Educational Status and its Association With Risk and Protective Factors for First Nations Youth

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This study involved the administration of the 127-item Aboriginal Youth Health Survey. In total, 131 Aboriginal youth from Alert Bay, BC participated. It was found that school connectedness and family connectedness were not associated with delinquency or health and well-being measures. When individual delinquency items were contrasted, participants who dropped out were more likely to be addicted to alcohol and marijuana than participants who were in school or had graduated. Both participants in school or graduated and youth who dropped out reported similar levels of health and well-being. Limitations and possible interventions to keep First Nations youth in school are discussed

Introduction

Aboriginal[1] people frequently live in unacceptable conditions of neglect, malnutrition, discrimination, and poverty (Kelm, 1998). Consequently, many Aboriginal youth continue to face special challenges during the transition to adulthood, including geographic isolation, poor economic conditions, and living in single-parent families. Furthermore, Aboriginal youth show elevated risk for dropping out of high school and have been found to be more likely to engage in risky behaviors such as substance use and delinquency (Cummins, Ireland, Resnick, & Blum, 1999). However, it is not always the case that Aboriginal youth have done poorly with respect to healthy outcomes. Cummins et al. and van der Woerd and Cox (2001) found that Aboriginal youth who attended school and who reported high levels of connection to school and family were less likely to engage in maladaptive behaviors and more likely to have higher levels of emotional and physical well-being. This article examines factors associated with dropping out of high school for Aboriginal youth. It was hypothesized that attendance in school and high levels of connection to family and school would be protective factors when considering the overall health of Aboriginal youth. Furthermore, it was expected that higher levels of connection to family and school would be associated with school completion.

Historical Perspectives

To understand the multifaceted social issues presently faced by Aboriginal peoples, "researchers are expected, by their communities and by the institutions which employ them, to have some form of historical and critical analysis" (Smith, 1999, p. 5). European-Western colonizers' attitudes toward the people they colonized were expressed in debates on whether Native peoples were in fact

human beings or whether they deserved human rights. These attitudes formed the foundation of Indian policies of 1815 (Tobias, 1976). In the 1850s, cooperation between the government and churches was established that facilitated the expansion of residential schools. It was believed that residential schools would be effective in removing Aboriginal youth from their unclean and diseased homes and from their uncivilized parents and cultural traditions (Tobias, 1976). The residential schools had deleterious outcomes as the health of the children was not preserved; at least one quarter of the children died while on the school roll (Kelm, 1998). In 1960 Aboriginal people won the right to vote, which coincided with the eventual demise of the residential school system (Nuu-Chah-Nulth Tribal Council, 1996).

Significance of the Project

In 2001 the British Columbia (BC) Ministry of Education reported that 61% of Aboriginal youth did not graduate within six years of beginning grade 8 (Ministry of Education, 2001). Aboriginal students leave school at significantly higher rates than non-Aboriginal students and at younger ages. In addition, Aboriginal students are disproportionately overrepresented in special education and underrepresented in the gifted category.

Chambers, Abrami, Massue, and Morrison (1998) found that for the 137,000 youth who dropped out of school in 1989, more than 4 billion dollars will be lost to Canadian society by way of tax revenue, salaries, and the associated costs to redress social problems. Aboriginal communities suffering high unemployment rates, isolation, overcrowded houses, and poverty cannot afford the economic costs of their youth not completing high school.

Literature Review

Research has shown that many maladaptive behaviors such as teenage pregnancy, substance abuse, juvenile delinquency, and school dropout have overlapping risk and protective factors (Barton, Watkins, & Jarjoura, 1997). Many factors influence school dropout such as the student's motivations, values, parental attitudes and education status, school curriculum, and peers' values (Frymier, 1996). A considerable amount of research has addressed the problem of youth dropping out of school, yet little psychological or educational research focuses on Aboriginal youth, particularly in Canada. Government reports state that there is no consistent profile of youth who drop out of school in Canada, except that Aboriginal youth, particularly boys, are the most susceptible to dropping out of school (Gingras, & Bowlby, 2000).

Risk factors at the individual level have included grade retention, the influence of peers and bonding with antisocial peers, teenage pregnancy and parenthood, poor academic achievement, truancy (Battin-Pearson et al., 2000; Roderick, 1994), and substance use (White, 1999). Chambers et al. (1998) found that grade retention was one of many predictors of school dropout, poor school attendance, behavior problems, and low SES. Queen (1994) reported that daily failure by the student would eventually lead to grade retention, increasing the likelihood that the student would leave school early.

