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An Exploration of the Self-Perceived Health-Related Needs of Ethnic Minority Adolescents

BY

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The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies for acceptance, a thesis entitled "An Exploration of the Self-perceived Health-related Needs of Ethnic minority Adolescents" submitted by Maureen J. Angen in partial fulfillment of the requirements for the degree of Master of Science.

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ABSTRACT

The literature suggests that ethnic minority adolescents experience greater demands in their lives than majority adolescents. The study described in this thesis explored the self-perceived health-related needs of ethnic minority adolescents. An adolescent health needs survey, used to prioritize programming for a pilot Comprehensive School Health project at the high school level, provided the data for this study. The needs rated by ethnic minority adolescents were compared to those rated by majority adolescents. Within the minority data, possible differences due to ethno-linguistic group membership, length of residence in Canada, and gender, were also assessed. Results suggest that minority adolescents comprise a distinct group from majority adolescents on the strength of some health needs. Within the minority data, length of residence in Canada was the only distinction to result in significant differences between groups. Ethnic minority adolescents who had lived in Canada for 5 years or less showed higher needs than those who had lived in Canada for 6 or more years. Results support the literature in several areas and suggest the need for assessment and programming which is sensitive to the health-related needs of ethnic minority adolescents, particularly the most recent immigrant group.

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Chapter One

Introduction

Recent advances in the field of health have included a vast literature on health promotion, a concept derived from the recognition that much of the health morbidity and mortality in Western society is a consequence of social, behavioral and environmental factors which are amenable to human influence (Epp, 1986). Advances in bio-pharmacological medicine and public health policy have all but eradicated the germ-based infectious diseases which were the major threats to human health in the past. Health practitioners are now fighting the battle for health on a new front, that of social morbidity. This advance has prompted an expanded view of health, as recognized by the World Health Organization, from a physical illness based model to a model which integrates physical, psychological, and social factors and considers overall well-being, rather than the simple absence of physical disease, the goal (1991, cited in Koch, Maney, & Susman, 1993, p. 241).

The health promotion movement, based on this positive and enlarged sense of health, requires the dissemination of information to allow individuals the opportunity to make appropriate choices toward healthy behaviors (Epp, 1986). The growing concern over health care expenditures has added significant impetus to the movement. This recent economic stimulus has resulted in a rapid increase in literature on preventative health issues in an attempt to aid the public in adopting healthy lifestyles (Tones, 1986). Reaching children and adolescents before they have acquired unhealthy habits has become a particularly important focus of the health promotion movement. If we can succeed in aiding adolescents in the development of healthy lifestyles, we may alleviate some of the strain on the healthcare budget in the future, and prevent the individual suffering associated with social morbidity.

Adolescence is generally considered a physically healthy stage of life. However, when health is defined comprehensively to encompass physical, psychological, and social well-being, rather than simply defined as the 'absence of illness', it becomes apparent that adolescent health is an issue of growing concern in our society (Klein & Sadowski, 1990; Kolbe, 1985; Mason, 1989). In Canada, mortality rates for the adolescent segment of the population are rising due to increased accident fatalities, suicide and homicide, substance abuse, and sexually transmitted diseases, especially AIDS (Cameron, Mutter, & Hamilton, 1991). Recent demographic changes in the adolescent population, the most dramatic of which is the increasing number of youth who are culturally and racially different from the majority population, have also elicited concern (Hill, 1993; Jessor, 1993; Lerner, 1993). Of the over 250,000 immigrants to enter Canada in 1992, more than 17,000 were 15-19 years of age and over 46,000 were between the ages of 0 and 14 years. Together, these two groups comprised more than one quarter of the total immigration for that year (Citizenship and Immigration Canada, 1994). This increasingly youthful immigrant population, a trend over more than the last decade, is proportionately larger than the youth segment of the majority Canadian population (Rebello, 1989). There is evidence that the life experiences of adolescents from ethnic minority backgrounds may put them at greater risk than majority youth for social morbidity (Dryfoos, 1990; Finklestein, 1993; Weaver, 1990) and especially for delinquency due to alienation from the larger society (Calabrese & Adams, 1990; Wilson & Loury, 1987). Both of these conditions decrease their opportunities to become productive members of society.

Current Canadian and American government documents describe the need for preventative health promotion, utilizing community services in coordination with schools, to reach youth and disadvantaged groups (Epp, 1986;

National Commission on the Role of the School and the Community in Improving Adolescent Health., 1990). These documents recognize that adolescents will not achieve their full potential if they suffer from social, emotional, and physical health problems which interfere with their development and ability to learn. The understanding of the need to reach youth has provided the incentive for a new force in school based health education called Comprehensive School Health (CSH).

A comprehensive approach to school health differs from the traditional approach in Canadian schools, which has often been fragmented and issue-specific (Pawlovich, 1991). Topical issues such as substance abuse and AIDS have resulted in a crisis intervention focus in school health curricula, which neglects the need for the preventative, "upstream refocusing" promoted by CSH (Cameron et al., 1991; Tones, 1986). CSH requires an integrated approach utilizing the collaboration of schools, community resources and families in reinforcing health enhancing decision making through the provision of broad based health instruction, adequate and accessible health services and healthy school and community environments (McLean-Stearns, 1992; Nader, 1990; Seffrin, 1990).

The direct involvement of students, using a participant based planning strategy, is considered the key to effective program development in the CSH approach (Parcel, Simons-Morton & Kolbe, 1988). This "bottom-up" participatory research strategy entails a direct assessment of students' own perceptions of their health-related needs, to determine and prioritize program goals. This process ensures that the target population is invested in and motivated to take advantage of the programming. Encouraging ethnic minority participation in this process can increase minority investment in the initiative, as well as promoting culturally sensitive program development and implementation (Davis, 1982;

Humm-Delgado & Delgado, 1986).

There is evidence that ethnic minority youth may have distinctive health needs as they contend with the complex task of becoming bicultural along with the normal tasks of adolescence (de Anda, 1984; Kagitcibasi & Berry, 1989). Conflicts between traditional values espoused by parents and Canadian values espoused by peers, as well as issues such as poverty, racism, and discrimination, may increase the health needs of youth from different cultural backgrounds and widen the gap between their beliefs and knowledge about health and their health behaviors (Dryfoos, 1990). Identity formation, which has long been considered the central task of adolescence (Erikson, 1959; Violato & Travis, 1994), may also be a distinctly different process for minority adolescents, who are significantly affected by the need for the development of an ethnic identity (Archer, 1989; Helms, 1990; Phinney, 1989; Phinney & Alipuria, 1990; Phinney, Lochner, & Murphy, 1991; Spencer, Swanson, & Cunningham, 1991).

For the newly immigrated adolescent, the high demand task of acculturation is added to and further complicates a set of already complex tasks (Baptiste, 1990; Ishiyama, 1989; Spencer, et al., 1991; Weaver, 1990). Acculturation in a new country, "...a process of change that occurs when two or more cultures come in contact with each other" (Atkinson & Thompson, 1992, p. 360), has long been recognized as a disconcerting and arduous process, resulting in a period of acculturative stress, popularly known as "culture shock" (Furnham & Bochner, 1989; Kagitcibasi & Berry, 1989; Kealy, 1990). It is commonly acknowledged that, as the number of stressors increase, the risk to health rises (Girdano, Everly, & Dusek, 1989). Whether the demands of acculturation cross over the optimal line from positive, motivating eustress to debilitating distress (Selye, 1976), depends on the interaction of a number of complex factors (Berry, Kim, Minde, & Mok, 1987).

The adolescent drive towards autonomy may be stymied in immigrant youth because cultural disorientation and limited communication skills result in frustration and helplessness, which in turn engender passivity and dependence (Baptiste, 1990; Ishiyama, 1989). External sources of self worth and support, such as relationships with extended family, friends, and teachers, are left behind in the country of origin, while accumulated failures in the settlement country due to communication and cultural barriers, threaten the immigrant adolescent's sense of self. Differences between the values espoused by their Canadian peers and the values of their culture of origin, may result in increased conflicts between immigrant adolescents and their families (Baptiste, 1990; Nann, 1990; Westermeyer, 1989).

Adding the strain of crossing cultures to the common challenges of adolescence may increase the health needs of minority adolescents, particularly in the arena of mental and emotional health (Beiser et al., 1988). Other issues which may give rise to health concerns for immigrant adolescents include the following: more rapid acculturation rates for youths as compared to adults resulting in adolescents assuming adult roles within the family (Westermeyer, 1989); racism and discrimination in Canadian society resulting in estrangement during adolescence, a period when a sense of belonging is particularly sought after (Baptiste, 1990; Vega, Gil, Warheit, Zimmerman & Apospori, 1989); and differences in cultural definition of sex roles (Goodenow & Espin, 1993; Segal, 1991; Streitmatter, 1988; Westermeyer, 1989). To cope with these increased demands, minority and immigrant adolescents may require special services and programming designed to enhance their integration into Canadian society and their development into healthy productive adult citizens (Hicks, Lalonde ,& Pepler, 1993).

Purpose of the Thesis

This research explored the self-perceived health-related needs of ethnic minority adolescents as compared to majority adolescents. The study utilized a subset of data derived from a larger body of research aimed at developing Comprehensive School Health (CSH) programming for Canadian high school students. A joint venture between the community health services, the city public school board and the local university, the ultimate goal of the broader initiative is "to help young people achieve their fullest potential by accepting responsibility for personal health decisions and practices, by working with others to maintain an ecological balance helpful to society and the environment, and by becoming discriminating consumers of health information, health services and health products" (Calgary Board of Education, 1991).

The specific goals of the present study were to identify whether the self-perceived health-related needs of ethnic minority adolescents are distinct from those of the larger student population, and to explore possible differences within the ethnic population, based on differences in length of residence in Canada, gender, and ethno-linguistic subgroups. The broad purpose of the research was to develop a data base which could provide a rationale for programs designed to meet the specific needs of minority adolescents. If the data derived from the minority population are not identified and drawn out from the larger data set, they may be subsumed by the majority data. This loss could result in health programming which is insensitive to ethnic minority adolescent needs.

Definitional Issues

Canadian society, although it is a multicultural mosaic by virtue of one in six Canadians being foreign born (Naidoo, 1992), is still predominately comprised of white, English speakers. The concepts of "minority" and "majority" used in this study are based on this fact, with majority referring to those who's first language

is English, and minority referring to those for whom English is a second language. Ethnicity, throughout this study, is based on the linguistic distinction of having a first language other than English. Although this is not to ignore the fact that it is possible to have English as a first language and be a member of an ethnic minority group, for example being Jewish or Irish. The combined usage of "ethnic minority" is to separate the group under study from other minority groups within this society, such as groups based on class, or the physically or mentally challenged. Ethnic minority members in this study are differentiated by both their primary linguistic membership and by their length of residence in Canada, with those living here 5 years or less considered recent immigrants or newcomers and those of 6 or more years residence as established residents.

Chapter Two

Literature Review

A needs assessment survey, which was developed to inform programming for a pilot Comprehensive School Health (CSH) initiative provided the data for this study. This chapter, therefore, begins with a brief overview of how the health promotion movement has influenced CSH. The CSH model is outlined with a focus on the rationale for using a participant based needs assessment for program planning, and on the need for cultural sensitivity in CSH. The remainder of the chapter then focuses on the adolescent health literature, including the recent impetus for a more culturally informed framework and a description of the limitations of the research on minority adolescents. The available theoretical and research literature on ethnic minority youth and immigrant adolescents is then reviewed. A summary is provided, and the chapter ends with a focus on the present study, briefly outlining the initiative from which the data are derived.

Health Promotion

The concept of health has evolved significantly over the past hundred years. In the recent past, infectious diseases and sanitation related illnesses were the biggest threats to human health. Public health policy and modern pharmacological medicine have all but eradicated these problems, leaving preventable risk factors such as drug and alcohol abuse, tobacco use, death by accident, suicide or murder, unprotected sex, and poverty as the major causes of morbidity in North America today (Lavin, Shapiro, & Weill, 1992). As a consequence, health, rather than denoting the absence of disease, has come to pertain to a state of overall well being (Epp, 1986). This evolution has included a change in the focus of health literature, from a narrow convergence on the physical to a more encompassing scope inclusive of psychological and social well being, enabling an understanding of the broad range of factors affecting a

sense of well being. These factors are now generally believed to include the social and physical environment, the responses of individuals to their environments, and their biological predisposition's (Tones, 1986).

> In 1986 the World Health Organization defined health as:
>
> "the extent to which an individual or group is able, on the one hand, to realize aspirations and satisfy needs; and on the other hand, to change or cope with the environment. Health is, therefore, seen as a resource for everyday life, not the object of living; it is a positive concept emphasizing social and personal resources, as well as physical capacities" (p.73, cited in Robertson & Minkler, 1994, p. 298).

The Health Promotion movement contributed to this broadening of the definition of health by adding the idea that equal opportunities for all citizens to make healthy choices requires the promotion and dissemination of information on health issues. Jake Epp, the Canadian minister of Health and Welfare at the time, wrote an important document in 1986 outlining the government's position on health promotion. In the document, "Achieving Health for All" (1986), Epp identified the need for health promotion and the challenges Canada faces in this pursuit. Critical health issues cited were the need to reduce inequities, increase prevention, and enhance people's capacity to cope. The health promotion approach described in this government document involves self care, mutual aid, and the creation of healthy environments through the fostering of public participation, the strengthening of community health, and the coordination of public policy (Rootman, 1988).

The growing concern over health care expenditures has added significant impetus to the Health Promotion movement in this country . This economic imperative has resulted in a rapid increase in literature on preventative health

issues, exhorting individuals to adopt healthier lifestyles. Helping children and adolescents to understand the benefits of a healthier lifestyle, before they have acquired unhealthy habits, has become an important focus for the promotion of health in our society (Epp, 1986). Adolescence, as a period of transition between childhood dependence and adult responsibility, may be a particularly opportune time to intervene and help individuals set the patterns for healthy behaviors (Lerner, 1993).

The Role of Schools

From the early stages of the health promotion movement, it has been apparent that schools are uniquely situated to undertake health promotion strategies (Feagans & Bartsch, 1993). Although the health of adolescents has not traditionally been a mandate of our schools, it has become increasingly evident that learning and health are "inextricably intertwined" (McGinnis, 1981). Understanding that healthy behaviors established in youth lead to healthier adult lifestyles and that unhealthy students cannot learn effectively, suggests that schools are a critical forum for health promotion. Ignoring the health needs of students can lead to increased risk-taking behaviors and can culminate in early school leaving (Dryfoos, 1990). Employment and Immigration Canada (1990) contends that the current 30% rate of high school dropouts will soon overburden the country's health and welfare services. With the increasing demand for trained workers in our technology based economy, the loss to society through school dropouts is of growing concern. Beyond this economic imperative is the moral issue of promoting healthy values within an education system dedicated to developing "whole" students who will ultimately become active, contributing and reflective members of society (Cameron et al., 1991). Schools, forming as they do a large part of the adolescent's daily life, are uniquely situated to play a role in the process of instilling healthy attitudes and behaviors in our youth (Parcel, et

al., 1988). It has become imperative that aid be provided to schools to assist them in addressing adolescent health issues.

Comprehensive School Health

Although Canadian youth are generally quite healthy "...there are a number of health-related factors with which they must contend: nutrition, dental care, fitness, safety, communicable diseases, smoking, alcohol and other drugs, sexual activity, stress and relationships with peers and parents" (Mutter, Ashworth & Cameron, 1990, p.1). Mutter et al. (1990), delineate a number of areas of special concern in Canadian schools, including teen pregnancy, suicide, sexually transmitted diseases, and eating disorders. These specific concerns, along with drug use, have been targeted by national programs in an attempt to promote health in the schools. Collaboration between Health and Welfare Canada and the Council of Ministers of Education has made these initiatives possible, but this crisis oriented, piecemeal approach has been called into question over the past decade (Cameron, et al., 1991; Kolbe, 1985; Pawlovich, 1991; Tones 1986). A more comprehensive approach, with an emphasis on prevention rather than on crisis management, is being urged by health education councils across North America (American Association of School Administrators, 1990; Canadian Association for School Health, 1991; National Commission on the Role of School and the Community in Improving Adolescent Health, 1990).

