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The health of alternative education students compared to secondary school students: a New Zealand study

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Abstract

Aim To describe the health and wellbeing of alternative education (AE) students from the Northland and Auckland regions of New Zealand and compare these AE students with secondary school students of similar age from the same region.

Methods All 36 AE schools in the region were surveyed in the year 2000. A total of 268 AE students completed a youth health questionnaire using laptop computers. Regional data from a 2001 national secondary school survey that used the same methodology was used for comparison with the AE student data.

Results This study found that compared to secondary school students, AE students are more likely to come from disadvantaged backgrounds, with proportionally more AE students reporting socioeconomic difficulty and less parental connection. AE students were more likely to be vulnerable to behaviours that endanger their health, such as drug and alcohol use, risky sexual behaviours and risky motor vehicle use than secondary school students. AE students were also more likely to suffer from high levels of depressive symptoms indicative of significant psychopathology.

Conclusions Findings from this study support the need for specific policies and programs for alternative secondary school students to address urgent and serious threats to their health and wellbeing.

Alternative education schools serve students with behavioural problems, repeated expulsions and/or pregnancy/child care responsibilities that preclude them from attending their usual secondary schools. In New Zealand, alternative education (AE) is a relatively new concept. In 1999, the New Zealand Ministry of Education set up the Alternative Education Initiative in response to a growing concern by schools, communities and families about the increasing number of young people who were excluded from school and had few other educational options. In New Zealand, alternative education is limited to students in school years 9 through 11 (aged 13 to 15 years). By 2002, there were 2756 students enrolled in alternative education schools from throughout New Zealand; this is approximately 1.6% of the total population of young people aged 13 to 15 years.[1,2]

Previous research from overseas suggests that young people excluded from mainstream education are more likely to have significant health issues compared to students attending mainstream education.[3] We have previously shown that AE students from New Zealand are similar to AE students in the United States and engage in high rates of health risking behaviours.[4] What is less clear is the context for these health issues among AE students in New Zealand and how the health and wellbeing of AE students compare to students from secondary schools in New Zealand.

Methods

Background—In the year 2000, the Adolescent Health Research Group developed a youth health questionnaire administered by laptop computers (Youth2000) as part of a national youth health survey to provide data on the health and wellbeing of New Zealand's youth.[5] Alternative education schools from Auckland and northern New Zealand were surveyed in the lead-up to the national survey using the same youth health questionnaire and laptop computer methodology.

Questionnaire development—The questionnaire was developed over a 2-year period and includes major themes and research questions identified by key stake holders and end-users, including health providers, youth health researchers, government agencies, schools, young people, and Maori and Pacific community leaders. A survey tool using multi-media computer-assisted self-interviewing (M-CASI) was developed to administer the questionnaire. Using M-CASI, the questionnaire was pilot tested in a sample of 110 students (aged 12 to 18 years) from a diverse range of socioeconomic and ethnic backgrounds.[6]

Revisions of the questionnaire were made based upon the findings and experiences from the pilot study. The Reynolds Adolescent Depression Scale (RADS) which measures depressive symptoms was incorporated into the final survey.[7] The RADS also allows for an empirically derived cutoff score to define a clinically relevant level of depressive symptomatology (ie, of sufficient severity to be considered pathological).

Study populations—All 36 AE schools from Auckland and Northland were surveyed in 2000. Lists of AE schools were obtained from the Ministry of Education and local coordinators of alternative education programs. The requirement for inclusion was that each school receives funding from the Ministry of Education to provide alternative education to students aged 13 to 15 years who are outside of and alienated from the education system. All 36 AE schools in the region consented to take part in this study. Of the 365 students enrolled in the AE schools, 276 completed the survey, 88 students were absent, one student declined consent and seven student surveys were lost due to computer error. The reasons for student absence were sickness or illness (16%), pregnancy related (4%), truancy (23%), at work placement (3%), miscellaneous (14%), and unknown (40%). The overall AE student response rate for survey analysis was 76%.

The national secondary school youth health survey was conducted in 2001.[5] 133 schools were randomly selected and invited to participate from a total of 389 New Zealand secondary schools with school rolls greater than 50 students. A total of 114 schools agreed to participate. At each school, the study administrators randomly selected 15% of all eligible Year 9 to Year 13 students. A further 15% of the students were randomly selected to be reserves if the selected students did not arrive at the study venue on the day of the survey.

