sectional surveys in New Zealand secondary schools (in 2007 and 2012) found double minority (both sexual/gender and ethnic minority) students reported poorer mental health than sexual/gender majority students who were of the same minority ethnicity [15].

In addition, this same study from New Zealand [15], found that the double minority students, Asian Rainbow, reported better mental health than New Zealand European Rainbow students. This has also been noted by other researchers [16], who found that identification with ethnic and sexual/gender minority status was not associated with higher risk for psychopathology such as depressive symptoms, nonsuicidal self-injury, suicide ideation or attempts compared to White (Caucasian) cisgender heterosexuals [16]. Minority stress theory posits that stress experienced by minority groups due to stigma and discrimination is the basis of greater health inequalities for these groups [17]. However, the cultural practices of sexual minority Asians may act as a protective factor by either insulating them from minority stress or by helping them to cope with stressors more effectively than other sexual minority young people [18].

To further explore what protective factors might help mitigate risk of adverse mental health and wellbeing outcomes for Asian Rainbow youth, previous research [19–23] has identified a range of protective factors for Rainbow youth in general. Previous research has highlighted that family connectedness or family acceptance (as measured by a range of survey questions including family caring, family accepting, spending time, and showing interest in their lives and activities), an adult caring, caring teachers and school safety [19–22] were significantly protective against suicidality and poor mental health outcomes among sexual minority youth. In relation to ethnic minority Rainbow young people, critical resources such as an LGBTQ (lesbian, gay, bisexual, transgender, queer)-inclusive curriculum, and the presence of supportive student clubs were associated with Asian American or Pacific Islander students identifying as LGBTQ feeling more connected to the school community and feeling less unsafe due to their sexual orientation and gender expression [23]. Peer and social support have also been demonstrated to have a positive effect on mental health and wellbeing among Asian sexual minority men in Australia who experience fear of stigma and discrimination related to their sexual identity [24]. Based on this review of the literature, being cared about, being accepted, and feeling safe were identified as characteristics worthy of further exploration as potential protective factors supporting the wellbeing and emotional health of Asian Rainbow youth [19–24].

Previous New Zealand studies illustrated that Asian Rainbow youth experienced poorer mental health and wellbeing compared to Asian non-Rainbow, but better mental health compared to Pākehā Rainbow youth [15]. A gap remains in understanding which factors may protect Asian Rainbow youth against the higher levels of adverse mental health outcomes reported by some groups of Rainbow young people. This study aims to identify some protective factors, under the three broad themes identified—being cared about, being accepted, and feeling safe, specific for Asian Rainbow youth. To facilitate an exploration of the minority stress hypothesis, two reference groups of Asian non-Rainbow and Pākehā Rainbow youth were chosen to compare Asian Rainbow youth to single minority populations. The purpose of identifying protective factors is to aid policymakers, schools, and health practitioners to provide better support for Rainbow young people.

Methods

This study uses data from the Youth19 Rangatahi Smart Survey; a cross-sectional survey of a random sample of young people at secondary schools (school years 9–13, typically ages 13–17 years) in the upper North Island of New Zealand in 2019 [25]. The schools were in Auckland, Tai Tokerau, and Waikato education regions—which account for 47% of the youth population in New Zealand. This region is regarded to be the most ethnically diverse region in New Zealand with the highest Asian student population [25]. Schools (mainstream and private) were randomly selected and invited to participate. In each participating school, students were then randomly selected from the school roll. In total, 7,374 students from 45 secondary schools participated. The participating students completed a set of questions about health and wellbeing anonymously using internet tablets. The questions were based on previous Youth2000 series surveys, which had been refined and validated over three previous waves of survey [25]. The question and response options were available in written text and in audio over headphones, and available in English or Te Reo Māori (indigenous language of New Zealand and an official spoken language). Information sheets regarding the survey method and consent were provided to parents or caregivers prior to the day of the survey. Ethics approval was granted by The University of Auckland Human Subjects Ethics (application #022244). Full information about the study, methodology and questionnaires is available on the Youth19 website (https://www.youth19.ac.nz).

Measures

Demographics. Students were asked their age and consistent with previous Youth 2000 research on this topic [15] dichotomisation was used to construct two age groups. Participants were

grouped as junior (14 years and under) and senior (15 years and over). These age groups were used to adjust for the different pressures of formal school assessment and the stresses and mental health impacts that this brings [26]. In New Zealand, those aged 13 and 14 will most likely not be engaged in formal assessment, compared to those aged 15 and above who will be.

Students were asked which ethnic group they belonged to and could choose as many as they needed. Students who selected any Asian ethnic group (East Asian, South Asian, or other Asian) were coded as Asian. Students who only selected the New Zealand/Pākehā ethnic group were coded as Pākehā.

Students were described as living in low socioeconomic status if they responded that their parents, or the people who act as their parents, often or all the time worried about not having enough money to buy food, or that in the last 12 months they had to sleep somewhere other than their own bed because it was hard for their family to afford or get a home, or there was not enough space.

Gender was determined by the response to the question "How do you describe yourself" with response options of I am a boy or man; I am a girl or woman, or I identify in another way. Participants who selected one of the binary gender options were coded as boy/man or girl/woman. Those who selected "another way", were either coded as transgender or gender diverse, or recoded as girl/woman or boy/man depending on their constellation of responses to some of the gender identity questions asked below.

Transgender and gender diverse participants were derived based on responses to three questions:

1. "How do you describe yourself?" with response options: boy, girl, another way.
2. "Are you (or might you be) transgender or gender-diverse? By this, we mean that your current gender is different from your gender at birth (e.g., transgender, nonbinary, Queen, fa'afafine, whakawahine, tangata ira tane, genderfluid, or genderqueer)." With response options yes, no, I'm not sure, or I don't understand the question.