Lavin et al., (1992), reviewed a selection of twenty five recent reports and articles on comprehensive, school-based health promotion. They found five main areas of agreement. First, the various authors of the reports agreed that education and health are interrelated. This interrelationship is due to the fact that knowledge about the etiology of ill health and about the preventative measures for sustaining health can influence health behaviors. As well, students experiencing ill health will experience a reduced ability to learn.

The second area of agreement is that social morbidity is the most prevalent health risk at this time. This area of consensus is based on the previously described change in the threats to human health, from risk of infectious disease to preventable behavioral and environmental perils.

Thirdly, there is agreement on the need for a more integrated "comprehensive" approach to health education. The emphasis on a comprehensive approach is based on the lack of effectiveness of health promotion initiatives due to fragmentation of programming. As noted above, the crisis intervention mentality is too simplistic to encompass the complexity of underlying socio-cultural, economic and environmental factors which predispose youth to social morbidity (Dryfoos, 1990; Finklestein, 1993).

A fourth area of agreement indicates acceptance that health promotion is best centered in and around schools. Knowledge about health and the provision of support for adopting healthy lifestyles may be the most important foundation which schools can impart to students, since without health their ability to become productive citizens will be severely compromised.

The idea that unhealthy citizens will be unproductive leads directly to the fifth area of agreement, the social and economic imperatives for acting at a preventative level. The loss of productivity and the cost of social welfare due to high school dropouts, teen pregnancy, and drug addictions is, as noted earlier, significant in our precarious economic times. The main goal of CSH is the promotion of health and wellness among students through assisting students to understand the bio-psycho-social factors which impact on their health, and their own role in shaping and coping with those factors.

The Comprehensive School Health Model

Nader (1990) has delineated five steps which are necessary for achieving a comprehensive model of health in schools. The first step requires establishing

links between all agencies and services concerned with health in the school and the community. Next, an assessment of local health needs must be undertaken to ensure that program specific planning is carefully tailored to each locale. Third, adequate health services must be provided for both students and school staff (as staff will provide role models for students). Fourth, health education should be modified to suit prioritized local needs, and to address behavioral, knowledge and attitudinal outcomes. Finally, attention must be given to creating a healthy and health enhancing environment within the school and in the community.

Participatory Research. In CSH, participant based planning is considered the key to effective program development (Nader, 1990; Parcel et al., 1988). The required participant involvement should go beyond treating the subjects as simply a source of data, to the engagement of subjects in the development of the assessment instruments as well as in the design of programs. This participatory process should have the benefit of instilling a greater sense of ownership among the stakeholders for the initiative, as well as increasing motivation for, and commitment to change (Aborealis & Bremborg, 1988; Davis, 1982; Parcel et al., 1988; West, 1983). Encouraging ethnic minority participation in this process can increase minority investment in the initiative and ensure culturally sensitive survey design and programming, resulting in a sense of increased control for these groups (Davis, 1982; Humm-Delgado & Delgado, 1986). O'Brien (1993) contends that using focus groups is particularly effective for health survey research. Item construction and choices of words and phrases in the questionnaire, as well as procedures for survey implementation, can be informed by a representative group of the target population. Importantly, this approach also allows researchers to grasp the experiential reality of participants' needs, rather than relying on "expert" assumptions about those needs (English &

Kaufman, 1975; Morgan, 1991).

Needs Assessment. A study of successful innovations in school programming by Huberman and Miles (1984) concluded that "a good fit between the characteristics of the innovation and local school level needs is an essential ingredient" to ensure success (p. 241). The needs assessment process, an integral aspect of the CSH model, promotes the active involvement of the target population in a "bottom-up" participatory research strategy and identifies the priority goals for program design and implementation (Burton & Merrill, 1991; Cameron et al., 1991; West, 1983). Assessing needs directly through a survey approach, to determine and prioritize program goals, ensures that initiatives will be responsive to the expressed needs of the target population (Humm-Delgado & Delgado, 1986) and provides justification for allocating resources to meet the derived programming needs (West, 1983). Without an assessment of needs, any initiative runs the risk of addressing a problem in which the target group is not invested by their own felt need (Kaufman, 1979). This risk becomes particularly relevant when the age and/or the ethnicity of the target population differs from that of the researchers and policy makers (Hicks et al., 1993; Jessor, 1993).

Culture in CSH. A Canadian Association for School Health (CASH) was launched in 1988 to promote the goals of a comprehensive approach to school health. A recently formulated consensus statement by CASH (1991) includes the following assertion: "[e]xperience and research evidence suggests strongly that a comprehensive school health approach can influence the health related knowledge, attitudes and behaviors of students" (p. 2). The authors of this consensus statement also recognized that socio-economic and cultural factors play a significant role in student health and must be given careful consideration. Mutter et al. (1990) report the need to recognize "that health problems (and therefore solutions) are embedded in a social context that includes the individual,

the community, and the society at large" (p. 6). As the socio-economic and cultural contexts are important, care must be taken to avoid fostering an approach to health which puts the responsibility on the individual while ignoring these other critical factors (Becker, 1993). Cultural pluralism is often cited as one of the factors as yet neglected by CSH and by the health promotion movement in general (Epp, 1986; Mutter et al., 1990; Rootman, 1988). In Canada, Rootman (1988) reported that Canadian health statistics neglect to distinguish between ethno-cultural groups, even though there is evidence that culture and language differences contribute to health problems and to reduced access to health care.

Accepting that the socio-cultural context is a recognized influence on health issues necessitates a careful consideration of cultural differences at the assessment level, as noted above, to ensure that programming is specific to the needs of cultural sub-groups (Humm-Delgado & Delgado, 1986). Unless the requirements of minority groups are separated out from the overall assessment data, their needs may be masked or distorted by the needs of the majority (Sue & Sue, 1990).

Adolescent Health Literature

This section begins with a description of the call for culturally sensitive research in adolescence. This is followed by a focus on the issues described in the ethnic minority adolescent literature and those pertaining more specifically to immigrant youth. The section ends with a focus on positive outcomes for minority adolescents.

The Cultural Context in Adolescent Research

In a review of recent advances in adolescent research and a consideration of future directions, Hill (1993) notes the increasing numbers of young people in Western countries with ethnic minority backgrounds which, he believes, provides compelling evidence that cultural factors are a crucial element in any study of

adolescents. Addressing the issue of research on adolescents in general, Lerner (1993) writes: "only through scholarship and application that are sensitive to diversity and context can the richness of the adolescent period be best appreciated and best used to enhance development during this period" (p.2). A report to the U.S. congress on adolescent health, by the Office of Technology Assessment (1991), found that the common assumption of adolescence as a healthy period is not justified, that more attention should be paid to adolescent health in general, and, in particular, to issues of gender, race, ethnicity and income related risks (as cited in Dougherty, 1993, p. 193). However, the scarcity of studies pertaining to youth of ethnic minority cultures has been noted by many recent authors in the research fields of adolescent development and health (Barker & Adelman, 1994; Hicks et al., 1993; Hill, 1993; Jessor, 1993; Lerner 1993; Munroe-Blum, Boyle, Offord, & Kates, 1989; Prilleltensky, 1993; Walden, 1994).

The degree to which research on adolescence has been restricted to middle class whites has also been decried in a text sponsored by the Carnegie Council on Adolescent Development (1990, cited in Jessor, 1993, p. 118). Jessor (1993) describes an emerging paradigm in research on adolescents which endeavors to embrace the increased complexity now understood to impact on adolescents. This model takes into account the larger socio-economic and cultural factors, as well as family, community and school factors, all of which combine with the characteristics of each individual as they develop over time. Lerner (1993) has labeled this approach to research on adolescents "developmental contextualism". This more complex and encompassing approach is apparent in an assessment of priorities for research on adolescent development by Zaslow and Takanishi (1993), who conclude that:

> "Future research must (a) deepen the recent work in the

> understanding of normal adolescent development, particularly among American youth from understudied racial and ethnic minority groups...; (b) balance the pressures to implement urgent preventative interventions for adolescents with the need for systematic evaluations that will lead to improvements in these approaches, including those that promote healthy patterns in all adolescents and target clusters of behaviors rather than single ones; and (c) identify specific features in the range of settings in which adolescents participate that do not foster healthy development" (p. 185).

Ethnic Minority Adolescent Health Literature

It is apparent that the recent literature on adolescent health and development calls for a more culturally-informed framework to address the increasing numbers of youth from cultures other than the majority. Although, in recent years, there has been increased interest in studies of ethnic groups, immigrants, and refugees, the literature on children, and particularly adolescents, from these groups remains sparse (Hicks et al., 1993; Kagitcibasi & Berry, 1989; Prilleltensky, 1993).

Limitations in the Literature. Recent studies on adolescent ethnicity and health issues tend to focus on one particular group and one specific problem, or, in studies of more than one ethnic group, ethnicity is often dealt with as one monolithic block, as if there were no differences from one group to another (Sue & Sue, 1990). Examples of the former in the Canadian literature include a study on the socialization of South Asian immigrant youth (Kurian, 1991) or research into the immigration experience of Latin American families in Ontario (Prilleltensky, 1993). An example of the latter problem is the Ontario Child Health Study (Munroe-Blum et al., 1989), in which "born outside of Canada" was

the criterion for data used to study immigrant mental health issues (p. 511). No attempt was made to differentiate the over 200 subjects as to their distinct ethnic groups or period of residence in Canada, or to assess the particular health issues of those among the over 2000 subjects "born in Canada" who have ethnic minority backgrounds.

In a recent review of the literature on the psychosocial considerations in the mental health of immigrant and refugee children, Hicks et al.(1993) explain that researcher difficulties in crossing culture and language barriers, as well as the complexity of the acculturation process, have been key factors in the paucity of empirical research in this area. These authors also contend that the exceptional nature of Canadian multicultural policy and the ethnic composition of Canadian society, render studies produced outside of Canada of little value. This claim speaks to the fact that the demands arising from acculturation can be moderated by a number of elements, one of which is the nature of the larger society into which the individual is attempting to adapt (Kim & Berry, 1986). Acculturation into Canadian society is supported by national policy, though there is some suggestion that this policy may have less than the desired effect at the local level (Boekestijn, 1988).

Another problem encountered in a review of the literature is the reliance on theoretical assumptions and discussions of clinical observations rather than data driven research. Studies which do not address inter-cultural differences, focus on only one issue, or rely on theory and/or observations of small clinical samples will not provide an adequate basis for policy and program development to meet the health needs of minority groups. Also limiting the viability of the findings in many studies is a lack of consideration for intra-cultural differences based on length of time in Canada and on refugee status. An immigrant who arrives at age 16 may have very different difficulties than one who arrived as an

infant. As well, a child or an adolescent who comes from the trauma of a war torn country will certainly arrive with different symptomatology. Because these last issues suggest that health needs would be different from, and additive to, those of minority adolescents born in Canada, the literature on immigrant youth will comprise a separate section in this review.

Adolescent Risk and Protective Factor Research. The research literature on "at-risk" adolescents has provided an important theoretical basis for looking at the risk and protective factors influencing the developmental process of minority adolescents (Hicks et al., 1993; Prilleltensky, 1993). This literature clearly indicates that the experience of numerous concurrent changes vastly increases the risk of negative developmental paths during adolescence (Lerner, 1993; Seidman, 1991; Wilson & Loury, 1987). Ethnic minority adolescents, by virtue of the complex demands involved in negotiating between two cultures, may experience increased risk during adolescence (Kagitcibasi & Berry, 1989; Westermeyer, 1989). This process has been termed achieving a "bicultural identity" (de Anda, 1984), or an "ethnic identity" (Archer, 1989; Helms, 1990; Phinney, 1989; Phinney, Lochner and Murphy, 1990; Spencer et al., 1991) and has drawn much of the research attention in the literature on minority adolescents.

An Overview. As noted above, ethnic identity development has been an area of considerable research. For ethnically, and especially for racially different adolescents, identity consciousness is heightened. Membership in a group disfavored by the majority may have negative consequences for the development of a healthy self-concept (Spencer et al., 1991). Also, as there are few ethnic minority adults in positions of authority to act as role models and encourage healthy exploration of future possibilities, the normal developmental impetus towards adult independence may be undermined (Temeles, 1988). In both

arenas, the development of a coherent ethnic identity and the lack of positive role models, female minority adolescents may experience greater impact than males (Goodenow & Espin, 1993). Racism and discrimination may also provide critical negative experiences during adolescence (Canino, 1988; Smith, 1985). Another very important factor in the health equation of minority adolescents is the prevalence of poverty (Hoberman, 1992). Each of these areas will be considered in turn.

Ethnic Identity Research. The formation of a coherent sense of identity has long been considered the central task of adolescence (Erikson, 1959). For the ethnic minority adolescent, the achievement of a healthy sense of identity will necessarily entail coming to terms with their ethnic heritage. A number of researchers have recently adapted Marcia's adolescent identity development stages to fit ethnic minority youth more closely (Phinney, 1989; Helms, 1990; Phinney, Lochner, & Murphy, 1990; Spencer et al., 1991). Phinney et al. (1990) argue that there are two central issues which non-dominant groups must struggle with in the process of identity development. The first includes ignorance, stereotypes and prejudice among members of the dominant culture. The second is the conflict between the norms and values of the minority member's culture and those of the majority culture. Both of these barriers to coherent identity formation put minority adolescents at greater risk for developing the mental and emotional difficulties associated with the problematic, diffused or foreclosed, stages of identity development (Phinney & Alipuria, 1990).

Phinney et al. (1990) describe three stages of ethnic identity development. In the first stage, "diffusion/foreclosure", the individual exhibits no exploration of, or commitment to, an ethnic identity and often implicitly accepts ethnic stereotypes and prejudice. This stage seems to leave adolescents particularly susceptible to peer pressures (Archer, 1989). In the following stage,

"search/moratorium", individuals are actively exploring and gaining an awareness of their ethnic heritage. During this stage, individuals may begin to reject the stereotypes and feel a sense of anger and outrage at injustices perpetrated by the majority culture. In the final stage, "achieved" ethnic identity, the individual is resolved and committed to her/his ethnicity. The internalization and integration inherent in this last stage generally produces high self-esteem and a healthy adjustment resulting from a strong ethnic pride. The authors developing these models caution that the stages should not be regarded as discrete; considerable overlap is to be expected.

It should also be cautioned that empirical evidence supporting these models is minimal as yet. So far, the researchers studying ethnic identity agree that some processing of one's ethnic origins must occur for adolescents to arrive at a consistent and healthy sense of identity (Archer, 1989). One empirical report concludes that "... self esteem for minority subjects is influenced by the extent to which one has thought about and resolved issues regarding one's ethnicity" (Phinney & Alipuria, 1990, p. 181).