Adolescents at risk of dropping out of school have been found to have few same-sex friends, few school friends, and more working friends, older friends, and are more often employed (Ellenbogen & Chamberland, 1997; McNeal, 1997). Future high school dropouts were found to be more likely to have been rejected by their school peers, feel less popular, and not be connected to school. Furthermore, the friendship network of adolescents at risk for dropping out of school has been found to be increasingly populated by youth who have already dropped out of school (Ellenbogen & Chamberland, 1997).

The BC Ministry of Education (2001) noted that pregnancy and parenthood were the primary reasons Aboriginal students dropped out of school. Other research has noted that pregnancy and parenthood have been associated with dropping out, especially for ethnic minority youth (Marin, 1995). Davison-Aviles, Guerrero, Barajas-Howarth, and Thomas (1999) found that pregnancy or parenthood was a response to difficulties with other students and the school; they hypothesized that girls who became pregnant made a conscious decision and wanted to leave school.

Poor academic achievement and dropping out of high school have been related to greater levels of psychological distress such as depression and suicidal ideation (Thompson & Eggert, 1999; Ystgaard, 1997). Dropping out of high school also has been found to have disadvantageous effects such as low self-esteem, low expectations for success, and feelings of hopelessness (Jessor, Turbin, & Costa, 1998). Risk factors associated with dropping out of high school and health status can be further intensified when ethnicity is considered. Protective factors for the individual can be conceptualized as the reciprocal of the above-mentioned risk factors, along with other factors such as participation in school extracurricular activities and prosocial coping skills (Blechman & Culhane, 1993; Mahoney, 2000).

At the school level, attitudes of teachers and administrators and school setting have been associated with dropping out of school. Frymier (1996) found that when students were at risk for dropping out of school, teachers were less likely to be willing to spend time or effort to work with them. Furthermore, high school principals were less interested in at-risk youth because they perceived them to be the cause of lower academic achievement levels and also those who created discipline problems. Kortering and Braziel (1999) found that dropouts tended to perceive the school setting as unrewarding, lacked positive experiences with their teachers, had social and academic problems in school, lacked out-of-school support, and avoided becoming engaged in school activities. In a Canadian study, MacLean and Janzen (1994) recommended that the school climate should be safe, friendly, and orderly, with consistent, student-centered policies. These recommendations were also supported by the Safe and Caring Schools initiative in Alberta and other Canadian provinces like Ontario (Malicky, Shapiro, & Mazurek, 1999).

As indicated, many of the above mentioned factors relating to school dropout at the individual, school, or community levels are compounded when ethnicity is considered. Some studies have shown that Aboriginal and other minority youth show elevated risk for dropping out of high school, and as a result may have lower levels of emotional health, which contributes to higher rates of depression and suicide than in non-Aboriginal youth (Ripple, 1996). In the United States it has

been found that Native Americans are at the greatest risk (over other minority youth) for dropping out of school and have the lowest level of educational achievement and highest rate of unemployment (Moore, 1994; Ramasamy, 1996).

Despite research findings that suggest Aboriginal youth have higher levels of engagement in risky behaviors and lower levels of emotional health, Aboriginal youth who attend school have rated their physical health as good or excellent, had high educational aspirations, and had high levels of connection to both school and family (Tonkin et al., 2000). Thus Aboriginal youth who have a good self-concept (i.e., see themselves as healthy, have high levels of connection with school and family, and have high educational aspirations) are more likely to stay in school. At this point the relationship between school and family connection and overall well-being is correlational rather than a causal.

In general, *connectedness* is an expression used to describe how adolescents feel about their social surroundings. More specifically, school connectedness refers to how adolescents feel about going to school, measuring how the youth feel about being at their school, how much their teacher cares for them, whether they are treated fairly by the teacher, how often they get into trouble with teachers or peers, whether they feel safe at school, and whether they are happy to be at their school. Family connectedness refers to how adolescents feel about their family relationship, measuring how close the youth feel to their parents, how much they feel their parents care for them or how loving they are, and how satisfied they are with their relationship (Tonkin et al., 1999).