For those who selected "another way" to the first question and/or "yes" or "I'm not sure" to the second question, they were then asked follow-up questions:

3. "Which of the following best describes you? (You may choose as many as you need)" with response options: Transgender boy or man, Tangata ira tane, Transgender girl or woman, Whakawahine, Fa'afafine, Fa'atatama, nonbinary, genderqueer, genderfluid, Takatāpui, Akava'ine, Agender, I'm not yet sure of my gender, something else, please state: I don't understand this question. Table 1 provides some explanation of the indigenous terms used above [27], however sex and gender may be experienced differently in differently cultures, so translations between languages are not always exact and nuances might be missed.

Participants who selected any of the responses to the third question other than "I don't understand the question" or "I'm not yet sure of my gender" were coded as transgender or gender diverse, those who said they did not understand the question were coded as cisgender, and those who said they were "unsure" were excluded from the analysis.

Participants' sexual attraction, and therefore sexual minority/majority status, was assessed via a question on sexual attraction: "Are you attracted to opposite or a different sex, same sex, attracted to male and female, not sure, neither or don't understand the question". Respondents who selected being attracted to the same sex or attracted to males and females were coded as same or both sex attracted. Those who reported they were not sure of their attractions, or said they were not attracted to males or females were excluded from the analyses.

Rainbow participants included those coded as transgender or gender diverse and/or those who selected an attraction to same or both sexes. To compare Asian Rainbow youth to single-minority populations, the relevant comparison (reference) groups in this study are Asian non-Rainbow youth and Pākehā Rainbow youth.

Emotional and mental health indicators. Emotional and mental health indicators were measured using World Health Organization (WHO)-5 wellbeing index (raw score of 13 or more out of 25 indicating good wellbeing) [28]; Reynolds adolescent depression scale – short form (score of 28 or more indicating depression) [29]; Patient Health Questionnaire (PHQ) anxiety subscale (score $\geq$3 indicating presence of anxiety [30]; and questions about thoughts and attempts of suicide in the last 12 months ("during the last 12 months have you seriously thought of killing yourself (attempting suicide)" and "during the last 12 months have you tried to kill yourself (attempted suicide)".

Protective factors. The three themes (being cared about, being accepted, and feeling safe) were coded as potential protective factors for Asian Rainbow youth's good wellbeing and emotional health outcomes. Each theme was explored by a series of individual questions from the Youth 19 survey. Where participants had the option of responding on a scale; agree or strongly agree, and most or all of the time, were interpreted as positive responses. For the category of being cared about, the participants were asked if they felt cared for a lot by at least 1 parent (yes or no), felt teachers/tutors cared (yes or no), felt they had a friend who they were close with or who would stick up for them (agree or strongly agree), and if they felt they had an adult outside their family that they were close with or who would stick up for them (agree or strongly agree). For the category of being accepted, the participants were asked whether their school is supportive of gender identity and sexuality diversity (yes or no), whether their family accepts them for who they are (agree or strongly agree), if

Table 1
Glossary

Terms (Language origin)	Explanation
Takatāpui (Māori)	Originally meant an intimate companion of the same gender. Now it is used as an umbrella term similar to LGBTQI+
Fa'afafine (Samoan)	'fa'a' meaning to create, become or be, and 'fine' meaning woman
Fa'atatama (Samoan)	To create or become a man
Whakawahine (Māori)	To create or become a woman
Tangata ira tane (Māori)	Tangata – person Ira – gender, spirit, essence Tane – man
Akava'ine (Cook Islands Māori)	To create or become a woman

Source: [27] - Gender Minorities Aotearoa. Trans 101: A Glossary of Trans Words and How To Use Them. Accessed December 2023. https://genderminorities.com/glossary-transgender/.

they have a friend who accepts them for who they are (agree or strongly agree), and if they have an adult outside their family accepts them for who they are (agree or strongly agree). For the category of feeling safe, the participants were asked if they feel safe at home (most or all the time), feel safe at school (most or all the time), and feel safe in their neighborhood (all the time). Most of the time was not offered as an option for neighborhood safety.

Statistical analysis

Survey data were analyzed using R 4.0.3 [31]. The numbers presented (n and N) are based on the raw data of the number of survey participants. Prevalence estimates, odds ratios (ORs), and confidence intervals (CIs) have been adjusted to account for the unequal probability of each student being invited to participate in the survey. Sample weights were calculated as inverse probability weights to adjust for the unequal probabilities of selection. Reported ORs have been adjusted for age, gender, and socioeconomic status. Using generalized linear models (GLMs), we examined the prevalence of protective factors (cared about, accepted, feeling safe) and emotional and mental health indicators, for Asian Rainbow compared to Asian non-Rainbow, and Asian Rainbow compared to Pākehā Rainbow, controlling for age, gender, and socioeconomic status. Next, for Asian Rainbow youth, a GLM was conducted for each group of care protective, acceptance protective, and safety protective variables to examine their associations with good emotional wellbeing, depressive symptoms, anxiety, and thoughts about attempting suicide, while controlling for age, gender, and socioeconomic status.

Results

Participant characteristics

In total, there were 1,632 Asian and 2,719 Pākehā participants included in this study. Of the total, 12% of Asian participants identified as Asian Rainbow and 10% of Pākehā participants as Pākehā Rainbow youth (Table 2). The Asian participants were a mix of East Asian, South Asian, and "other Asian" regions (see appendix 1 for detailed breakdown of Asian participants by region of origin). These subgroups were combined for analysis due to small numbers. Of the Asian Rainbow youth, 96% (186/193) reported being attracted to the same or both sexes, and 7% (14/193) were transgender or gender diverse. All Asian Rainbow youth in these analyses, including transgender and gender diverse young people selected a binary gender identity in response to the first gender question, with the majority (74%) selecting girl/woman, and 26% selecting boy/man. However, in a later question where participants could select more than one gender-identity, four said they were "trans boys and men" and four said they were "trans girls and women", and five said "nonbinary", and three selected "agender", demonstrating existence of nonbinary and gender diverse identities as well as overlap between nonbinary and binary gender identities amongst some of the 14 Asian transgender and gender diverse students.