Gender Issues. There is some evidence that the process of identity development may be more complex for female adolescents from minority cultures than it is their male minority peers. Streitmatter (1988) found that minority female adolescents, as a group, report little exploration of identity options and alternatives. This finding was interpreted as inhibited personal exploration on the part of minority females, due to their having greater discomfort than their male minority peers in negotiating between the majority culture and their ethnicity. In a more recent study of identity choices for female immigrants, Goodenow and Espin (1993) conclude that "...potentially disastrous social and psychological consequences...may occur when the integration of cultures is problematic" (pp. 182-183). Female adolescents from ethnic minority groups

may be at particular risk for identity strain from conflicting cultures. There is some evidence that the increased strain is due to the female gender role in Canadian culture requiring more independence and freedom than the traditional female role of many minority ethnic cultures, resulting in increased family conflict (Seiber, 1993; Westermeyer, 1989). Zambrana & Silva-Palacios (1989) found gender differences on relational concerns among Spanish speaking minority adolescents. An alternative explanation for the higher rates of stress reported by ethnic minority females, especially recent immigrants, is the tendency of females to be more honest about their personal concerns than males are when self-reporting (Kim & Berry, 1986).

Insufficient Role Models. The developmental process of minority adolescents may be hampered by the lack of appropriate role models. Schools, universities and the media do not provide adequate representation of minorities, which may result in adolescents of these groups questioning their ability to succeed in the majority culture (Spencer et al., 1991). Temeles (1988) states that: "[t]his society presents the minority adolescent with a paradox" (p. 63) by providing education as an institution which should enhance cultural integration, but instead allowing it to maintain the status quo of the majority culture in both content and personnel. Without adequate representation from their cultures, in both curriculum material and staff, ethnic adolescents may be provided with little evidence that their culture of origin has any validity in Canadian society. Although Canada has a multicultural educational policy, and employment equity practices which work towards ameliorating this situation, thus far the results seem insufficient. In the words of a researcher comparing Canadian government policy with social acceptance of minorities in this country "there seems to lie a long way ahead..."(Boekestijn, 1988, p. 98).

Racism and Discrimination. A government report, "Equality Now" (1984),

documented the finding that 15 per cent of Canadians exhibit outright racist attitudes and an additional 20 to 25 percent hold racist tendencies (cited in Beiser et al., 1988). Beiser et al. (1988) contend that the immediate consequence for members of visible ethnic minorities in Canadian society is a lack of social support, which may lead to a sense of alienation and concomitant emotional distress. Because adolescents are in a developmental period in which identity issues are particularly salient, the effects of racism and discrimination may be heightened (Canino, 1988; Naidoo, 1992). As Spencer et al. (1991) note "the acquisition of a sense of self-certainty over a sense of self-consciousness is more difficult if one is visibly culturally different" (p. 380). Although the causal links between racism and mental disorder have yet to be established, it is difficult to imagine that "the pressure of always being on watch for the hard edge of prejudice and discrimination" does not jeopardize one's mental health (Beiser et al., 1988). Programming to address the health needs of minorities must take into account the interactive nature of the problems encountered. For example, anti-racism campaigns targeted at majority youth may ameliorate some of the difficulties experienced by minority adolescents.

Poverty. Because ethnic minorities, especially recent immigrants, are disproportionately represented among the poor in Canada, poverty is another source of difficulty for minority youth. Research has found a consistent relationship between social class membership and psychological problems: "Regardless of race, people from lower socioeconomic backgrounds tend to have more psychological symptoms and psychological disorders than those from more advantaged backgrounds" (Smith, 1985, p. 549). Issues of unemployment and underemployment, often due to unrecognized credentials, can create a cycle of poverty for minority and immigrant Canadians (Hicks et al., 1993; Ishiyama, 1989). Richmond (1987), in a review of the literature on the immigration

experience in Canada, found "evidence of ethnic labor market segmentation as well as a relative concentration of immigrants in service industries." (p. 1216). The instrumental advantages of a higher standard of living are assumed to mitigate some lifes problems, whereas poverty increases the strain. Numerous studies have noted that financial stresses exacerbate the already complex lives of both minority and immigrant families, negatively impacting on the youth (Barker & Adelman, 1994; Beiser et al., 1988; Dryfoos, 1990; Esquivel & Keitel, 1990; Hoberman, 1992; Prilleltensky, 1993; Sue & Sue, 1990; Westermeyer, 1989).

Immigrant Adolescent Health Issues

The Canadian Task Force on Immigration and Health (Beiser et al., 1988) concluded that: "[w]hile it is reasonable to assume that migrant children and youth face unique problems and therefore experience elevated ... risk, there has been no research to date to confirm or refute this conclusion" (p. 65). The literature reviewed in this section reflects the view of elevated risk, but because most studies rely on theories of culture conflict and on anecdotal or small sample evidence, this negative conclusion must remain suspect. Adequate empirical support is lacking.

An Overview. Again, the risk and protective factors literature provides a framework for looking at the available research. Ethnic minority adolescents who have recently immigrated have a number of added risk factors to struggle with, though the extent to which these factors compromise their well-being can be mediated by numerous protective factors, such as strong family and ethnic community ties, positive public policy, and programming at the preventative level (Hicks et al., 1993; Prilleltensky, 1993). Language, in particular, is a major obstacle for new immigrants. Other difficulties include loyalty binds, role changes and role conflicts leading to intergenerational friction. The problem of culture

shock due to immersion in a foreign society has been considered a significant health risk since Stonequist (1936) delineated the outcomes of marginalization in the early part of this century (cited in Westermeyer, 1989). In a recent theoretical review of the effects of intercultural migration, Boekestijn (1988) states that stress is inherent to the experience of immigrating because it entails "a basic tension between the desire to adapt and the preservation of identity" (p. 90). The loss of social support due to migration is another significant factor in the tally of stressors which may lead to anger or depression for immigrant adolescents (Baptiste, 1990). Acculturation research, the language barrier, intergenerational conflict and risk of depression due to loss of social support are reviewed in the following sections.

Acculturation Research. The available literature on the health risks of acculturation provides evidence that problems, particularly mental health problems, can arise for individuals negotiating an identity between two cultures, although the difficulties can be moderated by numerous group and individual characteristics (Kim & Berry, 1986). Berry, Poortinga, Segall, and Dasen (1992) state that "acculturation sometimes enhances one's life chances and mental health and sometimes virtually destroys one's ability to carry on; the eventual outcome for any particular individual is affected by other variables that govern the relationship between acculturation and stress" (p. 285). These variables include the mode of acculturation chosen - integration, assimilation, separation, or marginalization; the phase of the acculturation process - contact, conflict, crisis, or adaptation; the nature of the larger society - multicultural or discriminatory; and the characteristics of the acculturating individual or group, such as subjective appraisal of the experience and coping skills for dealing with the inevitable stresses. A synthesis of aspects of both the culture of origin and the majority culture, a phenomenon called "integration" or "biculturalism" in the literature,

seems to result in the healthiest outcomes (de Anda, 1984; Kim & Berry, 1986; Portes & Rumbaut, 1990; Westermeyer, 1989).

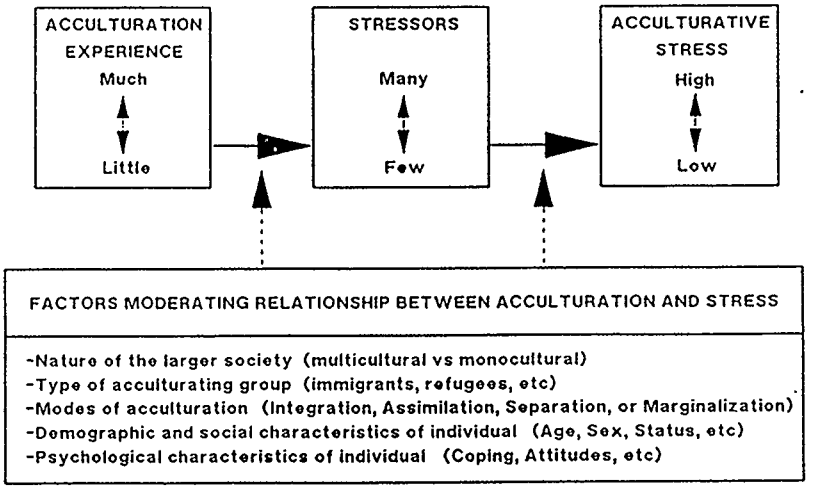

Figure 1 Variables governing the relationship between acculturation and stress. Note. From Ethnic psychology: Research and practice with immigrants refugees, ethnic groups Native Peoples and sojourners (p. 49) by J. W. Berry and R. C. Annis, 1987, Lisse: Swets and Zeitlinger. Copyright 1987

A study by Thurston, McGrath and Sehgal (1993), on the health promotion needs of immigrants in Calgary, found that many minority respondents indicated "stress was the source of serious mental health problems". (p. 27) It should be noted that the usage of the word "stress" in the acculturation literature may have a broader, more colloquial connotation than "stress" in the psychological literature.

Language. Beiser et al. (1988) consider the language barrier the initial impediment to successful acculturation, as well as a significant source of difficulties in the early stages of the immigration experience. Misunderstandings due to limited vocabulary, accents, and differences in non-verbal cues may result in "elective mutism" at the extreme (Esquivel & Keitel, 1990), or simple avoidance as a coping mechanism (Vercruysse & Chandler, 1992). While avoidance can be

an appropriate short-term response to excessive stress, if used for long periods it may lead to feelings of alienation and to other mental health problems. As adolescent immigrants are immediately faced with schooling, language acquisition is imperative, otherwise failure and dropping out may result (Esquivel & Keitel, 1990). In fact, rapid language acquisition by youths is an important variable in the generational conflicts experienced by immigrant families (Nann, 1990).

Intergenerational Conflict. Family conflict is repeatedly addressed in the literature as a serious source of strain in immigrant families (Baptiste, 1990; Boekestijn, 1988; Nann, 1990; Nguyen, 1992; Phinney et al., 1990; Spencer et al., 1991; Vega et al., 1989; Westermeyer, 1989). In some families, this conflict is due to role reversals; in others it occurs as a clash of values. Role reversals occur in new immigrant families when younger family members assimilate the new language faster than the adults, who may work long hours at low paying employment to meet the economic needs of the family. Proficiency in the new language can result in adolescents being the intermediaries between the family and the new culture. While the parents struggle to support the family outside of the home, adolescents may be put in the adult position of running the household. This role reversal gives youth considerable power which can then create conflict when parents attempt to exercise their adult authority over adolescent family members.

The second cause for intergenerational conflict, that of conflicting values, results from the adolescent's desire to "fit in" with their new milieu, which may be at odds with the older generation's desire to preserve the values of their culture of origin. Westermeyer (1989) points out that the malleability of youth facilitates a rapid acculturation process and the more entrenched socialization of the older generation creates a resistance to the process, resulting in "intergenerational

strife". Adolescents may also be more vulnerable to peer evaluation and may succumb to the need for acceptance by rapidly adopting the values of the new culture (Ishiyama, 1989). The ensuing rapid acculturation and dependence on peers can undermine parental authority and disrupt family communication patterns leading to the need for family counselling (Baptiste, 1990; Vega et al., 1989).

Intergenerational conflict has serious health implications for immigrant adolescents. An extensive longitudinal study (Raja, McGee, & Stanton, 1992) has provided evidence that lower perceived attachment to parents is associated with lower scores on measures of well being. The findings of this study also suggest that perceived attachment to peers has no compensatory effect.

Social Support Loss. Immigrant adolescents may also be at risk for bouts of depression due to feelings of helplessness when attempts to cross cultural barriers fail repeatedly (Ishiyama, 1989; Boekestijn, 1988). Baptiste (1990) describes how immigrant adolescents "experience a revised estimation of their own self-worth in the process of adjusting to the new culture" (p. 12). Another issue affecting the health of new immigrants is the loss of self-validating reference points due to re-location (Ishiyama, 1989). Adolescents may depend more heavily on external sources of self-validation and therefore be at much greater risk than adults who have an internalized sense of self-validation. Leaving behind one's friends, extended family, and familiar community, may engender considerable anger at the parents who initiated the move, as well as grief over the loss of those contacts and supports. The resulting depression can be compounded in three important ways in the new culture. Firstly, as mentioned previously, the adolescent may experience rejection by host culture peers due to stereotyping and racial discrimination. A loss in ability to perform adequately at school due to language barriers and unfamiliar expectations is a second

plausible experience. Thirdly, immigrant families often experience a loss of socio-economic status due to the difficulties of transferring professional qualifications. All of these factors can create increased feelings of alienation, a significant precursor to deviant behavior and dropping out of school (Calabrese & Adams, 1990; Wilson & Loury, 1987).

Refugees. The last few sections have focused on the problems new immigrant adolescents face which may impact on their health. Those adolescents who enter Canada as refugees often have an even higher risk factor level and a more complex period of adjustment (Beiser et al., 1988; Westermeyer, 1989). The distinction between immigrant and refugee generally rests on the issue of voluntary and desirable versus involuntary and unprepared migration (Portes & Rumbaut, 1990). In Canada, conventional refugee status is conferred only when political upheaval in the country of origin is intense. Many persecuted and displaced persons who do not qualify to enter as conventional refugees are admitted in a humanitarian class or a specially designated class, for example in recent years people from Poland, Southeast Asia and Latin America have formed designated class categories (Beiser et al., 1988). Health compromising experiences such as trauma due to war or political persecution, loss of family members, long periods of time spent in refugee camps, and poor nutrition prior to arrival are common to many refugees who arrive in North America (Lee, 1988; Westermeyer, 1989). All of these factors put refugees in a high health needs category.

Positive Outcomes for Ethnic Minority Adolescents

The positive consequences of acculturation are often mentioned in the literature but, due to the emphasis on culture conflict and acculturative stress, little empirical evidence has been amassed to support this possibility (Kim & Berry, 1986). Positive outcomes are theorized to result from the numerous

adaptive coping strengths gained during the process of acculturation and with the development of a healthy bicultural or integrated ethnic identity (Berry, 1987; de Anda, 1984). Whether the experience is faced as a personal challenge and an opportunity, or as a threat, may have important consequences for the individual adolescent (Hersov, 1988). Goodenow and Espin (1993), in a study of identity development in female immigrant adolescents, concluded that successful negotiation of cultural conflicts "...may even promote a stronger, more self-assured adult identity" (p.182-183). Spencer et al. (1991) echo this sentiment by arguing that the minority adolescent who arrives at an achieved ethnic identity, may well be better prepared to take on the challenges of adult life than many majority adolescents, as the majority youth have relatively little to struggle against in their identity development process. In a paper considering the health status relative to each of the different stages of adolescent identity development, Archer (1989) concludes that:

> "given the unpredictability of a fast paced world in which family roles and viable careers may be redefined within a decade, it would appear that flexibility, exploration, cognitive weighing of alternatives, making choices from among feasible options, and periodically assessing one's decisions are becoming basic mental health survival skills for many individuals" (p. 347).

This passage indicates that it may not be arrival at a determined end stage which is healthy; rather it is the adaptability acquired in the process which is essential to the maintenance of mental health. It is conjectured that minority adolescents, especially those having weathered the acculturation process, have acquired this adaptability in large measure. Hoffman (1990) believes that the preoccupation with problems and conflict in the research obscures consideration of the valuable learning which takes place during acculturation. The process of crossing

cultures, when successfully negotiated, may develop an increased sense of one's own strengths and self worth resulting in increased confidence and positive self-esteem (de Anda, 1984; Portes & Rumbaut, 1990).

Summary

Although the model of adolescent development which viewed this period as excessively problematic has been largely abandoned, there is agreement that adolescence is a period of transition from the relatively protected and dependent status of childhood to the independence and self-sufficiency of adulthood (Hill, 1993; Lerner, 1993; Violato & Travis, 1994). Precisely because adolescence is a period of adjustment in psychological, physical and mental status, it may "provide a window of opportunity for changing adolescents' beliefs and perceptions about health behaviors, attitudes and values" (Lerner, 1993). CSH programming is intended to capitalize on the malleability of youth, using a participatory strategy which unites and coordinates the efforts of the family, school, and community, to aid adolescents in developing healthy lifestyles.