Students were ineligible to participate if they were not New Zealand residents, if they had insufficient English language skills, or had a disability that preventing them from using a standard laptop computer. For the majority of students who were selected but did not participate, no reason could be identified. Twenty-eight percent of non-participating students were absent on the day of the survey and 2.5% actively declined to participate. A total of 9567 students completed Youth2000 with an overall response rate of 64.3%.

Because AE schools only enrol students from Year 9 through Year 11, comparisons with the secondary school students were restricted to students in Year 9 to 11. Only students from Auckland and Northland regions from the national youth health survey were used for comparison with the alternative education school data. This resulted in 2104 students in Years 9 to 11 from the national youth survey for comparison with AE data.

Table 1 shows the demographic characteristics of the AE students and secondary school student sample. The majority of AE students are male (68%), aged between 14 and 15 years (75%) and Maori (78%). The secondary school student sample has slightly more female students (58%), mostly aged 13 years to 15 years, and represented a range of ethnic backgrounds.

Consent procedures were the same for both studies. Information about the survey was sent to all families of students who were invited to participate in the surveys. Parents were able to withdraw their child from the study. Informed consent was obtained from all participating young people. Ethical approval for both studies was obtained from the University of Auckland Human Subjects Ethics Committee.

Analysis—Estimated proportions and their 95% confidence intervals were calculated separately for males and females. Estimates and standard errors were adjusted for the clustering of data within schools and the unequal probabilities of selection of students.[8] Differences are considered statistically significant if the 95% confidence intervals do not overlap. The use of non-overlapping confidence intervals to test for significant differences has been shown to underestimate significant differences.[9] This method was chosen for this analysis because of the number of comparisons being made and the small size of the alternative education sample. Confidence intervals are able to give a better understanding of the differences between the two populations than more direct tests of proportions.

Table 1. Demographic characteristics of students at alternative schools and secondary schools from Auckland and northern New Zealand (NZ)

Variable	AE students* n (%)	Secondary school students† n (%)
Sample size	268	2104
Gender (%)		
Male	180 (68.3)	883 (42.0)
Female	86 (32.1)	1221 (58.0)
Age (%)		
≤13	36 (13.5)	631 (30.8)
14	103 (38.7)	689 (32.6)
15	97 (36.5)	633 (30.0)
≥16	30 (11.2)	151 (6.6)
Ethnicity (%)		
NZ European	24 (9.1)	730 (34.3)
Maori	206 (78.3)	551 (25.0)
Pacific	25 (9.5)	411 (19.3)
Asian	2 (0.8)	281 (15.2)
Other	6 (2.3)	127 (6.2)

*Mean age=14.5; 95% confidence interval=14.3–14.6; †Mean age = 14.1; 95% confidence interval=14.0–14.2; AE=Alternative eduction.

Results

Socioeconomic and family environments—Table 2 shows that there are large differences between AE students and secondary school students on a range of socioeconomic indicators. Over 40% of AE students had moved their home two or more times in the previous year compared to less than 15% of secondary school students. Proportionally more AE students said that an adult in their home had a community services card then secondary school students. Basic household resources, like a working car, were reported less frequently among AE students than secondary school students.

AE students were less likely than secondary school students to report supportive relations with their parents (Table 2). More male AE students than male secondary school students report that they feel that they have less supportive home environments and were less likely to report getting enough time with their mother or father, getting praise from their family, or feeling close to their mother or father. Both male and female AE students were less likely to report that their mother or father care a lot about them than male and female secondary school students. In contrast, similar

proportions of AE and secondary school students report supportive relations with other family members and relatives who do not live with them.