Emotional and mental health. Fifty-four percent of Asian Rainbow students reported depressive symptoms for two weeks or more in the past 12 months, 48% reported that they had thought about attempting suicide in the past 12 months, and 61% experienced anxiety in the past two weeks (Table 3). Forty-two percent reported good emotional wellbeing in the past two weeks. Compared to Asian non-Rainbow youth, the odds are higher for Asian Rainbow youth reporting depressive symptoms (adjusted odd ratio (aOR) 3.73, 95% CI 2.79–4.97), thoughts about suicide (aOR 3.91, 95%CI 2.87–5.32), and anxiety (aOR 2.09, 95% CI 1.59–2.71), and the odds are lower for good emotional wellbeing (aOR 0.30, 95% CI 0.22–0.42)

Asian Rainbow youth were less likely to report experiencing anxiety in the past 2 weeks compared to Pākehā Rainbow youth (aOR 0.65, 95% CI 0.45–0.94).

Protective factors. Compared to Asian non-Rainbow youth, Asian Rainbow youth reported lower odds of being accepted by their

Table 2
Asian and Pakeha Rainbow and non-Rainbow sample demographics[a]

	Asian rainbow (n = 193)		Asian non-rainbow (n = 1,439)		Asian total (n = 1,632)		Pakeha rainbow (n = 268)		Pakeha non-rainbow (n = 2,451)		Pakeha total (n = 2,719)	
	n	%	n	%	n	%	n	%	n	%	n	%
Gender												
Boy/Man	51	26.4	716	49.8	767	47.0	69	25.7	1,193	48.7	1,262	46.4
Girl/Woman	142	73.6	723	50.2	865	53.0	199	74.3	1,258	51.3	1,457	53.6
Age												
14 and under	58	30.1	483	33.6	541	33.1	87	32.5	1,012	41.3	1,099	40.4
15 and over	135	69.9	956	66.4	1,091	66.9	181	67.5	1,439	58.7	1,620	59.6
Low family SES												
Yes	35	18.1	268	18.6	303	18.6	44	16.4	279	11.4	323	11.9
No	158	81.9	1,171	81.4	1,329	81.4	224	83.6	2,172	88.6	2,396	88.1
Rainbow												
Yes	193	100.0	0	0.0	193	11.8	268	100.0	0	0.0	268	9.9
No	0	0.0	1,439	100.0	1,439	88.2	0	0.0	2,451	100.0	2,451	90.1
Sexual attraction												
Same or both sexes	186	98.4	0	0.0	186	11.4	265	100.0	0	0.0	265	9.8
Opposite sex	3	1.6	1,439	100.0	1,442	88.6	0	0.0	2,451	100.0	2,451	80.2
Transgender or gender diverse												
Yes	14	7.4	0	0.0	14	0.9	17	6.5	0	0.0	17	0.6
No	175	92.6	1,439	100.0	1,614	99.1	246	93.5	2,451	100.0	2,697	99.4

SES = socioeconomic status.
[a] N = 4,351 (Asian and Pakeha Rainbow and Non-Rainbow).

Table 3
Emotional and mental health indicators and protective factors: Asian rainbow compared to non-Rainbow, and Asian Rainbow compared to Pakeha Rainbow youth[f]