Overall, the literature on ethnic minority adolescents emphasizes the complex interplay of intervening variables in their lives, whether they are recent immigrants negotiating a new culture, or the children of immigrants attempting to reconcile their ethnic origins with Canadian majority culture. The stage of ethnic identity, or the level of acculturation, the nature of the host culture, the amount of discrimination or tolerance encountered, the degree of contrast between the culture of origin and the majority culture, the degree of support on arrival, and the psychological characteristics of the acculturating individual and his/her family, all add to the intricate web of interactions affecting the health and lives of minority adolescents and their families. Clearly, comprehensive school health initiatives responding with contextually sensitive preventative programming will need to be responsive to the complex lives of minority adolescents .

The Present Study

In a review of the literature on health promotion in adolescence, Susman, Koch, Maney, and Finkelstein (1993) present a number of important recommendations. These include: the incorporation of a developmental perspective which integrates organismic and contextual factors that influence health outcomes; the need for promoting optimal health and development through a comprehensive approach, and the need to focus research efforts "on the adolescents' perceptions of their own health, health beliefs, attitudes, values, and health-related expectations" (p. 257). This last recommendation parallels the second step in the CSH model, the assessment of needs, and, as noted earlier, is the basis of this study on the self-perceived health needs of minority adolescents.

It is hoped that a study investigating the self-perceived health needs of a normal (i.e., non-deviant, non-pathological) population of minority youth will begin to fill a gap in the literature and provide data to support the definition and implementation of appropriate prevention and intervention strategies to meet the unique needs of ethnic adolescents. The ultimate goal is to provide programs which ease the process of cultural integration and ensure that minority adolescents become healthy, fully functioning members of Canadian society.

The data utilized in this thesis are the product of a needs assessment completed as one part of a larger adolescent health initiative. The Partners for Healthy Living Initiative has taken up the challenge of addressing adolescent health by piloting a CSH program in several city high schools, using a comprehensive approach where prevention, rather than crisis intervention, is the goal. Health, for the purpose of this initiative, is defined as overall well-being, not simply the absence of illness, and therefore includes physical, mental, and emotional dimensions.

The first step for the PHL initiative was the development of a joint venture steering committee including the community based Calgary Health Services, the Calgary Board of Education, and a research and evaluation team from the Department of Educational Psychology at the University of Calgary. The next step was the development of survey instruments to carry out adequate health needs assessment and the collection of baseline evaluation data on adolescent health knowledge, attitudes, and behaviors. The needs assessment instrument was then used in each of six pilot schools to establish program priorities for instructional, service, and environmental health concerns. Reassessment of attitudes, knowledge, and behaviors provides evaluation of programs targeted to meet priority needs.

In order to address the current demographic changes in the adolescent population and the need for more culturally informed programming, the health needs assessment data collected on ethnic minority students are separated from those of the majority in this study. The assessment of the priority needs of these groups of ethnic adolescents is done in order to ensure that the distinctive needs of these groups are not subsumed by the health needs of the majority adolescents surveyed. These data should provide evidence for whether these ethnic minority adolescents perceive themselves as having health needs which are distinct from those reported by their majority peers, and whether these different needs are accurately reflected in the literature described above. If such needs are identified, the data can support the development of programs to meet the most pressing needs of minority adolescents. Within the minority data differences in self-perceived health-related needs due to different ethno-linguistic groups, gender, and length of residence in Canada will be assessed. Policy, program, and service implications of the findings will be considered.

The Research Questions

The broad purpose of the present study is to examine the self-perceived health needs of ethnic minority adolescents. To accomplish this purpose, answers will be sought for the following questions: 1) Are the self-perceived health needs of ethnic minority adolescents distinct from those of majority adolescents? 2) Are there differences within the ethnic minority data based on ethno-linguistic subgroups, the number of years of acculturation, and/or gender? 3) Do the minority and majority groups differ in their perception of the highest priority health needs?

Chapter Three

Methodology

This study uses a subset of data collected through the Partners for Healthy Living (PHL) initiative, a program aimed at implementing CSH programming in high schools. The first phase of this initiative included an assessment of the self-perceived health needs, knowledge, attitudes and behaviors of students, their parents and school personnel. The data used for this thesis include the self-perceived health-related needs of the adolescents at two of six high schools involved in the PHL initiative. It was hypothesized that: 1) Ethnic minority student needs would differ significantly from the majority student needs; 2) Within the minority data, differences would be found based on cultural subgroups, years in Canada, and gender; 3) The minority and majority groups would differ in their perception of the highest priority health needs.

The methodology used to gather data for the PHL initiative followed the CSH model as described by Nader (1990). First, collaboration between the local school board, the city health services, the university research team and each of six pilot high schools was established by the development of a steering committee to inform and oversee all aspects of the initiative. The second step was the development of an instrument for the assessment of adolescent health needs to provide the basis for program planning. This chapter provides a brief description of the sample population, the method by which the health needs survey instrument was developed, and the procedures used for local tailoring of the instrument. Reliability and validity measurements for the instrument are provided and details of administration procedures and data analyses are reported.

Participants

The adolescent subjects participating in the study attend two different

senior high schools. The two schools were selected from the six pilot schools because according to school board statistics the populations at these schools include a high percentage of students with ethnic minority backgrounds. Both schools serve communities which have large ethnic populations. A school wide administration of the health needs survey during a regular class period ensured an adequate and representative sample of both minority and majority student populations at both schools.

Ethnic differences were assessed, in accordance with requests from ethnic minority focus group members (see instrument development below), using a demographic question based on first language. This question asked if the respondent's first language was Arabic, Chinese, English, Punjabi, Spanish, Vietnamese, or "Other". These language groups were derived from demographic data provided by the school board. Intra-group differences in the level of acculturation were assessed by a demographic question asking the number of years the respondent had lived in Canada.

The participants included 533 students distributed across language groups as shown in Table 1 below. Within this sample, 252 participants spoke English as a first language and 281 students spoke a language other than English as their first language: 26 students spoke Arabic, 92 Chinese, 13 Punjabi, 15 Spanish, 59 Vietnamese, and 76 spoke other first languages. In the group of English as a second language (minority), students 132 were male and 149 female. Within the English speaking (majority) sub sample there were 124 females and 128 male participants. Students in both groups were evenly distributed across grades 10, 11, and 12 and across ages ranging from approximately 15 to 18 years. In the ethnic minority sub sample, 76 students (28%), had lived in Canada for less than 5 years and 198 (72%), had lived here for 6 or more years. For a language by gender breakdown see Table 1.

Table 1

Student Distribution by Ethno-linguistic Groups and Gender

Language Group	Category					
	Female		Male		Total	
	n	%	n	%	n	Percent of total
Arabic	13	50	13	50	26	5
Chinese	53	58	39	42	92	18
Punjabi	76	54	6	46	13	2
Spanish	6	40	9	60	15	3
Vietnamese	30	51	29	49	59	11
English	124	49	128	51	252	47
Other	40	53	36	47	76	14
Column Total	273	100	260	100	533	100
Percent of total N	51		49		100	

Dependent Measure

When an extensive search of the health research literature did not yield an appropriate instrument for assessing adolescent health-related needs, development of the dependent measure became imperative. In keeping with the participatory research strategy promoted by the PHL steering committee as an essential aspect of CSH, a Delphi process was undertaken to develop the original survey instrument. The Delphi procedure has been prescribed as an appropriate method for the development of a needs assessment questionnaire when a participatory strategy is particularly warranted (Burton & Merrill, 1991; Davis, 1982). The Delphi procedure involves using a representative sub sample of the target population to provide rounds of feedback on a draft instrument

derived from the literature. Between each of the rounds, the instrument is revised according to the changes suggested by the participants.

Instrument Development

A list of potential survey items was drawn from an extensive review of the adolescent health literature conducted by members of the university research team (for a complete list of the literature sources see Collins, 1993, p. 35.) The resulting comprehensive list fulfilled the requirement that the range of items, provided to the Delphi participants, be as encompassing as possible (Burton & Merrill, 1991). This comprehensive list was presented to a focus group representative of the target population at the first pilot school. In accordance with the Delphi procedure, the participants were instructed to rate the items provided according to their perceptions of adolescent health needs, using a 5-point Likert scale ranging from "not at all important" to "very important". Participants were also asked to add any items they thought had been missed. Two Delphi rounds were used to resolve the final form of the questionnaire (a more extensive description of this procedure can be found in Collins, 1993, p. 34-39.) To maintain the participatory strategy throughout the initiative, each subsequent school was provided with an opportunity to tailor the instrument to suit local needs.

Local Tailoring

At the first of the two pilot schools from which the data for this study are derived, the opportunity for local tailoring of the instrument was taken very seriously. A committee comprised of students across all first language groups represented in the school population, was assembled to assure input from all interested parties. The committee was given four opportunities to assess the face validity of the survey items, suggest additions or deletions to suit local concerns, and comment on overall formatting. After each meeting, the

questionnaire was adjusted according to the participants' suggestions and returned to the committee for review.

Particular care was taken to ensure that ethnic minority students opinions were carefully considered and the overall goals of the initiative kept to the foreground. For example, although demographic data on socioeconomic status and refugee standing would have provided valuable research information, the students felt their peers would be threatened by such questions and would not provide honest answers. As the primary purpose of the initiative was to determine and meet the self-perceived health needs of these adolescents, it was considered necessary to follow their advice and forgo the added demographic information. On another occasion, some of the minority committee members expressed a concern over questions relating to sexuality. As these items were considered by the rest of the student committee to be essential adolescent health issues, a carefully worded option to skip any items which a respondent felt uncomfortable answering was provided on the survey instrument and in the administration instructions, rather than leaving these important items out. Several rounds of this procedure resulted in considerable felt-ownership of the instrument, and a clearer understanding of how the resulting data would be useful for program development.

The second school providing data for this study was aware of the lengthy and careful tailoring carried out prior to administration at the preceding school. Because the demographic makeup of the two schools is very similar, they felt justified in drawing together an ad hoc committee of school personnel and students to look over the survey instrument and make a few minor changes in wording and items to suit the needs at their school.

The final form of the needs survey instrument consists of three major divisions - Services, for health-related services required; Instruction, for health-

related skills and information needed; and Environment, for changes in the physical environment needed. Within each of the three divisions there are several subscales comprised of various numbers of individual items. See Table 2 for an outline of the instrument. Students were required to respond on scantron answer sheets, rating each individual item on a 5 point Likert scale ranging from 1- 'strongly disagree' to 5- 'strongly agree'. (A copy of the final form of the instrument is provided in Appendix A)

Table 2

Major Divisions and Subscales in Student Health Needs Survey Instrument

Major Division	Subscale
I Services:	
	A. Physical health
	B. Counselling
	C. Sexuality
	D. Family/Home life
	E. School performance
II Instruction:	
	A. Health promotion
	B. Physical health
	C. Sexuality
	D. Mental/Emotional health
	E. Interpersonal relationships
	F. Safety and accident prevention
III Environment:	
	A. School building and grounds
	B. School atmosphere: Involvement with other students
	C. School atmosphere: Involvement with teachers and staff
	D. Home atmosphere: Family

Instrument Reliability and Validity

Validity of the instrument is based on the Delphi process of development as well as the extensive local tailoring process provided at four pilot sites. A factor analysis of the individual questionnaire items has provided evidence of internal consistency on the 15 subscales (r>.68). (See Table 2.) Reliability measurements include test re-test procedures carried out at two previous pilot schools. A test of difference between the initial test scores and re-test scores on subscales resulted in a non significant F of .49 (p < .92). Correlation coefficients on test re-test scores range from .58 to .90 on all but two subscales (of .36 and .48) , and 8 of the 15 subscale coefficients are above .70. (See Table 3.)

Table 3

Test-retest Reliability Coefficients on Subscales

Subscale	r	Subscale	r
Services: Physical health	.90**	Instruction: Mental/emotional	.66**
Services: Counselling	.80**	Instruction: Interpersonal	.67**
Services: Sexuality	.69**	Instruction: Safety	.36
Services: Family/home life	.58**	Environment: Building	.77**
Services: School performance	.48*	Environment: Students	.58**
Instruction: Health promotion	.76**	Environment: Staff	.73**
Instruction: Physical health	.77**	Environment: Family/home	.69**
Instruction: Sexuality	.80**		

* = p<.05 ** = p<.01

Procedure

Questionnaire Administration

Because a successful needs assessment requires a reliable and valid survey instrument which has been pilot tested to identify unexpected problems, revised, and implemented with the appropriate subject pool (Burton & Merrill,

1991), a pilot test of the locally adapted needs questionnaire took place two weeks prior to the date for school wide administration. Based on the findings of the pilot administration, a number of adjustments were made to the instruction sheet provided to classroom teachers (see appendix B). Also, several changes were made to the formatting and scoring procedures on the survey instrument to simplify the process for respondents.

Half the student body completed a copy of the needs instrument and the other half completed a survey of health-related knowledge, attitudes, and behaviors, to be used as baseline data for program evaluation. As noted above, verbal instructions given by classroom teachers, as well as written instructions provided on the form, gave permission for subjects to leave out any questions which they were uncomfortable answering.

Students for whom English was a second language were invited to work with language specialists to ensure their understanding of the questions. In two classrooms, questions were read aloud and explanations provided as necessary while students recorded their answers individually. Three school committee members familiar with the instrument provided support to classroom teachers during the administration, by answering questions called in to the school office. Completed answer sheets and surveys were turned in to the main office.

Data Analysis

Answer sheets were scanned by the Board of Education. Resulting data files were computer analyzed using Statistical Procedures for Social Science (SPSS). Descriptive statistics and demographics were compiled, and differences were assessed using three MANOVA procedures. 1) The first MANOVA was a one factor MANOVA to look at differences between majority and minority adolescents on 14 subscales. One subscale, Home atmosphere: Family, was dropped from the analyses as 28 (11%) of the majority students and 59 (21%) of

the ethnic minority students chose not to answer some of the items contained in this subscale. Follow-up comparisons were performed to locate the direction of differences found between minority and majority students on the remaining subscales.

2) The second MANOVA was a 5 x 2 procedure using the five definitive language groups as one independent variable (excluding the first language groups of "English" and "Other"), and 2 levels of the time in Canada breakdown as another independent variable. The categories for time in Canada were reduced from three, 5 years or less, 6 to 10 years, and more than 10 years, to two categories, 5 years or less and 6 or more years, due to low cell numbers in the 6 to 10 years category. Tests were conducted initially on the 14 subscales and follow-up analyses were performed as necessary.

3) The third MANOVA was also a 5 x 2 procedure based on language (again excluding "English" and "Other") and gender as independent variables. Again, tests were conducted initially on the 14 subscales.

Because a more complex design is preferable, a three factor 5 x 2 x 2 MANOVA using language, time in Canada, and gender would have been superior, but this was not possible due to low cell sizes. Even though a less complex design was utilized, some cell sizes were as low as $n = 5$, jeopardizing the assumptions of normal distribution and homogeneity of variance required by the MANOVA procedure. Non-parametric procedures with less stringent assumptions might have been more applicable, but were ruled out due to the large number of items being tested (i.e., too many tests resulting in an increased risk of false positives). Given the low cell sizes, the interpretation and generalization of results from the last two MANOVAs must be limited and made with caution.

Chapter Four

Results

This chapter presents the findings of the study. Results of the statistical analyses are presented in three sections, each of which address one of the three research questions described in Chapter Two.

Research Question One

A one factor MANOVA was conducted to test whether the ethnic minority adolescents showed distinct differences on health needs from majority adolescents. The multivariate analysis compared the mean scores of the English speaking majority group to the mean scores of the students who classified themselves as having Arabic, Chinese, Punjabi, Spanish, Vietnamese, or Other as their first language. The initial comparison was made on the 14 subscales of the health needs survey (as outlined in the previous chapter). Results indicated that the minority and majority student groups differed significantly on subscales, $F(1,236) = 3.86$, $p<.01$.