Lower levels of school and family connectedness scores have been correlated with other health-compromising behaviors such as drug and alcohol abuse, risky sexual behavior, physical and sexual abuse, suicide, emotional distress, bullying, skipping class, and lower education expectations (Neumark-Sztainer, Story, French, & Resnick, 1997; Pesa, Syre, & Jones, 2000; Tonkin et al., 1999).

Conversely, higher levels of school and connectedness scores have been correlated with health-promoting behaviors such as good emotional and physical health, increased extracurricular activities, and positive body image (Jacobson & Rowe, 1999; Pesa et al., 2000). It was found that "young people who reported good family relationships were also less likely to use alcohol and marijuana" (Waldram, Herring, & Young, 1995, p. 93). Finally, it was found that youth who reported high levels of school and family connectedness were more likely to have a greater sense of academic competence and higher educational aspirations (van der Woerd & Cox, 2001).

The School Connectedness Scale (SCS) and the Family Connectedness Scale (FCS) were developed for adolescent populations currently attending high school (Jacobson & Rowe, 1999). The SCS and FCS have been used as a subscale in adolescent health surveys and have been administered to more than a quarter of a million adolescents throughout the US and BC (Neumark-Sztainer et al., 1997; Pesa et al., 2000; Tonkin et al., 1999).

In 1998 the McCreary Centre Society administered the Adolescent Health Survey (AHS) to nearly 26,000 students throughout BC, including over 1,700 who identified themselves as Aboriginal. The AHS was designed to assess factors that related to adolescent health. The McCreary Centre Society's landmark report from

these data entitled *Raven's Children* indicated that Aboriginal youth in BC report having excellent health and similar levels of emotional health to non-Aboriginal youth (Tonkin et al., 2000). However, one of the major limitations of the *Raven's Children* is that the surveys were obtained only from youth who were in school at the time. More critically, Aboriginal youth who dropped out or were ill or skipped classes on the day of administration were not included in this study. Yet it is possible that youths who dropped out or were absent from school would have had a different health profile than that of the in-school norms for Aboriginal youth. The relationship between dropping out of school and factors such as connection to school and family, engagement in risky behaviors, and health and well-being are explored in this article.

This study involved the administration of an adapted version of the AHS survey used in *Raven's Children* to Aboriginal youth in Alert Bay, BC. The research questions were as follows:

1. Are school and family connectedness associated with delinquent behaviors and health and well-being for First Nations youth?
2. Is school attendance associated with delinquency and health and well-being for First Nations youth?

Method

Participants

Participants were youth on the First Nations Population Band Lists in Alert Bay. The Alert Bay First Nations population includes Namgis people, Whe-La-La-U people, and First Nations people from Kingcome Inlet and Guilford Island. Alert Bay has a residential school history, and over an 80-year period (1894-1974) approximately 1,800 Kwakiutl youth attended St. Michael's residential school. By 1974 St. Michael's school was shut down (Bohni-Nielsen, 2001). Alert Bay has taken the initiative to obtain self-government and take control of education (the T'lisala'gilakw School). The T'lisala'gilakw School was formed in 1976 and offers classes from nursery school to grade 8. To attend grade 9-12 classes the youth must leave Alert Bay and travel by ferry to Port McNeil High School.

Instrument

Aboriginal youth were sent a letter inviting them to participate in a 127-item (116 closed-ended and 11 open-ended questions) paper-and-pencil Adolescent Youth Health Survey (AYHS). The AYHS was adapted from the Adolescent Health Survey (1998) and the Youth Health Survey—Street Youth (2000) developed by the McCreary Centre Society, a nonprofit organization committed to improving the health of BC youth through research, information, and community-based participation projects.

The AYHS includes demographic information; questions about peers; family background; connection to school and family; attitudes toward school; physical health status; illness and disabilities; emotional health; suicide risk; help-seeking behavior; sexual activity; drugs, alcohol, and tobacco use; and delinquent behaviors.

The AYHS contains delinquency and health and well-being items and school and family connectedness constructs. The delinquency items include: charged with

or convicted of a crime; expelled or suspended from school; use of other illicit drugs; self-reported addiction to alcohol or marijuana; and carrying weapons and involvement in physical fights. Health and well-being items consist of self-reported physical health, body image, emotional distress, suicidality, and discrimination.