	Asian Rainbow		Asian non-Rainbow		Asian Rainbow cf non-Rainbow[g]		Pakeha Rainbow		Pakeha non-Rainbow		Asian Rainbow cf Pakeha Rainbow[h]	
	n (N)	% [95% CI]	n (N)	% [95% CI]	AOR[i] [95% CI]	*p*-value	n (N)	% [95% CI]	n (N)	% [95% CI]	AOR [95% CI]	*p* value
Emotional and mental health indicators												
Good emotional wellbeing in past 2 weeks[a]	81 (188)	41.6 [32.7–50.6]	1,026 (1,413)	72.4 [68.8–76.1]	**0.30 [0.22-0.42]**	<.001	95 (263)	34.2 [27.6–40.7]	1,786 (2,409)	73.2 [70.7–75.8]	1.35 [0.97–1.88]	.087
Depressive symptoms in past 12 months[b]	99 (185)	53.8 [46.0–61.7]	303 (1,413)	22.3 [19.4–25.2]	**3.73 [2.79-4.97]**	<.001	133 (259)	53.8 [46.2–61.4]	417 (2,414)	18.1 [15.9–20.4]	1.01 [0.72–1.43]	.947
Anxiety in past 2 weeks[c]	111 (187)	60.8 [54.2–67.4]	553 (1,412)	40.7 [36.2–45.1]	**2.09 [1.59-2.71]**	<.001	173 (261)	70.9 [62.0–79.9]	874 (2,408)	36.5 [33.9–39.2]	**0.65 [0.45-0.94]**	.030
Thought about attempting suicide in past 12 months	87 (186)	47.9 [41.5–54.2]	262 (1,415)	18.4 [15.6–21.2]	**3.91 [2.87-5.32]**	<.001	114 (261)	47.1 [36.9–57.3]	367 (2,412)	15.9 [13.9–17.8]	1.04 [0.69–1.56]	.846
Attempted suicide in past 12 months	18 (186)	9.9 [4.7–15.1]	62 (1,416)	4.2 [2.5–5.8]	**2.29 [1.22-4.29]**	.014	20 (262)	8.2 [5.5–11.0]	63 (2,414)	2.9 [2.0–3.8]	1.17 [0.56–2.49]	.677
Protective factors – cared about												
Parent cares a lot (at least one)	147 (165)	88.5 [82.7–94.3]	1,052 (1,122)	93.5 [91.6–95.4]	0.61 [0.30–1.24]	.181	218 (248)	87.8 [83.7–92.0]	2,065 (2,148)	96.1 [95.4–96.8]	1.20 [0.63–2.29]	.593
Friend cares[d] (agree or strongly agree)	170 (191)	89.4 [84.8–94.0]	1,338 (1,431)	92.8 [91.0–94.6]	0.73 [0.44–1.20]	.223	239 (267)	89.4 [85.2–93.7]	2,328 (2,441)	95.2 [94.2–96.2]	1.03 [0.51–2.05]	.942
Teachers/tutors care (yes)	151 (175)	86.5 [81.3–91.8]	1,187 (1,356)	88.2 [85.7–90.7]	0.84 [0.57–1.23]	.372	188 (252)	76.9 [69.2–84.5]	1,969 (2,356)	84.0 [82.3–85.8]	**1.92 [1.20-3.07**]	.010
Adult outside family cares (agree or strongly agree)[d]	80 (170)	46.1 [37.3–54.9]	749 (1,314)	56.6 [52.6–60.7]	0.73 [0.47–1.13]	0.168	143 (251)	55.0 [49.0–61.1]	1,605 (2,267)	70.6 [67.9–73.3]	0.70 [0.44–1.11]	.135
Protective factors - accepted												
Family accepts them for who they are (agree or strongly agree)	113 (192)	57.5 [49.9–65.1]	1,222 (1,431)	84.5 [81.8–87.2]	**0.26 [0.17-0.38]**	<.001	209 (267)	76.5 [72.0–81.0]	2,266 (2,432)	93.1 [92.4–93.9]	**0.42 [0.31-0.57]**	<.001
Friend accepts them for who they are (agree or strongly agree)	164 (189)	87.8 [83.4–92.3]	1,335 (1,431)	92.8 [91.4–94.2]	**0.59 [0.35-0.97]**	.047	244 (267)	91.5 [86.2–96.9]	2,319 (2,441)	94.8 [93.6–95.9]	0.68 [0.36–1.28]	.238
School supportive of gender and sexuality diversity (yes)	116 (182)	67.5 [53.5–81.5]	918 (1,382)	68.2 [62.7–73.7]	0.97 [0.60–1.57]	.894	181 (255)	76.1 [64.3–87.9]	1,708 (2,329)	75.2 [70.9–79.6]	0.67 [0.33–1.34]	.263
Adult outside family accepts them (agree or strongly agree)	88 (171)	50.4 [43.5–57.2]	833 (1,314)	63.8 [61.0–66.5]	**0.61 [0.44-0.85]**	.005	148 (250)	58.9 [53.3–64.5]	1,776 (2,275)	77.9 [75.2–80.6]	**0.71 [0.53-0.95**]	.026
Protective factors – feeling safe												
Feels safe at home (most or all the time)	162 (193)	83.3 [76.0–90.6]	1,377 (1,439)	95.6 [94.4–96.7]	**0.25 [0.12-0.50]**	<.001	233 (268)	85.6 [79.9–91.3]	2,347 (2,450)	95.4 [94.4–96.5]	0.90 [0.57–1.44]	.672
Feels safe in school (most or all the time)	160 (190)	84.6 [78.0–91.2]	1,310 (1,431)	90.4 [87.6–93.3]	0.56 [0.30–1.05]	.080	220 (266)	82.9 [77.0–88.8]	2,213 (2,443)	89.5 [87.0–92.0]	1.17 [0.70–1.97]	.544
Feels safe in neighborhood (all the time)[e]	94 (183)	51.3 [45.5–57.1]	800 (1,389)	55.9 [51.7–60.1]	0.89 [0.66–1.21]	.457	124 (260)	49.6 [39.4–59.7]	1,548 (2,397)	63.5 [60.2–66.7]	1.06 [0.72–1.55]	.765

eSum of recoded responses on PHQ anxiety subscale questions ≥ 3.

[a] Score of 13 or more on the World Health Organization Well-being Index (WHO-5). Good wellbeing in past 2 weeks.

[b] Score of 28 or more on the Reynolds Adolescent Depression Scale - Short Form (RADS-SF). Depressive symptoms for 2 week or more in past 12 months.

[c] Sum of recoded responses on PHQ anxiety subscale questions ≥ three.

[d] Has friend/adult outside family who will stick up (has got their back) *or* has close bond with.

[e] This neighbourhood safety question did not include a 'most of the time' response category, and so is not directly comparable to the home safety and school safety variables.

[f] N = 4,350 (Asian and Pakeha Rainbow and Non-Rainbow).

[g] Reference category is Asian non-rainbow.

[h] Reference category is Pakeha rainbow.

[i] Odds ratio adjusted for age, gender, and SES.

Table 4
Protective factors predicting emotional and mental health for Asian Rainbow youth[f]