Follow-up univariate tests showed significant differences between majority and minority groups, on 5 subscales as follows:

1) Services: Sexuality, $F(1,487) = 5.13$, $p<.02$;

2) Services: School performance, $F(1,487) = 14.77$, $p<.01$;

3) Instruction: Health Promotion , $F(1,487) = 8.17$, $p<.01$;

4) Instruction: Physical Health, $F(1,487) = 5.66$, $p<.02$;

5) Environment: Students, $F(1,487) = 6.83$, $p<.01$.

(See Table 4 for a listing of all univariate tests results for differences between groups on summary scores.)

Table 4

MANOVA Results and Means Scores Comparing Minority and Majority Students on 14 Health Needs Subscales

Subscale	Group		F	p<
	Minority Mean/(SD)	Majority Mean/(SD)		
Services: Physical health	3.56/(.64)	3.46/(.58)	3.47	.06
Services: Counselling	3.51/(.69)	3.58/(.68)	1.39	.24
Services: Sexuality	3.47/(.85)	3.64/(.78)	5.13	.02
Services: Family/Home life	3.27/(.76)	3.20/(.76)	1.03	.31
Services: School performance	3.68/(.67)	3.46/(.57)	14.77	.01
Instruction: Health promotion	3.66/(.79)	3.46/(.74)	8.17	.01
Instruction: Physical health	3.78/(.78)	3.61/(.74)	5.66	.02
Instruction: Mental-emotional	3.72/(.75)	3.65/(.76)	1.03	.31
Instruction: Sexuality	3.51/(.82)	3.44/(.82)	.97	.32
Instruction: Interpersonal	3.57/(.81)	3.44/(.79)	2.99	.08
Instruction: Safety / prevention	3.82/(.84)	3.76/(.81)	.77	.38
Environment: Building	3.95/(.65)	3.85/(.64)	3.10	.08
Environment: Students	3.59/(.67)	3.43/(.67)	6.83	.01
Environment: Staff	3.56/(.68)	3.52/(.66)	.55	.46

Individual Questionnaire Items

Each of the subscales with a significant result (Services: Sexuality and School performance, Instruction: Health promotion and Physical health, and Environment: Students) were considered separately, using univariate tests, to assess the individual items on which the two groups differed, and the direction of

the difference. Results indicated that on one subscale, Services: Sexuality, minority students expressed lower needs than their majority peers did. However, on the remaining individual items within the significant subscales, minority students expressed higher needs when compared with their majority peers. These results, along with mean scores and standard deviations for both groups, are presented in Tables 5 - 9.

Services: Sexuality. The question block for the Services: Sexuality subscale is prefaced with the stem "It is important to me personally for the school to provide...". Results indicated that the minority adolescents consistently express lower needs on the individual items within this subscale with "Counselling and referral to deal with sexual abuse/ assault," "Condom vending machines in the school," and "Counselling and referral for pregnancy testing" scored significantly lower by minority students when compared to the majority students. (See Table 5 for specific F and p values, means, and standard deviations.)

Table 5

Mean Score Comparisons of Majority and Minority Students on Significant Questionnaire Items in the Services: Sexuality Subscale

	Group			
Services: Sexuality Individual Items	Majority Mean/(S.D.)	Minority Mean/(S.D.)	F	p<
Sexual abuse / assault counselling	4.08 / (.95)	3.77 / (1.0)	11.37	.01
Condom vending machines	3.82 / (1.3)	3.23 / (1.4)	26.09	.01
Pregnancy testing / counselling	3.62 / (1.0)	3.37 / (1.1)	7.14	.01

Services: School Performance. School performance issues were addressed in a question block prefaced with "I would personally benefit in terms of my school performance if I...". Within this subscale results indicated significantly higher needs for minority students when compared with majority students on the following items: "Understood my school work more easily," "Was able to read better," '" Was in more special education classes," " Had fewer learning problems or concerns," "Understood English better," "Had more confidence in terms of my school work," "Had more time to focus on core subjects such as English, Math etc.," and "Spent more time doing my school work". (See Table 6.)

Table 6

Mean Score Comparisons of Majority and Minority Students on Significant Questionnaire Items Within the Services: School Performance Subscale

	Group			
Services: School Performance Individual Item	Majority Mean/(S.D.)	Minority Mean/(S.D.)	F	p<
Better comprehension	4.03 / (.93)	4.21 / (.98)	4.08	.04
Better literacy skills	2.87 / (1.2)	3.61 / (1.1)	51.76	.01
Special education opportunities	2.58 / (1.1)	3.05 / (1.2)	19.67	.01
Less learning difficulties	3.12 / (1.1)	3.44 / (1.1)	10.53	.01
English as a second language	2.56 / (1.2)	3.44 / (1.3)	60.31	.01
More academic self-confidence	3.50 / (1.0)	3.71 / (.98)	4.97	.03
More focus on core subjects	3.27 / (1.1)	3.81 / (1.1)	29.60	.01
More time on school work	3.63 / (1.0)	3.83 / (1.0)	4.40	.04

Instruction: Health Promotion. Instruction on several health promotion topics was also indicated by the results a significantly higher need for minority students when compared with their majority peers. Minority students expressed higher needs for information or skills on the following items: "How to tell when I am getting sick", "Where to get information about my health", "How to take more responsibility for my own health", "How to choose what help or advice is best for me", and "How to understand and follow my doctors orders". (See Table 7.)

Table 7

Mean Score Comparisons of Majority and Minority Students on Significant Questionnaire Items in the Instruction: Health Promotion Subscale

	Group			
Instruction: Health promotion Individual Items	Majority Mean/(S.D.)	Minority Mean/(S.D.)	F	p<
Symptom recognition	3.39 / 1.0	3.60 / 1.1	5.49	.02
Access to information / resources	3.50 / .89	3.68 / .91	5.19	.02
Personal responsibility	3.62 / .87	3.68 / .96	8.51	.01
Consumer health	3.51 / .86	3.74 / .97	7.58	.01
Self-management - doctors orders	3.26 / .92	3.56 / .97	12.48	.01

Instruction: Physical Health. A number of physical health instruction items were also indicated by the results as significantly higher needs for minority adolescents compared to majority adolescents. Minority youth expressed higher needs for information and skills related to the following: "How drugs, alcohol, and tobacco affect my health", "How to prevent myself from getting cancer or heart disease", "How to take proper care of my skin, hair, etc.", and "How to find a good doctor". (See Table 8.)

Table 8

Mean Score Comparisons of Majority and Minority Students on Significant Questionnaire Items in the Instruction: Physical Health Subscale

Instruction: Physical health Individual Item	Group Majority Mean/(SD)	Group Minority Mean/(SD)	F	p<
Effects of alcohol / drugs / tobacco	3.27 / (1.1)	3.53 / (1.0)	7.29	.01
Cancer / heart disease prevention	3.72 / (1.0)	3.94 / (1.1)	5.58	.02
Personal hygiene / care	3.69 / (.98)	4.01 / (.91)	19.46	.01
Finding a good doctor	3.47 / (.99)	3.71 / (1.0)	6.75	.01

Environment: Students. Several items within the Environment subscale score dealing with the school atmosphere among students were also indicated by the results as significantly higher needs for ethnic minority adolescents over those indicated by majority youth. The question block was prefaced with: "The following changes to the school atmosphere are important to me personally...", and focused on peer interactions at school. Items indicated as higher needs for minority students included: "No smoking allowed", "No drugs or alcohol allowed", "Stop damage to school property", and "Control the noise in the school", "Being more accepting of different racial or cultural groups", "Being more accepting of, and friendlier towards, one another", and "Paying more attention to trespassing at the school". All items scored at the $p < .01$ level of significance, except the one concerning vandalism which scored at $p<.04$ level. .(See Table 9.)

Table 9

Mean Score Comparisons of Majority and Minority Students on Significant Questionnaire Items in the Environment: Students Subscale

Environment: Students Individual Item	Group		F	p<
	Majority Mean/(S.D.)	Minority Mean/(S.D.)		
No smoking	3.08 / (1.5)	3.61 / (1.4)	16.40	.01
No drugs / alcohol	3.69 / (1.3)	4.13 / (1.2)	16.09	.01
Less vandalism	3.79 / (1.0)	3.99 / (1.0)	4.27	.04
Noise levels	3.15 / (.98)	3.54 / (1.0)	17.72	.01
Racial / cultural acceptance	3.57 / (1.1)	3.88 / (1.0)	9.43	.01
General acceptance friendliness	3.76 / (.94)	3.98 / (.92)	6.48	.01
Attention to trespassing	3.18 / (1.1)	3.44 / (1.0)	7.04	.01

Research Question Two

To test between group differences within the minority data, concerning first language groups, gender, and length of residence in Canada, two separate two way MANOVAs were conducted. First, a MANOVA with language (Arabic, Chinese, Punjabi, Spanish, and Vietnamese) by length of residence in Canada (5 years or less, and 6 years or more) was conducted. A second MANOVA with language by gender (m, f) as independent variables was then conducted. As noted in the previous chapter separate procedures were required due to small cell sizes.

Language by Time in Canada MANOVA

The language by time in Canada MANOVA resulted in a significant main effect for time in Canada, $F(14, 154) = 2.18$, $p<.01$. However the main effect for language was not significant, $F(56, 628) = 1.09$, $p<.30$ and the interaction effect

was also not significant, F(56, 628) = .98, p<.53. Follow-up univariate tests on each of the 14 subscales were conducted to assess the nature and direction of the differences between the recent immigrants and the established residents within the minority group. Results showed a significant difference on one subscale. (See Table 10 for means F and p values on all subscales.)

Table 10

MANOVA Results and Means Scores Comparing Time in Canada Groups on 14 Health Needs Subscales

Summary Score	Time in Canada		F	p<
	5 Yrs or less	6 Yrs or more		
	Mean	Mean		
Services: Physical health	3.69	3.62	.30	.58
Services: Counselling	3.46	3.54	.42	.52
Services: Sexuality	3.28	3.69	5.71	.02
Services: Family / home life	3.42	3.45	.04	.83
Services: School performance	3.89	3.65	3.44	.07
Instruction: Health promotion	3.75	3.77	.02	.89
Instruction: Physical health	3.76	3.99	2.30	.13
Instruction: Mental-emotional	3.71	3.86	.98	.32
Instruction: Sexuality	3.50	3.75	2.33	.12
Instruction: Interpersonal	3.68	3.66	.02	.89
Instruction: Safety / prevention	3.78	4.01	2.09	.15
Environment: Building	3.89	3.98	.53	.47
Environment: Students	3.61	3.66	.11	.74
Environment: Staff	3.70	3.56	1.04	.31

Language by Gender MANOVA

The language by gender MANOVA resulted in no significant main effects with values of $F(56, 700) = 1.06$ $p<.37$ for language and $F(14, 172) = 1.45$, $p<.14$ for gender, nor was a significant interaction effect found, $F(56, 700) = 1.01$, $p<.47$.

Individual Item Analysis

Although only one subscale resulted in a statistically significant difference between the time in Canada groups on the follow-up procedures, it was deemed important from a programming point of view to explore any individual items for a significant difference between the recent immigrant group and those who had resided in Canada for a longer period. Subsequent univariate analyses revealed differences on individual items within 5 subscales (Tables 11-13).

Services: Physical Health. Within the Services: Physical health subscale, results indicated that recent immigrants expressed significantly higher needs than did their minority peers who had lived in Canada for a longer period. Differences were found on the following items: "Drug and alcohol abuse programs," "Referral to a doctor or clinic," and "Sight and hearing testing". (See Table 11.)

Table 11

Mean Score Comparisons of Time in Canada Groups on Significant Questionnaire Items Within Subscale - Services: Physical Health

Services: Physical health	Time in Canada			
	5 Yrs or less	6 Yrs or more	F	p<
Individual Item	Mean	Mean		
Effects of alcohol / drugs / tobacco	3.63	4.05	3.94	.05
Medical referral	3.66	3.31	4.59	.03
Sight/hearing testing	4.09	3.73	4.03	.05

Services: Counselling and Sexuality. Within the Services: Counselling and Services: Sexuality subscales, results indicated that recent immigrants expressed significantly lower needs than their established resident peers on the items: "Listen to me in a non-judgmental manner", "Counselling and referral for birth control", and "Counselling and referral for pregnancy testing". (See Table 12.)

Table 12

Mean Score Comparisons of Time in Canada Groups on Significant Questionnaire Items Within Subscales - Services: Counselling and Sexuality

Subscale Individual Item	Time in Canada 5 Yrs or less Mean	 6 Yrs or more Mean	F	p<
Services: Counselling				
Non-judgmental listening	3.04	3.64	8.55	.01
Services: Sexuality				
Birth control counselling / referral	3.19	3.85	10.46	.01
Pregnancy testing / counselling	3.27	3.68	3.85	.04

Services: School Performance and Environment: School. The subscale, Services: School performance, showed the largest number of significantly different results on individual items, with the higher need consistently expressed by the recent immigrant group when compared with their minority peers. Items significant at the $p<.01$ level included, "'Was in more special education classes," "'Got into less trouble over my behavior," and "Understood English better"; Items significant at the $p<.05$ level included, "Was able to read better," "'Had more motivation to attend," and "Had more self-confidence academically." The more established residents among the minority students expressed a higher need for "increased social/extracurricular activities". (See Table 13.)

Table 13

Mean Score Comparisons of Groups on Significant Questionnaire Items Within Subscales- Services: School Performance and Environment: Students

Subscale Individual Items	Time in Canada: 5 Yrs or less Mean	Time in Canada: 6 Yrs or more Mean	F	p<
Services: School performance				
Better literacy skills	4.07	3.54	6.47	.01
More motivation to attend	4.05	3.58	4.96	.02
More special education	3.86	2.75	28.52	.01
Less behavioral problems	3.54	2.94	6.70	.01
English as a second language	4.08	3.36	9.81	.01
More self-confidence academically	4.02	3.54	5.49	.02
More focus on core subjects	4.19	3.70	5.30	.02
Environment: Students				
Social / extracurricular activities	3.56	4.02	5.62	.02

Research Question Three

The three major categories of adolescents derived from the inferential analyses are as follows: 1) majority adolescents; and 2) minority adolescents further delineated into two groups by the number of years they have resided in Canada, 2a) 5 years or less; and 2b) 6 or more years. Descriptive results, means and standard deviations on questionnaire subscales for each of the three groups are displayed in Table 14. As shown, means for the three groups on all subscales are above 3.00 indicating that students in all three groups generally agree that the items within the subscales are health needs. Relatively high and low means are on similar subscales, again indicating extensive agreement in priority needs across the three groups, 'Environment: Building' scored highest for all groups and

'Services: Family/home life' scored lowest, likely indicating that all groups believe the school environment is a mandate of the schools, while services for their family life are not. The mean scores of the two minority groups are higher than those of the majority group on all but two subscales, 'Services: Counselling' and 'Services: Sexuality', indicating that these students perceive themselves as having higher needs generally, but are disinclined to seek counselling services or services for sexuality concerns or to see these as high need areas in the school context.