The SCS was developed as a 7-item scale measuring how students felt about their school environment. The FCS was developed as a 9-item scale measuring the degree of emotional distance or closeness between family members. After consultation, the Namgis school administration and Band Council requested that two items be added to each scale. Related to school, they were interested in whether the youth perceived that their teachers or school gave the impression that education was important; and that the teachers or school gave the impression they wished the youth to succeed in school. Related to family, they were interested in knowing whether youth felt that they spent enough quality time with their parents, and whether youth felt that the parents paid attention to them.

Procedure

A meeting was held in Alert Bay between the principal researcher, the Namgis Band Council, the School and Health Boards, the School Principal, and the Youth Program Coordinators to review this study. The project was introduced, and time was spent outlining specific concerns in the community about Aboriginal youth who had dropped out of school. The Aboriginal Youth Health Survey Information and invitation letter were reviewed, along with the parent or guardian and youth informed consent forms. The Aboriginal Youth Health Survey was reviewed for readability and content. Many suggestions were offered including the addition and removal of questions. The method of participant recruitment, location of data collection, and remuneration were also reviewed. The meeting concluded with the signing of the Namgis First Nation Guidelines for Visiting Researchers/Access to Information Contract. This contract outlined rules of conduct and included ethical guidelines outlined by the Social Sciences and Humanities Research Council of Canada. Finally, the Band Council drafted a letter of approval for the study.

In total, 144 information and invitation letters were mailed to First Nations youth between the age of 12 and 25 in Alert Bay, inviting them to participate in this study.[2] In addition, signs advertising the study were placed around the community (e.g., the Band Office, Community Centre, and Bingo hall). Potential participants were advised that completing the survey would take approximately one hour and that they would be compensated $10.00. Furthermore, they were advised that the information they provided would be completely anonymous and not for use by any outside organization. Participants were asked whether they would be interested in future research that might occur as a result of this study. Following the completion of the AYHS, participants were thanked for their involvement and were fully debriefed.

Results

The Sample

In total, 131 First Nations youth (female = 55%, male = 45%) participated in the AYHS. The age range was between 12 and 25 years old. In total, 64% of the youth

had lived on First Nations reserve land for most or all of their lives. When asked with whom the youth currently lived, 35% indicated that they lived with two parents, whereas 23% indicated that they lived with one parent, mother or father, at different times. Of the youth who participated, 15% reported that they had been legally adopted. In total, 13% of the youth had at some time been in care of the government in either a foster home or group home. When asked about their parents' employment status, 38% reported that their fathers worked full time, whereas 56% of their mothers worked full time. Participants were also asked to report the highest level of education completed by their mother or father. In total, 57% of fathers and 50% of mother's had not completed high school education. This is compared with the AHS data where 26% of fathers and 22% of mothers had not completed high school education.

In this study Cronbach's alpha was used to assess item reliability of the FCS, which was at an acceptable level (.81). There existed no significant differences in level of family connectedness between male and female participants, and between participants who dropped out and those who were in school or had graduated. Item reliability of the SCS was assessed using Cronbach's alpha and was found to be an acceptable level (.73). Participants were also asked whether they had ever considered dropping out of school, and 50% reported that they had. In total, 64% had a sibling who had dropped out of school.

Participants who dropped out of high school

In total, 49 (37%) of the participants in this sample had dropped out of high school. It is not surprising that youth who dropped out of school reported lower levels of school connectedness than those who were in school or who had graduated, $t=2.09$, $p<.05$. Participants who dropped out of school and those participants who were in school or had graduated shared many similarities and differences. For example, participants who dropped out were as likely as participants who were in-school or had graduated to have been suspended or expelled from school and to have been charged with or convicted of a crime. Conversely, youth who dropped out of school were more likely than youth in school or who had graduated to have mothers with less than a high school education χ^2 (1, $N=75$)=6.98, $p<.01$, to have friends who also dropped out of school, χ^2 (1, $N=109$)=14.50, $p<.001$, or friends who worked for a living, χ^2 (1, $N=97$) = 12.01, $p<.001$.

Research Question 1

Pearson's Product Moment Correlations (PPMC) and independent samples t-tests were used to determine the relationship between school and family connectedness and the delinquency items. The two test families were analyzed using the stepwise Bonferroni procedure for multiple comparisons. Overall, it was found that family and school connectedness were not related to any of the eight delinquency items.

PPMC and independent samples t-tests were used to determine the relationship between school and family connectedness and the health and well-being items. The two 15-test families were analyzed using the stepwise Bonferroni procedure for multiple comparisons.