	Good emotional wellbeing in past 2 weeks[a]		Depressive symptoms in past 12 months[b]		Anxiety in past 2 weeks[c]		Thought about attempting suicide in past 12 months	
	AOR[g] [95% CI]	*p*-value	AOR[g] [95% CI]	*p*-value	AOR[g] [95% CI]	*p*-value	AOR[g] [95% CI]	*p*-value
Care protective factors model								
Parent cares a lot (at least one)	0.61 [0.19–1.94]	.411	0.60 [0.12–3.00]	.544	0.83 [0.20–3.40]	.795	1.60 [0.43–5.99]	.494
Friend cares[d] (agree or strongly agree)	**0.29 [0.10-0.86]**	.037	**2.65 [1.31-5.39]**	.014	1.86 [0.50–6.87]	.364	1.54 [0.57–4.19]	.405
Teachers/tutors care (yes)	**5.12 [1.17-22.41]**	.043	**0.12 [0.03-0.49]**	.008	0.58 [0.18–1.84]	.365	0.51 [0.20–1.30]	.175
Adult outside family cares (agree or strongly agree)[d]	**2.33 [1.10-4.97]**	.040	0.71 [0.36–1.42]	.347	0.89 [0.48–1.64]	.714	0.75 [0.35–1.60]	.463
Acceptance protective factors model								
Family accepts them for who they are (agree or strongly agree)	**2.01 [1.16-3.47]**	.022	**0.35 [0.20-0.62]**	.002	**0.60 [0.42-0.86]**	.011	**0.41 [0.19-0.90]**	.038
Friend accepts them for who they are (agree or strongly agree)	0.72 [0.26–1.95]	.521	0.84 [0.27–2.58]	.763	1.00 [0.40–2.52]	.997	1.22 [0.40–3.65]	.731
School supportive of gender and sexuality diversity (yes)	0.65 [0.28–1.55]	.348	1.07 [0.48–2.39]	.873	0.91 [0.45–1.84]	.804	1.57 [0.75–3.28]	.242
Adult outside family accepts them (agree or strongly agree)	2.56 [0.89–7.37]	0.100	0.61 [0.31–1.18]	.159	0.66 [0.33–1.34]	.267	1.10 [0.53–2.27]	.805
Safety protective factors model								
Feels safe at home (most or all the time)	**2.86 [1.08-7.58]**	.046	**0.17 [0.08-0.39]**	<.001	**0.25 [0.08-0.79]**	.027	0.94 [0.37–2.41]	.900
Feels safe in school (most or all the time)	**3.25 [1.19-0.89]**	0.031	**0.30 [0.13-0.68]**	.009	**0.29 [0.09-0.95]**	.052	**0.33 [0.13-0.82]**	.027
Feels safe in neighbourhood (all the time)[e]	1.39 [0.70–2.75]	.354	0.80 [0.45–1.40]	.439	1.18 [0.63–2.19]	.608	0.92 [0.51–1.68]	.795

eSum of recoded responses on PHQ anxiety subscale questions ≥ 3.
[a] Score of 13 or more on the World Health Organization Well-being Index (WHO-5). Good wellbeing in past 2 weeks.
[b] Score of 28 or more on the Reynolds Adolescent Depression Scale - Short Form (RADS-SF). Depressive symptoms for 2 week or more in past 12 months.
[c] Sum of recoded responses on PHQ anxiety subscale questions ≥ three.
[d] Has friend/adult outside family who will stick up (has got their back) *or* has close bond with.
[e] This neighbourhood safety question did not include a 'most of the time' response category, and so is not directly comparable to the home safety and school safety variables.
[f] N = 4,280 (Asian and Pakeha Rainbow and Non-Rainbow).
[g] Odds ratio adjusted for age, gender, and SES.

family (aOR 0.26, 95% CI 0.17–0.38), a friend (aOR 0.59, 95% CI 0.35–0.97), and an adult outside their family (aOR 0.61, 95% CI 0.44–0.85) (Table 3). Similar outcomes were also found when comparing Asian Rainbow youth to Pākehā Rainbow youth as Asian Rainbow youth reported lower odds of being accepted by their family (aOR 0.42, 95% CI 0.31–0.57) or by an adult outside their family (aOR 0.71, 95% CI 0.53–0.95).

Compared to Asian non-Rainbow youth, Asian Rainbow youth reported lower odds of feeling safe at home (aOR 0.25, 95% CI 0.12–0.50). However, compared to Pākehā Rainbow youth, Asian Rainbow youth reported higher odds of being cared about by teachers or tutors (aOR 1.92 95% CI 1.20–3.07)

Relationships between protective factors and emotional and mental health for Asian Rainbow youth. As described below and shown in Table 4, feeling cared about was significantly associated with emotional wellbeing and depressive symptoms, but the directions were not consistently suggestive of protective factors. Having a teacher who cares was associated with higher odds of Asian Rainbow youth reporting good emotional wellbeing (aOR 5.12, 95% CI 1.17–22.4). Having an adult outside the family who cares (young person has a close bond with them or reports they will stick up for them/has "got their back") was also associated with higher odds of Asian Rainbow youth reporting good emotional wellbeing (aOR 2.33, 95% CI 1.10–4.97). Having a teacher who cares was also associated with lower odds of reporting depressive symptoms (aOR 0.12, 95% CI 0.03–0.49). Conversely, having a friend who cares was associated with lower odds of good emotional wellbeing (aOR 0.29, 95% CI 0.10–0.86) and higher odds of depressive symptoms (aOR 2.65, 95% CI 1.31–5.39). Parents, friends, teachers or other adults caring were not significantly associated with the mental health indicators of anxiety and thoughts about attempting suicide (see Table 4).

Asian Rainbow youth who felt accepted by family reported higher odds of good emotional wellbeing (aOR 2.01, 95% CI 1.16–3.47), and lower odds of depressive symptoms (aOR 0.35, 95% CI 0.2–0.62), anxiety (aOR 0.60, 95% CI 0.42–0.86), and having thoughts about attempting suicide (aOR 0.41, 95% CI 0.19–0.90). Being accepted by a friend, or by an adult outside their family, for who they were, were not significantly associated with emotional wellbeing and mental health for Asian Rainbow youth, and neither was going to a school that was accepting and supportive of Rainbow young people (see Table 4).

Asian Rainbow youth who reported feeling safe at home had higher odds of reporting good emotional wellbeing (aOR 2.86, 95% CI 1.08–7.58), and lower odds of reporting depressive symptoms (aOR 0.17, 95% CI 0.08–0.39) and anxiety (aOR 0.25, 95% CI 0.08–0.79). Similarly, Asian Rainbow youth who said they felt safe in school had higher odds of reporting good emotional wellbeing (aOR 3.25, 95% CI 1.19–8.89), and lower odds of reporting depressive symptoms (aOR 0.30, 95% CI 0.13–0.68), anxiety (aOR 0.29, 95% CI 0.09–0.95), and having thoughts about attempting suicide (aOR 0.33, 95% CI 0.13–0.82). However, the association between feeling safe in their neighborhood and emotional wellbeing for Asian Rainbow youth was not statistically significant (see Table 4).