Table 14

Means and Standard Deviations for 3 Groups of Adolescents on 14 Subscales

	Majority adolescents	Minority adolescents	
		5 Yrs or less	6 Yrs or more
Summary Score	Mean/(S.D.)	Mean/(S.D.)	Mean/(S.D.)
Services: Physical health	3.46/(.58)	3.59/(.67)	3.56/(.63)
Services: Counselling	3.58/(.68)	3.57/(62)	3.51/(.69)
Services: Sexuality	3.64/(.78)	3.38/(.76)	3.51/(.85)
Services: Family / home life	3.20/(.76)	3.40/(.74)	3.23/(.75)
Services: School performance	3.47/(.57)	3.87/(.63)	3.63/(.67)
Instruction: Health promotion	3.47/(.74)	3.80/(.72)	3.66/(.82)
Instruction: Physical health	3.61/(.74)	3.80/(.72)	3.78/(.77)
Instruction: Mental-emotional	3.65/(.76)	3.72/(.68)	3.72/(.76)
Instruction: Sexuality	3.44/(.82)	3.59/(.78)	3.48/(.83)
Instruction: Interpersonal	3.44/(.79)	3.72/(.76)	3.52/(.82)
Instruction: Safety/prevention	3.76/(.81)	3.83/(.76)	3.85/(.86)
Environment: Building	3.85/(.64)	3.91/(.58)	3.96/(.67)
Environment: Students	3.43/(.67)	3.62/(.62)	3.57/(.68)
Environment: Staff	3.52/(.66)	3.65/(.60)	3.52/(.69)

In order to consider whether the individual health needs expressed as the highest priority for each of the three groups differed, the ten highest scoring items for each group were compiled in Table 15. Results indicated considerable overlap in the students top rated needs with 'Career and course counselling', 'More interest in classes', 'Better air quality/circulation', and 'Better comprehension' perceived as high needs for all three groups. Recent immigrant students agreed with long term minority students that 'Less violence' and 'No drugs or alcohol' would improve their lives at school. The majority students agreed with the long term minority residents that 'Working clocks' and 'Better temperature control' would improve their schools and 'More windows' were of concern for the new immigrants and the majority students.

Table 15

Top 10 Priority Needs as Perceived by 3 Student Groups

Majority Adolescents	Minority Adolescents	
	5 years or less - Time in Canada - 6 years or more	
Clocks that work 4.34/(.97)	**Career/course information** 4.45/(.77)	**Career/course information** 4.35 / (.89)
More interest in classes 4.33/(.95)	**No drugs / alcohol** 4.41/(.96)	**Less violence** 4.25/(.94)
Career/course information 4.25(.90)	**Better air quality/ circulat'n** 4.31/(.77)	**Clocks that work** 4.23/(1.01)
More windows 4.14/(1.01)	**More interest in classes** 4.29/(.94)	**Better comprehension** 4.21/(1.01)
Better air quality/ circlt'n. 4.08/(.87)	**Less violence** 4.27/(84)	**Better air quality/ circulat'n** 4.20/(.93)
Non-judgmental listening 4.08/(1.01)	**More windows** 4.27/(1.10)	**More interest in classes** 4.18/(1.07)
Sexual abuse/assault counselling 4.07/(.97)	**Better comprehension** 4.12/(.95)	Longer cafeteria hours 4.14/(1.02)
Better temperature control 4.07/(.98)	General acceptance/ friendliness 4.11/(.83)	**Better temperature control** 4.05/(.97)
Better comprehension 4.04/(.93)	Healthier food available in school 4.11/(.93)	**No drugs / alcohol** 4.05/(1.21)
First aid/CPR training 4.02(1.00)	Cancer/heart disease prevention 4.10/(.97)	**First aid/CPR training** 4.03/(1.05)

Note. Items ranked in top ten by all three groups are bold and underlined. Items ranked in top five by two groups are bold.

Chapter Five

Discussion

The purpose of this study was to explore the self-perceived health needs of ethnic minority adolescents. An initial comparison was made between the health needs of minority youth with those of majority adolescents. Further comparisons were explored within the minority data to assess differences based on ethno-linguistic subgroups, gender, and length of residence in Canada. A discussion of the results is presented in this chapter with connections to the literature. This discussion is followed by a consideration of the possible programming applications, limitations of the study, implications for further research, and conclusions.

Multivariate Analyses

The initial hypothesis that the minority students would have significantly different needs from their majority peers was confirmed by the results of this study. Multivariate analysis found that ethnic minority adolescents did represent a distinct group when compared with the majority on health needs subscales. The direction of the difference was predominantly towards higher needs expressed by the minority group over those expressed by the majority youth. The second hypothesis, that the minority student data would contain a number of subgroups with distinct health needs, was only partially confirmed. Multivariate analyses provided evidence that minority adolescents who have lived in Canada for 5 years or less perceive themselves as having significantly higher health needs in a number of areas than their peers who have resided in Canada for 6 or more years. Both of these results are supported in the literature as the life experiences of minority adolescents are considered more demanding than those of majority adolescents, with those of the most recent immigrant group being even more complex and difficult (see for example Baptiste, 1990; Berry et al., 1992;

Ishiyama, 1989; Nann, 1991; Sue & Sue, 1990; Westermeyer, 1989).

Surprisingly, the needs expressed by ethno-linguistic subgroups were not significantly different. Nor did gender predict significant differences in intensity of health needs, although both of these variables had support in the literature. It is possible that the power of the test conducted was diminished by the small cell sizes resulting from the breakdown across six language groups and the two genders. However, a study by Atkinson and Gim (1989), on attitudes towards counselling services, found a similar result to that found in this study; that is, no intercultural or gender differences in attitude, but significant differences based on level of acculturation. Acculturation concerns seem to result in more distinctive differences than the differences between ethno-linguistic subgroups and between genders.

Univariate Analyses

Subsequent analyses indicated statistically significant differences between the minority group as a whole and the majority group in several broad needs areas. Minority adolescents expressed significantly higher needs than their majority peers for services to improve their school performance, for instruction and skills in the areas of health promotion and physical health, and for changes in their interactions with other students in the school environment. A careful look at these higher needs indicates that minority students generally require more information and a higher sense of security than their majority peers. Only in the area of services for sexuality issues did minority students express lower needs than those expressed by students in the majority group, with the lowest needs expressed by the most recent immigrants. These results are discussed below with reference to the significant individual items within the subscales mentioned. (Note: The individual item results pertaining to the most recent immigrant group must be viewed as exploratory due to statistically non significant results at the

subscale level.)

Individual Item Analyses

School Performance. Further follow-up analyses identified the individual items within the above mentioned subscales which were scored significantly differently by the minority compared to the majority students, and by the recent immigrant group compared to the established residents among the minority students. Within the school performance subscale, minority students expressed much higher needs than their majority peers for programming on issues relating to English as a second language, literacy, increased focus on core subjects, and special education classes. These differences seem to indicate that working in a second language represents a serious barrier to academic success for these students, a supposition supported in the literature (Esquivel & Keitel, 1990; Hicks et al., 1993; Ishiyama, 1989). Beiser et al. (1988), consider language to be the most significant source of difficulty, as well as the fundamental impediment to successful acculturation for immigrants to Canada. The recent immigrants expressed significantly higher needs than their long term resident peers on the following items within the school performance subscale: English as a second language; literacy; academic self confidence; focus on core subjects; and motivation to attend.

The recent immigrants also perceived themselves as getting into too much trouble over their behavior and as requiring special-education classes. As these last two items were among the few individual items not scored as needs (scores were below 3 on the Likert scale) for either the majority youth or the long term resident minority youth, it is possible these high scores may indicate misinterpretation of the two survey items. It is also possible, in the case of the behavioral item, that recent immigrant students are struggling with a sense of alienation which results in their using acting out behaviors as a source of

validation, or that they are confused as to what is culturally appropriate behavior. Perhaps the newcomers scored the item concerning "special-education classes" as a high need because they believed it meant classes in which they would be afforded special attention.

Health Promotion. Minority students express higher needs than their majority peers did for information on a number of health-related topics. Especially notable are the need to learn to understand and follow their doctors orders, to know how to take responsibility for their own health, and to know how to choose the best advice for themselves, as well as specific information on personal hygiene and on the effects of alcohol, drugs and tobacco. This result seems in support of the literature which describes lower use of health care services by minorities as due to cultural and language barriers, as well as lack of knowledge about, and/or access to, available services (Epp, 1986; Hoberman, 1993; Rootman, 1988; Sue & Sue, 1990). The possibility is also raised that ethnic minority members tend to use health services less because they are less inclined than their majority peers to consult a doctor for minor ailments, or they may prefer to access these resources within their own ethnic community.

School Environment. Other requirements of minority adolescents, when compared to their majority peers, include a number changes they desire in their school environment. According to the results of this study, minority students are significantly more concerned than their majority peers are over smoking and the use of drugs and alcohol at school, as well as noise levels, vandalism and trespassing at their schools. This result may indicate that minority students have had less experience with, and have less desire for, the health risk behaviors they are faced with in the high schools sampled in this study. Minority students are also more concerned than their majority peers are about being accepted despite racial and cultural differences, and about general acceptance and friendliness

among students. This finding supports the concern in the literature about the emotional damage and isolation experienced by minority members in Canadian society (Beiser et al., 1988; Canino, 1988, Naidoo, 1992), a concern which may put self-conscious adolescents at particular risk.

Established residents among the minority students expressed higher needs for social and extra-curricular activities at school than their recently immigrated minority peers. This last finding may indicate that they desire more interaction with the larger student body, but have few avenues by which to facilitate that interaction. Prilleltensky (1993) found in interviews with immigrant adolescents that those who had lived in Canada for some time were anxious to make the transition to developing relationships with their majority peers. The study by Hicks et al. (1993) also found evidence that the isolation experienced in the early stages of immigration could be ameliorated by extra-curricular involvement.

Sexuality. The areas of sexuality and counselling are the major exception to the higher needs expressed by the groups experiencing greater life demands. In the area of sexuality, minority students as a whole expressed significantly lower needs than did their majority peers, with the most recent immigrants expressing the lowest needs in this area. It is speculated that traditional sexual mores are strong for the minority students sampled by this survey. Support for this speculation comes from the concern, expressed by minority members of the focus group committee, that the sexuality items on the questionnaire might offend their ethnic minority peers. An exploration of missing data also provided evidence that compared with majority youth, a greater number of minority students left out items in this section of the questionnaire. The most recent immigrant group had the greatest number of missing items, possibly indicating a high discomfort, or a desire for privacy, on their part around questions of this nature.

Counselling. A number of counselling related individual items were scored

significantly higher by long term resident minority students compared to the recent immigrant youth. The counselling literature supports this finding, as new immigrants make infrequent use of counselling services, with language and cultural misunderstanding being the most critical barriers (Evans, 1989; Sue & Sue, 1990). A recent study by Gim, Atkinson, and Whiteley (1990), found that Asian-American college students are willing to see a counsellor about academic, career or financial issues, but rarely for personal concerns and that, as the level of acculturation increases, there is an increased positive attitude towards counselling on personal issues. In the present study, minority students seem uncomfortable with revealing issues of personal concern. This discomfort is evidenced by the loss of data on the part of the minority students on the Environment: Family/home life subscale. Over 28% of the recent immigrant youth, and 14% of the long term resident minority students chose not to answer these questions. This pattern may indicate the preference for utilizing services within their own communities, which are more culturally appropriate (Canino, 1988), or at least a desire not to involve the school in their personal concerns.

Research Question Three

A consideration of the 10 highest priority items for the three groups (majority youth, recent immigrants, and established resident minority students) resulted in considerable overlap in their most immediate concerns. The highest need expressed by both of the minority groups was the third most important item overall for the majority students: the need for information to help them decide on courses and career planning. This finding indicates that minority students should be a priority target group for school counsellors offering course planning and career education. All three groups also expressed a high need for better comprehension in their classes and a need to find their classes more interesting. These two items may indicate a need for teachers to consider incorporating some

alternative teaching methods in their classrooms, for example combining visual and auditory lessons with relevant kinesthetic experiences. There were also a number of school environment issues that were of concern for all three groups, or for two of the three groups. These issues include improved air quality, having clocks that work, more windows, better temperature control, and less violence at school. The overlap in these items seems to indicate that all of the adolescents involved in this study have some similar concerns, due to sharing the same developmental period and the same types of school environments.

Programming Implications

Although generalizations are constrained due to study limitations (see below), the results of this study do indicate that policies and programming which take into account the higher needs of ethnic minority adolescents are warranted. As noted above, though all of the students surveyed agreed on some issues that are particularly salient for the adolescent period of development, such as the provision of information on career and course planning, as well as on a number of issues relevant to their shared environment, such as improved air quality, the ethnic minority students participating in this study have some stronger needs than those expressed by their majority peers. Concerns about improving their school performance were much higher for the minority students, indicating a need for possible remedial programming to help these adolescents succeed academically. Perhaps this need is what the recent immigrant group were indicating when they scored the special education item so high. It is also important to note that counselling services for personal and sexual concerns are not sought after by these adolescents, therefore programming labeled as such may be shunned by this group. The findings of this study indicate that minority adolescents, especially the most recent immigrant group, could benefit from special programming designed to ameliorate the effects of negotiating a bicultural identity. Ultimately,

beneficial programming and policies for minorities must involve the majority population in an educational process to offset the negative effects of discrimination and isolation experienced by these students (Beiser et al., 1988).

Comprehensive School Health

CSH programming is an excellent vehicle to begin the process of educating minority and majority students about the health needs experienced by ethnic minority students. The goal of CSH is to aid students in an understanding of the factors effecting their health and well-being, and to increase their ability to respond to those factors in ways which are health enhancing. Culturally sensitive school-based services and programming are supported in the literature as the most effective way of addressing the needs of ethnic minorities (Anderson & Grant, 1987; Dryfoos, 1990; Hoberman, 1992; Nann, 1990; Spencer et al., 1991). Hoberman (1992) states that factors necessary to improve mental health services for ethnic minority adolescents include providing recognizable and flexible services, with convenient access, which are age and culturally appropriate, and coordinating these services with other significant services: He states that there is evidence that school-based health centers can meet such requirements. CSH programming can be instrumental in providing minority students with knowledge about the availability of, and access to, health care services. It can also provide these students with the knowledge and skills to be responsible for adopting health enhancing strategies into their lifestyles.

The five step CSH model delineated by Nader (1990) is well suited to a culturally sensitive perspective (see literature review). In the collaboration phase, cooperation can be sought from all the relevant systems including churches, folk healers and ethnic group leaders, along with the more commonly considered institutions such as the school board, community health services, and government social service agents (Hoberman, 1992). The needs assessment phase can, as

in this study, be done in a way which takes care to assess the needs of minority subgroups which might otherwise be submerged by the majority needs. On site health services and health instruction can, given the expanded sense of collaboration and assessment described above, be developed in a manner which raises the level of cultural awareness of all students and staff. Services and programming of this type should eventually translate into a health enhancing environment for minority and majority alike. In an evaluation of successful preventative programs, Price et al. (1988) delineate a number of features shared by successful programs, which again support the CSH model: Collaboration between community, school and family; an understanding of the needs of the target group; the provision of new skills to enhance coping; and evaluation of effectiveness. Pawlovich (1991), suggests that there is an important role for the school counsellor to play in the instruction, services and environment components of CSH programming.

Implications for Counselling

Although the process of negotiating between two cultures which is experienced by all ethnic minority students, will be different for each individual, there are some regularities which can be counted on (Berry et al., 1992; Canino, 1988). The findings of this exploration into the self-perceived health needs of minority adolescents support a number of the minority issues raised in the literature. Counselling programs developed to meet the needs of minority adolescents will need to work towards ameliorating the added demands in their lives. Initially this could take the form of support and education for the minority students themselves, aiding them in understanding the processes involved in the development of a bicultural identity. Efforts could be made at the psychological level towards increasing minority students' appraisal of the difficultiess experienced, and their ability to cope with increased demands (Smith, 1985).

Also, facilitation of their contact with the majority students could foster positive attitudes between minority and majority students (Berry et al., 1992; Prilleltensky, 1993) and, as noted above, educating majority students is an essential factor in easing the alienation experienced by minority students. A number of program possibilities and issues are discussed below.