Table 2. Socioeconomic indicators and family environments

Variable	Male % (95% CI)		Female % (95% CI)	
	Alternative education	Secondary schools	Alternative education	Secondary schools
A car at home that is working	84.6‡ (±5.9)	95.5‡ (±1.8)	86.3 (±9.7)	96.3 (±1.5)
A telephone at home that is connected	72.8‡ (±6.0)	93.7‡ (±2.4)	67.5‡ (±11.3)	93.3‡ (±3.2)
More than two people per bedroom at home	18.7 (±7.1)	8.3 (±3.6)	22.0 (±9.1)	10.9 (±4.2)
Moved home two or more times in the previous year	46.2‡ (±7.3)	12.8‡ (±2.9)	44.0‡ (±9.6)	14.1‡ (±3.2)
An adult in their home has a community services card	75.9‡ (±7.0)	39.3‡ (±6.9)	75.9‡ (±10.3)	45.0‡ (±8.4)
Mother or father care a lot	80.4‡ (±6.6)	92.1‡ (±1.3)	79.0‡ (±8.2)	91.7‡ (±1.3)
Feel close to mother or father*	59.6‡ (±6.9)	72.0‡ (±2.8)	63.9 (±10.2)	70.2 (±3.6)
Always get enough time with their mother or father	42.4‡ (±6.2)	61.8‡ (±5.0)	59.8 (±10.7)	62.1 (±3.9)
Get praise from their family†	57.2‡ (±7.5)	77.2‡ (±2.0)	63.9 (±12.3)	79.3 (±3.7)
Other family members care a lot	55.9 (±8.2)	59.9 (±2.8)	60.2 (±9.8)	60.5 (±2.7)
Relatives care a lot (who do not live with student)	55.0 (±8.6)	57.5 (±4.2)	56.8 (9.6)	57.5 (±4.2)

*Most of the time; †Usually or always; ‡Non-overlapping confidence intervals between the AE and secondary school students.

School and Community Environments—Both AE students and secondary school students report high levels of supportive school environments (Table 3). A higher proportion of AE students say that a teacher had gotten to know them well during the school year than secondary school students. Proportionally fewer female AE students report that people at their school expect them to do well compared to female secondary school students.

Similarly, both AE students and secondary school students report feeling connected to their communities and environments (Table 3). All students report high levels of connection to friends, and over half of the students indicated there was an adult in their community they could talk to about a serious problem. Compared to male students, proportionally more female students from both AE schools and secondary schools indicated that they had a friend they could talk to about serious problems and/or that their friends care a lot.

About half of all students said that their spiritual beliefs were very important to them. AE students were significantly less likely to report attending a place of worship regularly than secondary school students. Less than 10% of AE students reported attending a place of worship regularly, compared to about 25% of secondary school students.

Table 3. School and community environments

Variable	Male % (95% CI)		Female % (95% CI)	
	Alternative education	Secondary schools	Alternative education	Secondary schools
Like their school a lot or feel it is OK	82.1 (±6.4)	88.7 (±3.9)	80.5 (±11.0)	89.8 (±1.9)
People at their school expect them to do well	91.8 (±5.4)	90.5 (±1.8)	80.5* (±7.5)	90.9* (±1.9)
Feel part of their school	78.3 (±6.6)	81.8 (±3.8)	83.1 (±12.0)	82.1 (±1.7)
People at their school care about them (some or a lot)	89.7 (±5.3)	87.6 (±4.0)	90.8 (±7.1)	89.4 (±1.9)
Teachers treat students fairly (sometimes or most of the time)	84.4 (±6.9)	87.2 (±2.0)	85.5 (±8.5)	88.1 (±2.5)
A teacher has gotten to know them well during this school year	80.0* (±6.9)	50.4* (±5.6)	76.6* (±10.3)	43.1* (±6.9)
An adult they could talk to about a serious problem (who is not in their family)	56.3 (±9.5)	52.5 (±5.3)	62.9 (±10.6)	54.7 (±4.3)
A friend they could talk to about a serious problem	71.9 (±6.7)	68.9 (±3.8)	89.4 (±8.6)	88.0 (±1.3)
Friends care a lot	59.1 (±9.9)	50.5 (±3.2)	72.5 (±10.7)	73.9 (±3.0)
Spiritual beliefs are very important	53.4 (±9.9)	38.0 (±6.2)	49.2 (±14.8)	48.5 (±7.3)
Often attends church, mosque or shrine (or place of worship)	7.6* (±4.0)	24.2* (±6.4)	7. 6* (±7.6)	24.4* (±5.4)

*Non-overlapping confidence intervals between the AE and secondary school students.

Health risking behaviours—Most AE students have been sexually active (Table 4). Over 80% of AE students have had sexual intercourse compared to approximately 25% of secondary school students. More than 70% of AE students have been sexually active in the previous 3 months compared to less than 20% of secondary school students. Proportionally more AE students had been pregnant or been involved in a pregnancy than secondary school students, and more female AE students reported that they have had a sexually transmitted infection than female secondary school students. Among those students who were sexually active, proportionally fewer female AE students had used a condom during previous sexual intercourse than female secondary school students.