Discussion

The findings demonstrate that Asian Rainbow youth have a unique mental health and wellbeing profile compared to Pākehā Rainbow youth and cisgender heterosexual Asian youth. Asian Rainbow youth demonstrate a unique mix of strengths and vulnerabilities, and the findings help identify opportunities for more targeted support. Compared to Asian non-Rainbow youth, Asian Rainbow youth are more likely to report lower general emotional wellbeing, more symptoms of depression, more thoughts of suicide, and increased levels of anxiety. However, in comparison to Pākehā Rainbow youth, Asian Rainbow youth are less likely to report anxiety in the past 2 weeks. The pattern of these findings is consistent with earlier New Zealand research [15,32]. However, in addition, this study provides evidence that family acceptance, having caring teachers at school, and feeling safe at school, play a role in the emotional wellbeing and mental health outcomes among Asian Rainbow youth compared to their non-Asian or non-Rainbow peers. These results show that these protective factors, along with feeling safe at home, may variously be associated with improved emotional wellbeing and mental health indicators for Asian Rainbow young people.

The protective effect of family acceptance on Rainbow youth's identity and health has been described among LGBTQ youth in general [21,22]. It has been shown that parental acceptance and affirmation, belonging and connectedness were all associated with increased wellbeing for LGBTQ youth [21]. Family support and acceptance are associated with greater self-esteem and better general health status and are protective against substance use and depression for sexual and gender minority youth [22]. The results of this study support this notion, that where Asian Rainbow youth reported that their families accept them for who they are, they reported better emotional wellbeing and mental health outcomes.

However, sexual and gender diversity may not often be discussed openly among Asian families and communities [33], as these topics may be perceived as taboo or unconventional ideas and behaviors [34]. Asian cultures may also idealize family-based heteronormative conformity, hence revelation of one's gender and sexual minority status (or 'coming out') may be perceived as a failure of the family or the individual to adapt to societal expectations of heteronormative conformity [35].

Interestingly, the lack of any significant associations between self-report of parental care and mental health and wellbeing suggests that there is a difference for Asian Rainbow youth in the experience of being accepted by "family" (as defined by them) and the role of parental care in these outcomes. The findings suggest that these are different aspects of family support, which, though related, are not necessarily correlated. The power of broader family support is therefore a strength that can be harnessed, particularly in a collectivist familial cultural context for many Asian young people [36], when self-reported parental care is low. These findings emphasize the importance of recognizing the broader familial structure of Asian Rainbow young people and supporting them, as well as their parents, to better understand, accept and support their younger Rainbow members. Further research, with nuanced family support variables and pathway analysis, as well as prospective studies and qualitative methodology, is recommended to explore this in more depth.

Feeling safe at school was another key protective factor for the Asian Rainbow participants in this study, which is consistent with research in youth of all ethnicities in New Zealand [37] and other parts of the world [19]. Across Rainbow youth populations of all ethnicities, this finding has been reported in previous Youth2000 studies, where overall, fewer depressive symptoms were reported among self-identified male sexual minority students in supportive school environments [37]. Reasons for this effect may include that good interpersonal relationships both among sexual minority adolescents and with teachers mediated the effect of school victimization and subsequently reduced the risk of suicide [38]. Our results highlight both the importance of supporting better relationships with teachers and the need for positive relationships with peers. Some schools provide GSAs (often known as Gay-Straight Alliances/Gender Sexuality Alliances) which are student-led clubs that support LGBTQ youth. Rainbow students who have access to GSAs may feel more connected to school and may be less likely to feel unsafe due to sexual orientation or gender expression [23]. GSAs have also been found to increase youth's perceived peer validation and self-efficacy to promote social justice and hope [39] and present an appealing opportunity for public health interventions to support the wellbeing of Asian Rainbow young people.

Ethnic minority Rainbow populations may demonstrate greater resilience than ethnic majority Rainbow populations due to the development of coping mechanisms for racial/ethnic stigma, and also because they are more likely to be connected to multiple diverse communities or networks [40]. An earlier intersectional study showed multiple minority statuses (sexual/gender and ethnic) among youth were not associated with increased distress [41]. This was also noted in the current study, with Asian Rainbow youth reporting less anxiety than Pākehā Rainbow youth. One possible explanation for this finding could be Pākehā Rainbow youth being more likely to disclose their sexual/gender minority status to their parents compared to Asian Rainbow youth, consequently exposing themselves to potentially higher levels of parental discouragement and ensuing stress and resulting negative psychological effects [42]. Programmes and supports for all families of Rainbow young people, regardless of their ethnicity, are likely to provide important opportunities to improve the wellbeing of all Rainbow young people.

One unusual finding of this study was that having a friend who cares, defined as a friend who they were close with or who would stick up for them, was associated with higher odds of depressive symptoms and lower odds of good emotional wellbeing. While the cross-sectional design of this study limits the ability to consider temporal associations, it is possible that friends, per se, may not have the skills or experience to support Asian Rainbow youth experiencing emotional distress, and despite strong peer networks, Asian Rainbow youth may lack more robust protective factors that could support their

emotional wellbeing. Prior research has found that for youth, support from fellow sexual minority friends is more likely to provide sexuality related stress support, and subsequently decreased emotional distress, compared to support from heterosexual friends [43]. Programmes that can upskill all peers to help all young people, especially Asian Rainbow youth, may be particularly important to provide earlier mental health interventions for this group.