First, school connectedness was not associated with ratings of physical health, satisfaction with physical appearance, or emotional distress. It was found that

higher levels of school connectedness were associated with decreased body weight perceptions, r=–.29, p<.001. It was also found that school connectedness was not associated with considering or attempting suicide, but participants who planned a suicide attempt reported lower levels of school connection, t=–3.27, p<.001. It should be noted that four participants did not respond to the questions about suicide consistently. For example, a participant may have responded that he or she had attempted suicide, but that he or she had not considered suicide. Finally, participants who experienced discrimination for "street lifestyle/reputation" reported lower levels of school connection, t=–2.36, p<.05.

Overall, family connectedness was not found to be associated with the majority of health and well-being items, with the exception that participants who had planned a suicide had lower levels of family connection.

Research Question 2

Chi-square analysis was used to determine whether participants who dropped out of high school were more or less likely than the participants who were in school or graduated to be involved in the eight delinquent behaviors. Participants who dropped out were more likely to be addicted to alcohol and marijuana and more likely to use illegal substances than participants' in school or graduated (see Table 1). Participants who were in school or had graduated were more likely to have been involved in a physical fight in the past 12 months than participants who had dropped out.

Chi-square and independent sample t-tests were used to determine whether school attendance was associated with health and well-being. Participants who were in school or who had graduated reported similar levels of physical health, body image, and emotional distress as those who dropped out (see Table 2). Furthermore, participants in school or who had graduated were as likely as par-

Table 1
Chi Square Analysis of School Attendance and Delinquency Items

Variable	*In-school Graduated no. (%)*	*Dropped out no. (%)*	χ^2
Ever charged/convicted of a crime	17 (20.7)	16 (32.7)	2.19
Ever do illegal drugs	41 (50.0)	44 (89.8)	21.32***
Expelled from school	11 (13.4)	5 (10.2)	.01
Suspended from school	19 (23.2)	7 (14.3)	1.15
Addicted to alcohol	14 (17.3)	18 (36.7)	6.23*
Addicted to marijuana***	12 (14.8)	21 (42.9)	12.68***
Carry a weapon	5 (6.1)	3 (6.1)	.00
Involved in a physical fight	36 (43.9)	9 (18.4)	8.46**

*p<. 05
**p< .01
***p<.001.

Table 2
Independent Sample t-test for School Attendance and Health and Well-Being Items

Variable	In school or Graduated		Dropped out		t*
	M	SD	M	SD	
Emotional distress	12.32	2.70	12.15	2.56	.363
Describe your health	1.96	.702	2.16	.624	−1.54
How do you think of your body?	2.11	5.48	2.31	.585	−1.918
How satisfied with how body looks	4.78	1.55	4.61	1.64	.577

*Note: none of the t-tests was significant.

ticipants who dropped out to know someone who had attempted suicide, considered or planned suicide, or actually attempted suicide (see Table 3). Finally, participants reported similar levels of discrimination for any reason, whether they were in school or graduated or dropped out from high school.

Table 3
Chi Square Analysis of School Attendance and Suicide and Discrimination Items

Variable	In-school Graduated no. (%)	Dropped out no. (%)	χ^2*
Suicide			
Know anyone who attempted	67 (81.7)	43 (89.6)	1.44
Considered attempting	22 (26.8)	16 (33.3)	.619
Planned an attempt	6 (7.3)	6 (12.5)	.971
Attempted suicide	6 (7.3)	3 (6.3)	.054
Discrimination due to:			
Age	8 (9.8)	1 (2.1)	2.77
Gender/sex	17 (20.7)	4 (8.3)	3.44
Race/skin color	29 (35.4)	11 (22.9)	2.20
Sexual orientation	4 (4.9)	0 (0)	2.42
Religion	10 (12.2)	5 (10.4)	.094
Physical appearance	16 (19.5)	9 (18.8)	.011
Mental/physical disability	2 (2.4)	0 (0)	1.19
Street lifestyle/reputation	16 (19.5)	6 (12.5)	1.06

*Note: none of the Chi-Square comparisons was significant.