Rice, Herman, and Peterson (1993), suggest that adolescents experiencing challenge can be helped by using a psycho-educational model in the school context. The model proposed by Rice et al. (1993) entails increasing adolescents' external resources, such as parent and peer support, and their internal resources, such as perceived control and adaptive coping responses. Ishiyama (1989), has developed a self-validation model for understanding and working with youth in cultural transition. The model addresses the assault to one's sense of self experienced by ethnic minority youth negotiating a bicultural identity. Experiences of poor school performance and low academic self-confidence, concern over future possibilities within an environment lacking culturally similar role models, and discrimination and general lack of friendliness by majority students, all of which were issues of concern for the minority students in this study, combine to present these students with a constant sense of invalidation. This negative social reinforcement can result in self doubt and anxiety leading to social isolation, loneliness, and feelings of inadequacy (Ishiyama, 1989) or to a search for validation and reinforcement outside societal norms in delinquent and/or criminal activity (Dryfoos, 1990). A self-help, support group facilitated by the school counsellor, may be the most effective way to counteract the social isolation minority adolescents experience and provide the social reinforcement needed to validate their sense of self worth.

Social Support Issues. The stress mediating function of social support systems is well known. Social support can act as a buffer against the stresses

and demands inherent in the process of integrating two cultures (Berry et al., 1992; Kealy, 1989; Smith, 1985; Walsh & Walsh, 1987). School counsellors could be instrumental in developing and facilitating what Cardenas, Taylor and Adelman call "transition support groups" (1993, p.203), which would provide an opportunity for minority students to express their fears and their struggles within a supportive environment. This experience would allow them the sense that their experience is shared and not the result of personal deficits (Zambrana et al., 1989). Social support can also be more directive. It can provide important help in skill organization, and provide instrumental support where necessary, as well as providing emotional support to those experiencing higher needs These types of support can allow increased feelings of personal control and power in individuals (Compas, 1990), which may help to counteract the feelings of helplessness generated in the early stages of acculturation (Baptiste, 1990; Ishiyama, 1989). The established residents in the group could also act as positive role models representing the successful negotiation of a bicultural identity for those struggling with a more recent sense of loss and the immediate stresses of transition to a new cultural context (de Anda, 1984).

Language Issues. As language seems to be of central importance, any programming should include additional language training. A review by Berry et al. (1987) found that among all immigrant groups researched over a number of studies, a greater knowledge of English resulted in lower self-reported stress levels. It is easy to imagine how demanding it would be to attempt high school courses in an unfamiliar language; support in this area would be most beneficial for the recent immigrant group. Tannenbaum (1990), has developed an "English Conversation Group" model for working with Vietnamese adolescents. She believes this program allows the facilitator to make positive therapeutic interventions without raising the stigma of mental health issues. Zambrana et al.

(1989), suggest that additional language classes should encompass not only the adolescents themselves, but also their related family members, to offset the burden placed on these adolescents when they become more proficient in the language than the adults in their lives are.

General Orientation. Nann (1990) has guided the development of Canadian government services for recently immigrated families with the following principles: "1) All immigrants who come to Canada share some common settlement experiences; 2) A transitional service based on a bilingual and bicultural approach (i.e.: Anglo-Canadian and the immigrants own language and culture) can ease the settlement process and facilitate the integration of immigrants into Canadian life; and 3) A school-based service is an effective and efficient way of reaching families with children in this age group." (p. 129) Whatever specific aspects the programming entails (and there is much evidence to suggest that the detailed needs should come directly from the ethnic minority students themselves) the approach "must be conceptualized from the perspective of promoting healthy development, rather than from the perspective of diagnosing disturbance" (Hicks et al., 1993, p. 81). As well as avoiding a deficit perspective, as noted above, Hicks et al. recommend the use of an ecological perspective including the adolescents, their families, and the community as separate but interacting systems, again emphasizing the need for the education of the majority population as to the experiences and the strengths of minority students. Also, according to these authors, a developmental perspective which takes into account the length of residence in Canada (or the stage of ethnic identity), should be fostered. These three perspectives should be used as the guiding principles directing any interventions for ethnic minority adolescents.

Limitations

There are a number of important limitations which bear on the

generalizability of the results of this study. The foremost issue is the low numbers of subjects in several of the ethno-linguistic groups resulting in low subject numbers in some cells of the statistical analyses. Increased numbers of participants would lend credence to the results found here. Another limiting factor is the lack of data from early school leavers. A number of reviews on ethnic minority adolescents contend that school-based studies which do not account for students who have dropped out, likely underestimate the needs of minority students (Dryfoos, 1990; Hoberman, 1992). There is empirical support in the literature for a negative "fit" between the student and the school as a major contributing factor in the decision to leave school (Greene, 1993; Pawlovich, 1986). Because schools tend to provide a better fit for majority students, minority adolescents may be at high risk for leaving school early (Dryfoos, 1990). As the data utilized in this study are representative only of adolescents who have chosen to stay in school, the health-related needs which have already caused some students to abandon their education are not directly assessed here. It is possible that some of the high needs assessed in this study (for example, difficulties with comprehension in the classroom and discrimination experienced at school) may reflect the process that culminates in early leaving for minority students. Data on the health-related needs drawn directly from early school leavers could provide important evidence to support programming which might assist in addressing the needs of these youth in school and providing a better fit which allows them to complete high school (Cardenas et al., 1993).

Another major limitation of the present study was the lack of socioeconomic data. Because poverty and minority status are often confounded (Smith, 1985), it may well be that poor majority adolescents have some similar needs to those expressed by minority adolescents. As well, those minority adolescents not experiencing impoverished conditions may have different

concerns. An assessment of socioeconomic status would allow an understanding of how poverty affects the needs of all adolescents and possibly confounds our perception of the experience of ethnic minorities (Feagans & Bartsch, 1993).

A third limitation is the use of ethno-linguistic categories to group minority students, rather than some measure of ethnic identity. The use of language to categorize minority students may be the reason that no ethno-linguistic subgroup differences were found in the analyses of the minority data. There are likely to be differences within the ethno-linguistic groups in level of ethnic loyalty, and/or stage of acculturation (Atkinson & Thompson, 1992). For example, within the Spanish category the participants could be as varied as an El Salvadorian refugee, an upper class Colombian, or a second generation Canadian with parents who immigrated from Chile; the current experiences of each of these individuals would be very different. Viewing immigrants from the same global region or the same language category as homogeneous negates their within group diversity (Meleis, Lipson, & Paul, 1992). Minority members sharing the same ethno-linguistic label are not all the same.

Measuring the level of acculturation by the length of residence in Canada is another draw back. According to Walsh and Walsh, this is a "crude measure of an extremely complex process" (1987, p. 581). There is a need for more qualitative research to get at the "fuzzy concepts of the complexity of self in the acculturation process" (Hoffman, 1990, p. 276). This study would have been improved upon by administering a more specific measurement of acculturation to the minority students along with the health needs survey, as well as by some interviews of minority adolescents to check the relevance of the findings.

There is also the possibility that the students using English as a second language misunderstood some of the items on the questionnaire. Metaphoric understanding of the questions based on language difficulties are a source of

concern in this study. The suspected misinterpretation of "special education classes" is a case in point. Translation of surveys into the respondents first language is recommended (Ponterroto, 1988; Rogler, 1989). Translating the questionnaire was considered by the focus groups at the high schools, but costs were prohibitive for this study.

Future Research

Future research aimed at developing policies and programming specific to the needs of ethnic minority adolescents should take the above limitations into consideration. At the very least a larger sample size and translations of the survey instrument into the major first language groups would add validity to any investigation of ethnic minority needs. The inclusion of some assessment of ethnic identity and/or level of acculturation would also be an improvement. A more intensive, interview based qualitative study would likely access the health-related needs of this group with more clarity.

A qualitative study could provide a more definitive understanding of the coping strategies, effective and ineffective, presently used by these students, which would augment our ability to intervene with positive, preventative programming. Possible strategies for an intensive qualitative study would include the interviewing of a number minority students in two separate categories: that of recent early school leavers, and recent successful graduates. Questions addressing the risk and protective factors leading to the opposing outcomes in the lives of these minority adolescents, could provide invaluable information for the planning of supportive policies and programs.

Conclusions

Just as the literature describes, the results of this study suggest that minority adolescents have higher needs than their majority peers and more recent immigrants have higher needs still. The concepts that the tasks of

adolescence are made more complex by ethnic minority status, and that this complexity increases for those newest to the acculturation process, are supported by the data drawn here. This research supports the need to increase our sensitivity to the ethnic subgroups within the adolescent population, especially as there is a demographic trend towards a higher proportion of ethnic minority youth in Canadian society in the future. The concern that studies which neglect to distinguish between the majority data and the data representing ethnic minorities will likely submerge important distinctions (Humm-Delgado & Delgado, 1986; Sue & Sue, 1990), is justifiable according to the results found in this study.

From the perspective of health promotion and CSH, minority adolescents' requirements should be identified and addressed if the goal is for all adolescents to become healthy, fully functioning members of society. Care must be taken to avoid:

> "an introspective approach to health that fosters victim blaming and stigmatization, ignores critical social, economic and environmental issues that have major impacts on health, and further encourages an already unhealthy level in our society of concern for personal, rather than societal well-being" (Becker, 1993, p. 5)

This comment speaks to the need for concern over the conditions of poverty due to un- or underemployment which many ethnic minority group members experience in Canadian society, as well as to the condoning of racial discrimination and stereotyping, all of which impact on the health of minority youth. The focus on programming to improve the well-being of minority adolescents must address these issues and consequently must not ignore the need to educate the majority population.

To be an ethnic minority youth in Canadian society is to experience the difficulties of "living-between-two-cultures" (Nguyen, 1992, p. 219) with the

consequence, as evidenced in this study, of higher health-related needs. However, given supportive programming, adolescents negotiating the challenge of integrating two cultures have an opportunity for self-understanding and the development of health enhancing behaviors which is unmatched by the experiences of majority youth.

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Appendix A

Student
Health Needs Survey

The **purpose** of this survey is to develop a picture of the **health-related needs of students.**

- Feel free to omit any questions which you feel uncomfortable answering
- However, the more questions you answer, the better picture we will have of what students think about these issues.

Answer Sheet Number

In your survey you will find two **ANSWER SHEETS.**

On the **upper right hand corner** of each answer sheet we have stamped a **number.** This number will help us sort the answer sheets into groups (student, parent, or school personnel).

We cannot tell who you are using this number!
The survey is anonymous. All answers will be strictly confidential.

Using an **H.B. pencil:**

- **write** this number in the "STUDENT ID NUMBER" section on each answer sheet
- **fill in** the matching circles below each number (see example below)
- on the answer sheet marked "**TEST 1**" **fill in** the last 2 columns with a **10**
- on the answer sheet marked "**TEST 3**" **fill in** the last 2 columns with a **30**

Example:

This is how it would look if your number was: **12548**

And you added a **10** for the answer sheet marked "**TEST 1**"

STUDENT ID NUMBER						
(0)	(0)	(0)	(0)	(0)	(0)	(0)
(1)	(1)	(1)	(1)	(1)	(1)	(1)
(2)	(2)	(2)	(2)	(2)	(2)	(2)
(3)	(3)	(3)	(3)	(3)	(3)	(3)
(4)	(4)	(4)	(4)	(4)	(4)	(4)
(5)	(5)	(5)	(5)	(5)	(5)	(5)
(6)	(6)	(6)	(6)	(6)	(6)	(6)
(7)	(7)	(7)	(7)	(7)	(7)	(7)
(8)	(8)	(8)	(8)	(8)	(8)	(8)
(9)	(9)	(9)	(9)	(9)	(9)	(9)

Do not write your name on the answer sheet!

Find the section marked:
TEST 1
on your first answer sheet

Please answer the following questions by **filling in** the appropriate circle **on the answer sheet provided**. **Do not write in this booklet!**

Example: If your response to question **1.** was **B** (female), your answer sheet would look like this:

1.	A	B	C	D	E
	(1)	(2)	(3)	(4)	(5)

Background Information:

Are you male or female?

1.	A	B
	Male	Female

How old are you?

2.	A	B	C	D	E
	15	16	17	18	or older

What grade are you in?

3.	A	B	C	D
	10	11	12	12 repeat

What is your first language? **OR**

4.	A	B	C	D
	Arabic	English	Chinese	Punjabi
5.	A	B	C	
	Spanish	Vietnamese	Other	

How long have you lived in Canada?

6.	A	B	C
	Less than 6 years	6 to 10 years	more than 10 years

Who are you currently living with?

7.	A	B	C	D
	Parent(s)	Other relatives	Foster/group placement	Independent Living

How many hours per week do you spend at a job(s)?

8.	A	B	C	D	E
	None	1-5	6-10	11-20	more than 20

Approximately, what is your present academic average?

9.	A	B	C	D
	80-100%	65-79%	50-64%	49% or less

Instructions:

Read the statement at the beginning of each question. Focusing on your **own personal needs**, fill in the appropriate circle **on the answer sheet provided**:

A If you strongly disagree.
B If you disagree.
C If you don't feel strongly one way or the other (neutral).
D If you agree.
E If you strongly agree.

I. Services needed:

A. Physical Health

It is important to me **personally** for the school to provide...	Rate each item				
	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
10. Physical fitness programs	A	B	C	D	E
11. Stop smoking programs	A	B	C	D	E
12. Drug or alcohol abuse programs	A	B	C	D	E
13. Healthy weight management programs	A	B	C	D	E
14. First aid for minor injuries	A	B	C	D	E
15. Breakfast or lunch programs	A	B	C	D	E
16. More opportunity to talk to the school nurse	A	B	C	D	E
17. Referral to a doctor or clinic	A	B	C	D	E
18. Counselling about health problems	A	B	C	D	E
19. Support services for students with physical disabilities	A	B	C	D	E
20. A chance to talk to a nutritionist	A	B	C	D	E
21. Counselling about how to deal with eating disorders like anorexia or bulimia	A	B	C	D	E
22. Information and referral about testing and treatment for infectious diseases like mono or hepatitis	A	B	C.	D	E
23. More sports programs	A	B	C	D	E
24. Programs promoting healthy teeth and gums	A	B	C	D	E
25. Better fitness / weight facilities	A	B	C	D	E
26. Increased medical services	A	B	C	D	E
27. In-school medical clinic	A	B	C	D	E
28. Eye testing	A	B	C	D	E
29. Hearing testing	A	B	C	D	E

Remember: Your answers are confidential.
You can skip uncomfortable questions.

B. Counselling

It is important to me **personally** that a counsellor in the school be available to...	Rate each item				
	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
30. Listen to my personal problems	A	B	C	D	E
31. Help me learn how to cope with my feelings like stress, depression, sadness etc.	A	B	C	D	E
32. Listen to my thoughts about suicide	A	B	C	D	E
33. Provide information to help me decide what courses and jobs I would like	A	B	C	D	E
34. Provide information on and referral to community resources like social workers, counsellors, etc.	A	B	C	D	E
35. Help me to deal with social workers, police, etc.	A	B	C	D	E
36. Help me learn how to cope with the death of someone I know	A	B	C	D	E
37. Listen to my concerns about spiritual issues	A	B	C	D	E
38. Help me be more successful academically	A	B	C	D	E
39. Help me deal with concerns about my personal appearance	A	B	C	D	E
40. Set up a peer counselling program	A	B	C	D	E
41. Listen to me in a non-judgmental manner	A	B	C	D	E

C. Sexuality

It is important to me **personally** for the school to provide...	Rate each item: Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
42. Counselling and referral to get tested and treated for sexually transmitted diseases	A	B	C	D	E
43. Counselling and referral to get tested and treated for HIV	A	B	C	D	E
44. Counselling about AIDS	A	B	C	D	E
45. Counselling and referral for birth control	A	B	C	D	E
46. Special help with my pregnancy or my girlfriend's pregnancy	A	B	C	D	E
47. Time to talk alone with a trusted teacher / counsellor about sex	A	B	C	D	E
48. Counselling and referral to deal with sexual abuse	A	B	C	D	E
49. Condom vending machines in the school	A	B	C	D	E
50. Counselling and referral for pregnancy testing	A	B	C	D	E
51. Counselling and referral to deal with sexual assault or rape	A	B	C	D	E
52. Counselling about the risks involved in prostitution and how to deal with pressures to become involved	A	B	C	D	E

Notice: Your next answer should be #53 on the front of your first answer sheet.