A limitation of this study is the difficulty in determining the accuracy of answering survey questions pertaining to gender and sexuality among teenagers. Social desirability biases, notwithstanding, filling out the survey at school may prevent some young people from accurately reporting their sexual attraction or gender identity. However, the study was conducted anonymously, which may remove some social desirability influence when answering personal questions like sexual and gender identities. Nonetheless, there may be a proportion of Rainbow students who are not counted in this study due to social stigma, or their own discomfort with their identities, in which case we may be underestimating the negative effects of stigma and mental health challenges affecting these young people and present a more favorable analysis of Rainbow young people's wellbeing than is likely to be the case.

Due to the necessary limitations of large-scale population survey research, exploring which particular aspects of safety were significant to youth — for example physical safety, emotional safety, or both was not possible. Future research, particularly qualitative research, may be useful to explore this in more depth.

The study also combined sexuality and gender minority students into 1 group to provide enough statistical power for the between-group Asian analysis. However, this amalgamation obscures within-group differences, which, as noted in the introduction, include the greater challenges, reported by gender minority young people [2]. As such, our findings may well underrepresent the negative experiences of transgender Asian young people, and caution is required in extrapolating these findings to show the extent of challenges faced by transgender Asian young people. Further work with larger samples and qualitative work is required to explore transgender Asian experiences in more depth.

Due to the relatively modest sample size of the Rainbow population, this study adopted a pan-Asian paradigm. This limited our ability to consider more nuanced explorations acknowledging the significant cultural heterogeneity within the category "Asian". Further research on ethnic/cultural-specific impacts of coming from different regions (e.g., South Asian, East Asian, Middle Eastern) on Asian Rainbow youth would be beneficial. Despite significant differences within Asian population, they share common cultural values and beliefs such as collectivism, conformity to norms and humility [44].

This study provided some insights into the impact of key protective factors for Asian Rainbow youth on their mental health and wellbeing. Being accepted for their Rainbow identity by their family, as well as feeling safe at home and at school, and having teachers who care about them may particularly help Asian Rainbow youth to overcome discriminations and challenges. Future qualitative studies would be useful to help further explore and understand these findings and provide a more nuanced and in-depth understanding of ways to support and improve the wellbeing of Asian Rainbow youth. Those studies could assist various sectors (education, community, and health) deconstructing the complexity of Asian Rainbow youth experiences, and provide valuable insights for appropriate care and support.

Acknowledgments

The Youth19 Rangatahi Smart Survey is a collaboration between two Health Research Council of New Zealand Projects.

Clark, T.C., Le Grice, J., Shepherd, M., Groot, S., & Lewycka, S. (2017). Harnessing the spark of life: Maximising whānau contributors to rangatahi wellbeing. Health Research Council of New Zealand Project Grant (HRC ref: 17/315).

Fleming, T., Peiris-John, R., Crengle, S., & Parry, D. (2018). Integrating survey and intervention research for youth health gains. Health Research Council of New Zealand Project Grant (HRC ref: 18/473).

Supplementary Data

Supplementary data related to this article can be found at https://doi.org/10.1016/j.jadohealth.2024.05.026.

References

[1] Rainbow inclusive language guide. Te Kawa mataaho public service commission. https://www.publicservice.govt.nz/guidance/rainbow-inclusive-language-guide/. Accessed October 9, 2023.
[2] Clark TC, Lucassen MF, Bullen P, et al. The health and well-being of transgender high school students: Results from the New Zealand adolescent health survey (Youth'12). J Adolesc Health 2014;55:93–9.
[3] Ross-Reed DE, Reno J, Peñaloza L, et al. Family, school, and peer support are associated with rates of violence victimization and self-harm among gender minority and cisgender youth. J Adolesc Health 2019;65:776–83.
[4] Fenaughty J, Clark T, Choo WL, et al. Te āniwaniwa takatāpui whānui: Te aronga taera mō ngā rangatahi. Sexual attraction and young people's wellbeing in Youth19. New Zealand: Youth19 Research Group, The University of Auckland and Victoria University of Wellington; 2021.
[5] Lucassen MF, Clark TC, Denny SJ, et al. What has changed from 2001 to 2012 for sexual minority youth in New Zealand? J Paediatr Child Health 2015;51:410–8.
[6] Strutz KL, Herring AH, Halpern CT. Health disparities among young adult sexual minorities in the U.S. Am J Prev Med 2015;48:76–88.
[7] Guz S, Kattari SK, Atteberry-Ash B, et al. Depression and suicide risk at the cross-section of sexual orientation and gender identity for youth. J Adolesc Health 2021;68:317–23.
[8] Srivastava A, Rusow JA, Goldbach JT. Differential risks for suicidality and mental health symptoms among transgender, Nonbinary, and cisgender sexual minority youth accessing Crisis Services. Transgend Health 2021;6:51–6.
[9] Benner AD, Wang Y, Shen Y, et al. Racial/ethnic discrimination and well-being during adolescence: A meta-analytic review. Am Psychol 2018;73:855–83.
[10] Sutcliffe K, Ball J, Clark TC, et al. Rapid and unequal decline in adolescent mental health and well-being 2012–2019: Findings from New Zealand cross-sectional surveys. Aust N Z J Psychiatr 2023;57:264–82.
[11] 2018 Census ethnic group summaries. Govt.nz. https://www.stats.govt.nz/tools/2018-census-ethnic-group-summaries/sian. Accessed September 30, 2023.
[12] Gattamorta KA, Salerno JP, Castro AJ. Intersectionality and health Behaviors among US high school students: Examining race/ethnicity, sexual identity, and sex. J Sch Health 2019;89:800–8.
[13] Jackman K, Kreuze EJ, Caceres BA, Schnall R. Bullying and peer victimization of minority youth: Intersections of sexual identity and race/ethnicity. J Sch Health 2020;90:368–77.
[14] Xiao Y, Lu W. Temporal Trends and disparities in suicidal Behaviors by sex and sexual identity among Asian American adolescents. JAMA Netw Open 2021;4:e214498.
[15] Chiang SY, Fleming T, Lucassen M, et al. Mental health status of double minority adolescents: Findings from National cross-sectional health surveys. J Immigr Minor Health 2017;19:499–510.
[16] Fox KR, Choukas-Bradley S, Salk RH, et al. Mental health among sexual and gender minority adolescents: Examining interactions with race and ethnicity. J Consult Clin Psychol 2020;88:402–15.