About three-quarters of male AE students reported being exclusively attracted to the opposite sex which was significantly less than male secondary school students where almost 90% reported being exclusively attracted to the opposite sex.

Table 4 shows that AE students were much more likely to report using cigarettes, alcohol and other drugs than secondary school students. About 50% of male AE

students and 70% of female students report smoking cigarettes weekly or more often, compared to less than 15% of male and female secondary school students.

Table 4. Percentages of students who engaged in sexual behaviours and substance use

Sexual behaviours	Male % (95% CI)		Female % (95% CI)	
	Alternative education	Secondary schools	Alternative education	Secondary schools
Ever had sexual intercourse	84.7‡ (±4.8)	28.8‡ (±6.8)	85.7‡ (±7.4)	22.1‡ (±5.2)
Currently sexually active*	72.9‡ (±6.5)	18.1‡ (±4.9)	71.4‡ (±10.1)	14.1‡ (±3.9)
Condom use during previous sexual intercourse	61.5 (±9.0)	74.9 (±7.6)	40.4‡ (±11.7)	59.6‡ (±7.2)
Have had a sexually transmitted infection	3.6 (±3.0)	0.5 (±0.4)	12.0‡ (±9.8)	0.8‡ (±0.4)
Have been pregnant or got someone pregnant	23.6‡ (±9.4)	2.2‡ (±1.6)	27.3‡ (±13.2)	3.3‡ (±1.2)
Sexually attracted to the opposite sex	76.5‡ (±6.6)	89.1‡ (±2.3)	84.4 (±9.1)	87.1 (±3.2)
Ever smoked a cigarette	84.8‡ (±5.9)	44.5‡ (±8.8)	97.3‡ (±3.9)	48.2‡ (±7.3)
Weekly cigarette use or more often	52.8‡ (±10.3)	11.2‡ (±3.4)	69.9‡ (±12.3)	14.7‡ (±3.4)
Ever drunk alcohol	89.6‡ (±5.1)	72.8‡ (±8.0)	97.1‡ (±4.2)	67.1‡ (±7.3)
Weekly alcohol use or more often	31.3‡ (±8.4)	13.7‡ (±3.8)	49.3‡ (±14.4)	8.6‡ (±2.7)
Episodic binge drinking†	64.1‡ (±8.2)	28.8‡ (±7.9)	75.8‡ (±9.7)	26.4‡ (±5.8)
Ever used marijuana	85.9‡ (±6.3)	34.2‡ (±6.6)	92.4‡ (±6.2)	31.4‡ (±6.8)
Weekly marijuana use or more often	50.4‡ (±11.4)	6.8‡ (±2.2)	55.2‡ (±11.6)	4.9‡ (±2.1)
Ever used other drugs (Hallucinogens, stimulants, narcotics and/or cocaine)	38.1‡ (±10.5)	5.9‡ (±2.3)	42.1‡ (±11.9)	5.4‡ (±1.5)

*Had sexual intercourse during the 3 months preceding the survey; †Drank ≥5 drinks of alcohol in one session (within 4 hours) in the previous 4 weeks; ‡Non-overlapping confidence intervals between the AE and secondary school students.

Almost half of female AE students reported that they drink alcohol weekly or more often, and three-quarters of female AE students report binge drinking during the previous 4 weeks.

Most AE students had tried marijuana, and over half of the AE students reported using marijuana weekly or more often—compared to less than 7% of secondary school students. Over one-third of AE students reported that they had tried other drugs, such as hallucinogens, stimulants, narcotics and/or cocaine, compared to less than 6% of secondary school students.

Violence, injuries, and motor vehicle use—A greater proportion of AE students report experiencing violence and abuse in the previous 12 months compared to secondary school students (Table 5). Almost 70% of AE students had been in a serious physical fight in the previous 12 months compared to less than 30% of secondary school students. A greater proportion of AE students report experiencing sexual abuse in their lives compared to secondary school students, especially among female AE students. More than half of female AE students have experienced sexual abuse, compared to one-quarter of female secondary school students.