Discussion

Findings in this study replicated earlier research relating to youth who drop out of school. For example, similar to Ellenbogen and Chamberland's research (1997), findings in this study indicate that participants who dropped out were more likely to have friends who worked for a living and who dropped out of school. In addition, not completing high school was associated with increased drug use. In this study participants who dropped out were more likely to report being addicted to alcohol and marijuana. Finally, in this study parents of the participants who dropped out were less likely to have completed high school education, similar to the findings of Chambers et al. (1998).

The first research question was intended to assess whether there was an association between school or family connectedness and delinquency and health and well-being. Earlier research focusing on school and family connectedness has concluded that higher levels of school and family connectedness were associated with decreased levels of delinquent behaviors and increased levels of health and well-being (Neumark-Sztainer et al., 1997). It is interesting to note that despite previous robust findings, there were no associations between family connectedness and delinquency and the majority of health and well-being items in this study (except planning a suicide attempt). Limited associations were found between school connectedness and planning a suicide attempt and the experience of discrimination due to street lifestyle or reputation, but no associations with other health and well-being or delinquency items.

Why, then, were these findings different from the earlier findings? In this study both the school and family connectedness scales demonstrated sufficient item reliability. It could be questioned whether these scales were appropriate to use with this population, that perhaps they were not culturally sensitive. It should be noted that these scales have been administered to other Aboriginal populations in both BC and the US. Speculations for this study's different findings could include the fact that this sample was from a small community of youth in and out of school and at older ages. Other samples were province-wide or national samples including only youth in school. It could be the case that this study demonstrated a community effect. Although most participants demonstrated moderate to high levels of connection to school and family, other influences may have been operating such as peer influences or resistance to the school system, and delinquent behavior would still have occurred with family connection having limited influence. Future research needs to be conducted to consider other predictor variables for dropping out, what other factors contribute to levels of connection to school and family, and to determine how much confidence one can place in this scale as a predictive measure.

The second research question was intended to determine whether school attendance was related to delinquent behaviors and health and well-being. Participants who had dropped out were more likely to report being addicted to marijuana or alcohol and to have tried illegal drugs. School attendance had no bearing on the health and well-being of this sample. Earlier research has noted that factors such as engagement in risky behaviors and emotional distress have both been determined to contribute to, and result from, early departure from school (Loeber & Far-

rington, 1998). It should be noted that if an association were present, it would not necessarily be causal. For example, it could not be stated with certainty that involvement in health-promoting or delinquent behaviors contributed to dropping out of school or occurred as a consequence of dropping out of school. Other competing factors such as peer influences, high dropout rates, and environmental factors could explain the lack of association between school attendance and delinquency and health and well-being.

General Discussion

Alert Bay is a small, remote, and isolated Aboriginal community with high unemployment rates and poor economic conditions. Many efforts have been made by concerned members of the community to improve the living conditions and well-being of the population of Alert Bay by implementing programs and taking control of health care and education. Nonetheless, Alert Bay still has abysmal high school completion rates for their Aboriginal youth.

When conducting research with Aboriginal communities, it has come to be expected that the historical context be acknowledged and understood by the researcher. Many studies conclude with the call for First Nations people to embrace their history, culture, and traditions as a means to gain a better sense of self and self-worth. It is important to understand the role of history in contemporary education and how history can be used in solutions.

How, then, does history affect this study? First, many parents and community members in Alert Bay attended residential schools. It would not be an exaggeration to state that the residential schools have had a profound effect on this community. Although residential schools did mete out their own atrocities, there were worthwhile strengths that emerged among Aboriginal people. These strengths have included the cultivation of leaders, a sense of pride and power to resist assimilation, power to create means to preserve their identity, and power to control and survive (Kelm, 1998). These strengths are evident in Alert Bay and among the Kwakiutl people at large. There are many strong leaders who are concerned about the future of their children and the preservation of their culture. These people are making strides in better understanding these phenomena with efforts to make change.

Limitations

The results in this study are limited somewhat by the relatively small sample size. Specifically, the small sample size limited the sophistication of the data analysis due to lack of statistical power. Another limitation is the nonresponse rate. Some First Nations communities have become skeptical of research being conducted with themselves as participants. During one survey administration, an Elder and grandfather commented, "We don't like you to come and take information from the Natives," and one mother initially would not let her child participate because she "was tired of being studied, it never changes anything." However, it should be noted that despite negative attitudes, this project was widely accepted and promoted, even by Elders in the community.