[17] 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.
[18] Young CA, Israel T. Centralizing the Psychology of sexual minority Asian and Pacific Islander Americans. Psychol Sexual Orient Gender Diversity 2016;3:345–6.
[19] Eisenberg ME, Resnick MD. Suicidality among gay, lesbian and bisexual youth: The role of protective factors. J Adolesc Health 2006;39:662–8.
[20] Parmar DD, Tabler J, Okumura MJ, Nagata JM. Investigating protective factors associated with mental health outcomes in sexual minority youth. J Adolesc Health 2022;70:470–7.
[21] Ceatha N, Koay ACC, Buggy C, et al. Protective factors for LGBTI+ youth wellbeing: A Scoping review Underpinned by Recognition theory. Int J Environ Res Public Health 2021;18:11682.
[22] Katz-Wise SL, Rosario M, Tsappis M. Lesbian, gay, bisexual, and transgender youth and family acceptance. Pediatr Clin North Am 2016;63:1011–25.
[23] Truong NL, Zongrone AD, Kosciw JG. Erasure and resilience: The experiences of LGBTQ students of color, Asian American and Pacific Islander LGBTQ youth in U.S. schools. New York: GLSEN; 2020.
[24] Phillips TR, Medland N, Chow EPF, et al. "Moving from one environment to another, it doesn't automatically change everything". Exploring the transnational experience of Asian-born gay and bisexual men who have sex with men newly arrived in Australia". PLoS One 2020;15:e0242788.
[25] Fleming T, Peiris-John R, Crengle S, et al. Youth19 rangatahi Smart survey, Initial findings: Introduction and methods. New Zealand: The Youth19 Research Group, The University of Auckland and Victoria University of Wellington; 2020.
[26] Wuthrich VM, Jagiello T, Azzi V. Academic stress in the final Years of school: A systematic literature review. Child Psychiatr Hum Dev 2020;51:986–1015.
[27] Gender Minorities Aotearoa. Trans 101: A glossary of trans words and How to use them. https://genderminorities.com/glossary-transgender/. 2023.
[28] Topp CW, Ostergaard SD, Sondergaard S, Bech P. The WHO-5 well-being index: A systematic review of the literature. Psychother Psychosom 2015;84:167–76.
[29] Walker L, Merry S, Watson PD, et al. The Reynolds adolescent depression scale in New Zealand adolescents. Aust N Z J Psychiatr 2005;39:136–40.
[30] Kroenke K, Spitzer RL, Williams JBW, Löwe B. An Ultra-Brief Screening scale for anxiety and depression: The PHQ–4. Psychosomatics 2009;50:613–21.
[31] R Core Team. In: R: A Language and Environment for Statistical Computing. Vienna, Austria: R Foundation for Statistical Computing; 2023, https://www.R-project.org/.
[32] Chiang SY, Fenaughty J, Lucassen MFG, Fleming T. Navigating double marginalisation: Migrant Chinese sexual and gender minority young people's views on mental health challenges and supports. Cult Health Sex 2019;21:807–21.
[33] Sadika B, Wiebe E, Morrison MA, Morrison TG. Intersectional microaggressions and social support for LGBTQ persons of color: A systematic review of the Canadian-based Empirical literature. J GLBT Fam Stud 2020;16:111–47.
[34] Wong N, Menkes DB. Ethnic youth and sexual identity: The role of clinical and social support for 'double minorities'. Australas Psychiatry 2018;26:181–3.
[35] Tam M. Queer (and) Chinese: On be(long)ing in diaspora and coming out of queer liberalism. 2018. https://qspace.library.queensu.ca/items/ca8376c0-26d2-4110-af9b-83123b3b53af. Accessed September 30, 2023.
[36] Lui PP, Rollock D. Greater than the Sum of its parts. Cult Divers Ethnic Minor Psychol 2018;24:242–59.
[37] Denny S, Lucassen MF, Stuart J, et al. The association between supportive high school environments and depressive symptoms and suicidality among sexual minority students. J Clin Child Adolesc Psychol 2016;45:248–61.
[38] Huang Y, Li P, Lai Z, et al. Association between sexual minority status and suicidal behavior among Chinese adolescents: A moderated mediation model. J Affect Disord 2018;239:85–92.
[39] Poteat VP, Calzo JP, Yoshikawa H, et al. Greater Engagement in gender-sexuality Alliances (GSAs) and GSA characteristics Predict youth Empowerment and reduced mental health concerns. Child Dev 2020;91:1509–28.
[40] McConnell EA, Janulis P, Phillips G, et al. Multiple minority stress and LGBT community resilience among sexual minority men. Psychol Sex Orientat Gend Divers 2018;5:1–12.
[41] Hayes JA, Chun-Kennedy C. Do double minority students face double jeopardy? Testing minority stress theory. J Col Counsel 2011;14:117–26.
[42] D'Augelli AR, Grossman AH, Salter NP, et al. Predicting the suicide attempts of lesbian, gay, and bisexual youth. Suicide Life Threat Behav 2005;35:646–60.
[43] Doty ND, Willoughby BLB, Lindahl KM, Malik NM. Sexuality related social support among lesbian, gay, and bisexual youth. J Youth Adolesc 2010;39:1134–47.
[44] Kim BS, Omizo MM. Asian and European American cultural values, collective self-esteem, Acculturative stress, Cognitive Flexibility, and general self-efficacy among Asian American college students. J Counsel Psychol 2005;52:412.