Table 5. Experience of violence, injuries, and motor vehicle use

Variable	Male % (95% CI)		Female % (95% CI)	
	Alternative education	Secondary schools	Alternative education	Secondary schools
In a serious physical fight in the previous 12 months	66.4† (±6.4)	29.6† (±4.7)	64.0† (±14.9)	17.3† (±4.5)
Physically harmed by another person on purpose in the previous 12 months	51.0 (±8.6)	45.7 (±4.9)	53.3 (±11.4)	41.8 (±3.8)
Has been touched in a sexual way or made to do things that they didn't want	29.3† (±7.7)	17.2† (±3.1)	52.0† (±11.9)	24.3† (±3.9)
Has been bullied in school this year	19.3 (±6.1)	26.4 (±3.4)	21.9 (±10.0)	27.1 (±3.1)
Hardly ever or never wears a seatbelt in a car	20.5† (±7.0)	3.2† (±1.3)	12.2 (±8.0)	3.9 (±1.7)
Been in a car driven by someone who had been drinking alcohol†	48.8† (±7.0)	24.2† (±6.2)	50.6† (±10.5)	27.3† (±5.6)
Been in a car driven by someone who was high or had been taking drugs†	59.7† (±6.2)	14.6† (±3.8)	67.5† (±10.3)	15.2† (±4.2)
Been in a car driven dangerously by someone (speeding, car chases, burnouts)*	69.8† (±6.9)	30.9† (±4.8)	62.2† (±9.6)	29.7† (±4.2)

*During the previous 4 weeks; †Non-overlapping confidence intervals between the AE and secondary school students.

Table 5 shows that AE students are significantly more vulnerable to injury due to dangerous motor vehicle use than secondary school students. Regular seatbelt use was three to four times lower among AE students compared secondary school students. About half of AE students had been in a car driven by someone who had been drinking alcohol during the previous 4 weeks compared to about one-quarter of secondary school students. Similarly, about two thirds of AE students had been in a car driven by someone who had been taking drugs and/or driving dangerously such as speeding, car chases and burnouts, compared to less than one-third of secondary school students.

Emotional wellbeing—A significantly higher proportion of AE students report emotional health problems and/or attempted suicide compared to secondary school students (Table 6). Approximately 30% of female and 20% of male AE students reported levels of depressive symptoms above the RADS cutoff score indicating a high likelihood of clinically significant depressive symptoms. Similar proportions of

female and male AE students had made one or more suicide attempts in the previous 12 months.

Serious suicide attempts that resulted in medical treatment were made by about 10% of AE students in the previous 12 months, compared to about 2% of secondary school students. Significantly more male AE students had made serious suicide attempts in the previous 12 months compared to male secondary school students.

Table 6. Relative emotional wellbeing of students

Variable	Male % (95% CI)		Female % (95% CI)	
	Alternative education	Secondary schools	Alternative education	Secondary schools
Significant symptoms of depression*	21.1‡ (±6.4)	8.0‡ (±2.3)	35.4‡ (±11.8)	20.5‡ (±2.8)
Attempted suicide† one or more times during the previous 12 months	21.2‡ (±6.9)	5.1‡ (±1.5)	38.3‡ (±12.5)	12.8‡ (±2.7)
Suicide attempt requiring medical treatment during the previous 12 months	9.3‡ (±5.2)	0.9‡ (±0.7)	10.1 (±7.1)	3.4 (±1.0)

*Reynolds Adolescent Depression Scale cutoff; †Tried to kill yourself (attempt suicide); ‡Non-overlapping confidence intervals between the AE and secondary school students.

Discussion

This study compares the health and wellbeing of AE students to secondary school students in the northern region of New Zealand. This study also examines the community, school, and family contexts of AE students and secondary schools students. This study demonstrates that (compared to secondary school students) AE students are more likely to come from disadvantaged backgrounds, are vulnerable to behaviours that threaten their health and wellbeing, and suffer from serious emotional health concerns. These findings highlight the need for explicit policies and programs to address the health concerns of AE students.

Compared to secondary school students, AE students are more likely to come from disadvantaged backgrounds, with proportionally more AE students reporting socioeconomic difficulty and less parental connection than secondary school students. These findings are supported by research that has shown students who are risk of dropping out of secondary school are more likely to come from families experiencing poverty[10] and to experience adverse family environments.[11]

In contrast, AE students' positive connections to their wider family, school, and community are similar to secondary school students. AE students were just as likely as secondary school students to report that other family members, relatives, and their friends care a lot about them. Of importance is that most AE students in this study report that they feel like they are part of their school and that people at their school care about them. Indeed, alternative education schools (more than secondary schools)

have been recognised for providing more supportive and nurturing environments for students at risk of education failure.[12, 13]

This study highlights that AE students engage in significantly higher rates of health-risking behaviours than secondary school students.