The results of this study are based on a self-report measure that could potentially be inaccurate for at least four reasons: the social desirability bias wherein

participants may be motivated to present themselves or their actions more or less favorably; the perception of demand characteristics; potential ambiguity and misunderstanding of the open-ended questions; and finally, participants may have made errors in recall.

The next limitation is related to how questions were asked for the suicide and delinquency items. Some participants did not respond consistently to the suicide questions, leading to discrepancies in the findings such as the report of attempting suicide but not planning a suicide attempt. It could be the case that participants did not understand the questions or made assumptions that response to one item (attempted) assumed consideration or planning a suicide attempt. With respect to the delinquency items, it was not possible to ascertain severity of behavior that precipited suspension or expulsion from school, or whether the person actually committed the crime they were charged with or convicted of. To this end, interpretation of these data should be made with caution, and future research should explore these factors.

This study focused only on the responses of First Nations adolescents and did not consider school records or responses from parents, Elders, teachers, or other interested community members. To this end, none of the responses given by the youth could be validated with other input or school records.

Another limitation was the existence of a sampling bias. This study took place in a small, isolated community in BC and may not be representative of the population of First Nations youth who drop out of school.

Recommendations

Dryfoos (1995) stated that it is time for the health and education systems to address deficiencies endured by many students. He has also suggested that adolescents face incredible stressors that inhibit learning such as lack of parental support, living in troubled communities, and barriers to academic achievement.

What interventions could be developed based on information in this study? First of all, because school and family connectedness were not associated with delinquency and health and well-being items, community factors should be examined to reduce involvement in delinquent behaviors and increase the overall health status of Aboriginal youth. Second, if school attendance has no bearing on involvement in delinquent behaviors or health status, interventions should be targeted to where adolescents spend most of their time (e.g., the Community Center, Bingo Hall, restaurants, or the Big House). It is also important to consider how Aboriginal youth made the decision to leave school in order to develop timely and effective interventions. It is also important to consider the students' interest level in the course work, the interest levels of the teachers, and the costs to society.

Future Directions

On completion of this project, findings will be presented to interested parties in Alert Bay. This will include the youth who participated in the AYHS, teachers, administrators, Namgis Band Council members, Namgis Health Board members, family members, and Elders. Focus groups and workshops will be organized to review the findings and determine community-specific future directions. Many

youth who participated in this study expressed interest in future involvement in a project that would include increasing completion rates for high school.

Future research should also move away from the deficit model so often used in Aboriginal research and move toward research on individuals who are healthy in the face of adversity. It is necessary to look at positive factors and strengths such as trying to understand more about the youth who do finish school, what helps them, what motivates them to finish, and extend these findings to other youth.

Overview

This was an initial and exploratory study to look at issues relating to the high school dropout phenomenon in an Aboriginal community. The ultimate goal of this study was to begin to understand what was going on in this community that led to high noncompletion rates, then work with the community on these findings toward improving completion rates and increasing healthy outcomes for Aboriginal youth. Although this study contained many limitations, something was learned about these First Nations youth and what they are saying about their educational experience. Furthermore, rapport was established with the community and the youth, which facilitated continued involvement for research on this topic. This study provided information on group differences. Any differences, of course, did not imply causality, but could be useful in identifying possible factors that might be involved in decisions to remain in school or drop out. This information will help to identify interventions that might help to keep Aboriginal youth in school. This will lead to subsequent phases of the research program, which will focus on evaluations of interventions with youth, both those currently in school and those who have dropped out.

Similar to Frymier's (1996) conclusions, this study is based on the assumptions that it is advantageous for adolescents to be in school rather than out of school; that any education is superior to no education; that there are explicit social costs that society must bear when adolescents drop out of high school; and that to improve completion or graduation rates, society or community members must find a way to encourage teachers to work with those youth at risk and encourage the youth themselves.

Notes

[1]The terms *Aboriginal, First Nations*, and *Native* are used interchangeably and are all intentionally capitalized. This terminology is used to define the first inhabitants in Canada, including the Metis, Innu, and Inuit people. The term *Indian* is used in reference to government policies (e.g., Indian Act). It is not the intention to group First Nations peoples into one homogeneous group. We value and respect the diversity of beliefs and attitudes that exist among First Nations people.

[2]Some invitation letters were addressed to more than one person in a household (e.g., siblings). It should be noted that the names and content of the Namgis population band list were confidential; the names and total number of adolescents invited were not revealed.

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