These behaviours place AE students' health at greater vulnerability due to:

- Sexually transmitted infections and/or being involved in an unplanned pregnancy;
- Injuries or death from suicide behaviours, risky motor vehicle use, and/or violence; and
- Chronic ill health from cigarette, alcohol and/or other substance use.

Several recent studies have shown similar results.[3,14,15] Our study found that AE students are at higher risk for significant symptoms of depression than students from secondary schools. Over 25% of AE students had levels of depressive symptoms indicative of significant psychopathology and a similar proportion had made one or more suicide attempts in the previous 12 months.

While there have been few direct comparisons of the emotional wellbeing of AE students compared to secondary school students, the rates of significant depression symptoms found in this study among AE students are similar to a study of AE students from a large urban city in southeast Texas, USA.[16] Those findings show that students who are in alternative educational settings have significant health issues, both acute and chronic, as a result of a higher prevalence of health risking behaviours and emotional health concerns.

A major strength of the current study is that the methodology was the same for both AE and secondary school populations. This makes comparisons between the two student populations in our study more valid than studies biased by comparing data from different methodologies and questionnaires. That said, this study included some limitations. It used cross-sectional design, and cannot answer questions such as the effect of AE schools themselves on students' behaviour. A further limitation of this study is that the two student populations may not be directly comparable.

The average age of AE students is slightly higher than students from secondary schools in Year 7 through Year 9. This may account for higher rates of health jeopardising behaviours among AE students as most health risking behaviours increase through the secondary school years.[17] However, younger students in AE schools have been shown to be as likely, or more likely, to be engaging in health risk behaviours compared to older students.[18] Demographic differences were not adjusted for in the current study as it is primarily a descriptive study.

A further limitation of the current study was the different ethnic composition of the AE schools compared to the secondary schools, leading to the inaccurate conclusion that the health-risking behaviours and emotional health problems of the AE students are attributable to their different ethnic and cultural backgrounds.

Post-hoc analyses stratifying by ethnicity showed very few differences in the findings from the current study (tables available upon request). This suggests that it is the pathways to school failure that are the most detrimental to students' health and wellbeing rather than ethnic or cultural background. That said, it must be recognised that many secondary schools are failing significant numbers of Maori students. Maori

students are more likely to be suspended from school than students from other ethnic groupings, and leave school earlier than other students.[19]

In the past, lower socioeconomic status and lower levels of parental education of Maori were thought to be the main influence on poor school performance and higher schooldrop-out rates.[20] However, recently there has been a renewed focus on the role of teachers and the teaching process on student learning and achievement.[21,22]

For Maori, creating culturally appropriate and responsive learning environments has been shown to significantly improve educational outcomes.[23] Compared to secondary schools, it appears that alternative education schools are providing more supportive environments, especially for Maori students. It is paramount that secondary schools take a proactive approach to also improve the learning environments for Maori students to improve education achievements and retention at school.

Conclusion

This study highlights the need for explicit health policies and programs for alternative secondary school students. Indeed, the high levels of health-risking behaviours and emotional health problems within the AE population are of serious concern. Given the magnitude of the health problems that AE students face, collaborations between community health providers, specialist youth, and mental health services and educators are vital to most effectively utilise available resources and improve health services access.

One of the major findings from this study is that AE schools are providing supportive and caring environments for AE students. This is significant as one of the most important components of effective alternative education appears to be a caring environment for students in alternative schools.[13] Furthermore, current research shows that effective alternative education can improve the outcomes for young people by improving attitudes towards school and education, reducing drop-out rates, reducing health-risking behaviours, and improving long-term employment prospects.[12,24,25]

Alternative-education schools are in a unique position to improve the health of their students by:

- Providing accessible culturally appropriate healthcare;
- Encompassing comprehensive biopsychosocial assessment, services, and referral; and
- Delivering interventions that decrease the prevalence of health-risking behaviours.

Lastly, secondary schools can look to AE schools to model more supportive and caring environment for students at risk of educational failure.

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