D. Family / Home Life

It is important to me **personally** for the school to provide...		Rate each item				
		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
53.	Counselling about problems at home	A	B	C	D	E
54.	Counselling and referral to deal with physical or emotional abuse at home	A	B	C	D	E
55.	Support in talking to my family when things go wrong	A	B	C	D	E
56.	Help in finding and paying for a place to stay	A	B	C	D	E
57.	Programs teaching me to be a good parent	A	B	C	D	E
58.	Day care for my child(ren)	A	B	C	D	E
59.	Counselling about my parents' divorce	A	B	C	D	E
60.	Counselling about how to cope with step-family issues	A	B	C	D	E
61.	Help coping with being separated from my extended family living in another country or province	A	B	C	D	E
62.	Counselling about dealing with my family's poverty	A	B	C	D	E
63.	Support in talking to my family about dating and relationships	A	B	C	D	E
64.	Counselling about how to cope with cultural and family expectations about marriage	A	B	C	D	E
65.	Counselling about how to deal with my feelings about alcoholism in my family	A	B	C	D	E

E. School Performance

I would **personally** benefit in terms of my school performance if I...		Rate each item				
		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
66.	Found my classes more interesting	A	B	C	D	E
67.	Understood my school work more easily	A	B	C	D	E
68.	Was able to read better	A	B	C	D	E
69.	Was more motivated to attend school	A	B	C	D	E
70.	Felt more supported by parents	A	B	C	D	E
71.	Was in more special education classes	A	B	C	D	E
72.	Was taught more relevant career and life skills	A	B	C	D	E
73.	Had more access to tutoring for English, Math, etc.	A	B	C	D	E
74.	Had a longer break at lunch time	A	B	C	D	E
75.	Got into less trouble over my behavior	A	B	C	D	E
76.	Had better study skills	A	B	C	D	E
77.	Had fewer learning problems or concerns	A	B	C	D	E
78.	Was exposed to better teaching methods or style	A	B	C	D	E
79.	Understood English better	A	B	C	D	E
80.	Was offered more course options	A	B	C	D	E
81.	Had more self-confidence in terms of my school work	A	B	C	D	E
82.	Had more time focused on core subjects such as English, Math, etc.	A	B	C	D	E
83.	Spent more time doing my school work	A	B	C	D	E
84.	Was able to tell my teachers when I am having difficulty understanding their requirements	A	B	C	D	E

II. Information or skills needed:

A. Health Promotion

It is important to me **personally** to gain the following information or skills...	Rate each item				
	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
85. How to tell when I am getting sick	A	B	C	D	E
86. How to talk openly about how I feel	A	B	C	D	E
87. Where to get information about my health	A	B	C	D	E
88. How to prevent future health problems	A	B	C	D	E
89. How to avoid behaviors that are risky to my health	A	B	C	D	E
90. How to take more responsibility for my own health	A	B	C	D	E
91. How to choose what help or advice is best for me	A	B	C	D	E
92. How to understand and follow my doctor's orders	A	B	C	D	E
93. How to get Alberta Health Care information	A	B	C	D	E
94. How to find and decide upon a good doctor	A	B	C	D	E

B. Physical Health

It is important to me **personally** to gain the following information or skills...	Rate each item				
	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
95. How to have healthy eating habits	A	B	C	D	E
96. How tobacco use affects my health	A	B	C	D	E
97. How drugs or alcohol affect my health	A	B	C	D	E
98. How to avoid catching an infectious disease like mono or hepatitis	A	B	C	D	E
99. How to accept my appearance	A	B	C	D	E
100. How to prevent myself from getting cancer or heart disease	A	B	C	D	E

Turn over your first answer sheet to the section marked:

TEST 2.

1. How physical fitness affects my health	A	B	C	D	E
2. How to take proper care of my skin, hair, etc.	A	B	C	D	E
3. How to take proper care of my teeth	A	B	C	D	E
4. How to make sure I get enough sleep	A	B	C	D	E
5. How my emotional / mental health affects my physical health	A	B	C	D	E

Remember: Your answers are confidential.
You can skip uncomfortable questions.

C. Sexuality

It is important to me **personally** to gain the following information or skills...	Rate each item				
	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
6. Changes in my body and feelings as I grow up	A	B	C	D	E
7. How sexuality relates to who I am as a person	A	B	C	D	E
8. How to have a healthy pregnancy	A	B	C	D	E
9. How to make healthy decisions about sexual involvement	A	B	C	D	E
10. How to say "no" to sexual involvement	A	B	C	D	E
11. How to prevent sexually transmitted diseases or AIDS	A	B	C	D	E
12. Understanding sexual orientation like homosexuality or bisexuality	A	B	C	D	E
13. How to deal with and make choices about male and female role expectations	A	B	C	D	E
14. Pregnancy options like abortion, adoption, or keeping my baby	A	B	C	D	E
15. What is involved in "making love"	A	B	C	D	E

D. Mental / Emotional Health

It is important to me **personally** to gain the following information or skills...	Rate each item				
	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
16. How to deal with stress by relaxing, positive thinking, etc.	A	B	C	D	E
17. How to work through my problems	A	B	C	D	E
18. How to have confidence in myself	A	B	C	D	E
19. How to make healthy life decisions for myself	A	B	C	D	E
20. How to have healthy self-esteem	A	B	C	D	E
21. How to deal with (not worry about) the future	A	B	C	D	E
22. How to divide up my time between home, school, job, etc.	A	B	C	D	E
23. How to cope with anger, aggression, or conflicts	A	B	C	D	E
24. How to spend or save my money wisely	A	B	C	D	E
25. How to recognize all my feelings and reactions	A	B	C	D	E
26. How to set good goals for myself	A	B	C	D	E
27. How to stand up for myself and be assertive	A	B	C	D	E
28. How to deal with or avoid developing a gambling problem	A	B	C	D	E

E. Peer Relationships

It is important to me **personally** to gain the following information or skills...	Rate each item				
	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
29. How to work out conflicts	A	B	C	D	E
30. How to say "no" when my friends pressure me	A	B	C	D	E
31. How to feel more accepted by others	A	B	C	D	E
32. How to deal with relationships and dating	A	B	C	D	E
33. How to build healthy friendships	A	B	C	D	E
34. How to be more sensitive towards and accepting of different social and cultural groups and sexual orientations	A	B	C	D	E
35. How to deal with discrimination	A	B	C	D	E
36. How to listen	A	B	C	D	E
37. How to be selective about the friends I choose	A	B	C	D	E

Notice: Your next answer should be #38 on the back of your first answer sheet.

F. Family / Home Life

It is important to me **personally** to gain the following information or skills...	Rate each item				
	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
38. How to work out problems or conflicts with other members of my family	A	B	C	D	E
39. How to talk with my parents	A	B	C	D	E
40. How to be more considerate of others	A	B	C	D	E
41. How to cope with my parents' separation or divorce	A	B	C	D	E
42. How to help other members of my family work out their conflicts	A	B	C	D	E
43. How to listen	A	B	C	D	E

G. Safety and Accident Prevention

In order to live a safe and accident free life, it is important that I **personally**...	Rate each item				
	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
44. Be a more responsible driver by avoiding drinking and driving, reckless driving etc.	A	B	C	D	E
45. Stay out of trouble with the law	A	B	C	D	E
46. Learn to give first aid and CPR	A	B	C	D	E
47. Wear protective sports equipment such as a bicycle helmet	A	B	C	D	E
48. Use a seat belt	A	B	C	D	E
49. Learn to drive through a school based driver's education program	A	B	C	D	E
50. Develop outdoor and survival skills	A	B	C	D	E

III. Environmental changes needed:

A. School Building and Grounds

It is important to me **personally** for the school to...	Rate each item				
	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
51. Put healthier food in the vending machines	A	B	C	D	E
52. Make healthier meals in the cafeteria	A	B	C	D	E
53. Not allow smoking at all	A	B	C	D	E
54. Make sure there is no alcohol or drugs in the school	A	B	C	D	E
55. Do something to stop damage to school property	A	B	C	D	E
56. Clean up the washrooms	A	B	C	D	E
57. Control the temperature in the school	A	B	C	D	E
58. Clean up the school building and grounds	A	B	C	D	E
59. Make sure there is fresh air in the school	A	B	C	D	E
60. Have the cafeteria open longer hours	A	B	C	D	E
61. Reduce the amount of garbage and litter scattered around the school	A	B	C	D	E
62. Improve the appearance of the lockers	A	B	C	D	E
63. Provide better lighting	A	B	C	D	E
64. Use healthier foods in fund raising	A	B	C	D	E
65. Control the noise in the school	A	B	C	D	E
66. Deal with environmental problems like pollution	A	B	C	D	E
67. Put soap dispensers in the washrooms	A	B	C	D	E
68. Provide disposable paper toilet seat covers	A	B	C	D	E
69. Provide tampon dispensers in the cubicles	A	B	C	D	E
70. Put healthier food in the school store	A	B	C	D	E
71. Add more classroom windows	A	B	C	D	E
72. Improve overall appearance of washrooms/change rooms	A	B	C	D	E
73. Install school clocks that work	A	B	C	D	E

B. School Atmosphere: Involvement with other Students

The following changes to the school atmosphere are important to me **personally** ...	Rate each item				
	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
74. Reducing sexual discrimination by giving males and females equal opportunities	A	B	C	D	E
75. Being more accepting of different racial or cultural groups	A	B	C	D	E
76. Being more accepting of, and friendly towards, one another	A	B	C	D	E
77. Becoming more involved or active in school life	A	B	C	D	E
78. Doing something about other crimes at school like stealing	A	B	C	D	E
79. Increasing people's understanding of disabilities like deafness, learning disabilities, etc.	A	B	C	D	E
80. Being more considerate of others	A	B	C	D	E
81. Being offered more social or extracurricular activities like clubs, games, crafts, etc.	A	B	C	D	E
82. Learning more about human rights	A	B	C	D	E
83. Addressing incidents of sexual harassment	A	B	C	D	E
84. Starting a student crime watch program to deal with crime at school	A	B	C	D	E
85. Paying more attention to trespassing at the school	A	B	C	D	E

C. School Atmosphere: Student Involvement with Teachers and Staff

The following **changes** to the school atmosphere are important to me **personally** ...	Rate each item				
	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
86. My teachers understood more about and knew how to deal with the problems I face outside of school	A	B	C	D	E
87. There were better relationships between teachers and students	A	B	C	D	E
88. My teachers were feeling less stressed	A	B	C	D	E
89. I could have more input into rules and assignments	A	B	C	D	E
90. The school recognized and dealt more effectively with teachers who abuse students	A	B	C	D	E
91. There was better communication between school and home	A	B	C	D	E
92. My teachers were screened for records of sexual abuse	A	B	C	D	E
93. There were clear consequences for not following school rules	A	B	C	D	E
94. My teachers didn't discriminate against students on the basis of sex, race, or culture	A	B	C	D	E
95. My teachers were more understanding of my workload and stress	A	B	C	D	E
96. The resource officer was available more often	A	B	C	D	E
97. My teachers made their behavioral expectations more clear and consistent	A	B	C	D	E
98. Teachers, students, and parents reached more agreement about school rules	A	B	C	D	E

Notice: Your next answer should be # on the back of your first answer sheet.

E. Home Atmosphere: Family

I would **personally** benefit from the following changes in my family....	Rate each item				
	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
There was better communication and understanding within my family	A	B	C	D	E
My parents were not feeling so stressed	A	B	C	D	E
Our family had enough money for our basic needs like food, clothing, shelter, etc.	A	B	C	D	E
My parents had less conflict with one another	A	B	C	D	E
My parents didn't abuse alcohol	A	B	C	D	E
We could have more agreement about family rules	A	B	C	D	E
I felt more caring, support, and respect from my parents	A	B	C	D	E
The people in my family had fewer demands on their time	A	B	C	D	E
My parents had more support / training as parents	A	B	C	D	E
I was allowed to be more independent	A	B	C	D	E
My parents were more understanding about my workload and stress	A	B	C	D	E
Other family members didn't abuse alcohol	A	B	C	D	E
There was less violence in my home	A	B	C	D	E
I had more privacy at home	A	B	C	D	E
I had fewer expectations placed on me at home	A	B	C	D	E
I had more expectations placed on me at home	A	B	C	D	E

IV. General Needs Areas

In order to identify which health-related areas you think need the most attention, we have one final question for you.

For me **personally**, the most important health needs addressed in this survey are...	Rate each item				
	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Physical health (nutrition, fitness, alcohol, illness)	A	B	C	D	E
Sexuality (STD/AIDS, pregnancy, sexual abuse, making choices)	A	B	C	D	E
Counselling (personal problems, suicide, choosing jobs)	A	B	C	D	E
Family and home life (communication, abuse, conflict)	A	B	C	D	E
School performance (study skills, special classes, tutoring)	A	B	C	D	E
Health promotion (recognizing symptoms, finding help)	A	B	C	D	E
Mental/emotional health (ways to cope with problems like anger, stress, low self-esteem)	A	B	C	D	E
Peer relationships (peer pressure, acceptance, building relationships)	A	B	C	D	E
Safety and accident prevention (safe driving, first aid, CPR)	A	B	C	D	E
Home atmosphere (support, communication, alcohol abuse, family rules)	A	B	C	D	E
Involvement with teachers and staff (teachers under stress, school rules, relationships between teachers and students)	A	B	C	D	E
Involvement with other students (racism, understanding disabilities, friendliness)	A	B	C	D	E
School building and grounds (maintenance, litter, vandalism, healthy food)	A	B	C	D	E
Independent living atmosphere (roommate issues, finances, support, conflict)	A	B	C	D	E

Have you filled in your answer sheet number on both answer sheets? Please double check!

Thank-you for taking the time to answer these questions!

Appendix B

Health Needs Survey

NOTE:

- Survey to be administered in **period 2R, June 2**
- Some students will receive first language instructions for their parents. Please check for the envelopes for specific student names.
- All pencils, surveys, and answer sheets should be returned to the office.

Instructions for Student Administration

I. Materials

The students in your class will each receive an envelope containing :

A. A cover letter introducing the 'Partners for Healthy Living' project and the survey process to their parents

B. 3 Needs Assessment surveys labeled:

1. Student Health Needs Survey (blue) and answer sheets
2. Parent Health Needs Survey (yellow)
3. Health Needs Survey - Parent Views of Adolescent Health Needs (pink)

II. Student Instructions

Please have your students open the envelope and find the survey designed for STUDENTS (blue) and the 2 computer answer sheets.

The cover letter and remaining surveys are to be taken home to their parent/guardian(s).

Parents are invited to complete the surveys and have their child return them sealed in the envelope.

Once your students have located the STUDENT SURVEY, please give them the following brief introduction to the project.

This survey is being administered to assess the health needs of the students at High School. This is a chance for you to have direct input into the types of health related programs to be focused on at this school.

Now provide them with the following instructions...

Please listen carefully to the following instructions:

1. **Read the introduction on the survey.**

2. **Locate the answer sheets enclosed in the envelope.**

(Walk them through the numbering instructions so each student carefully fills in the STUDENT ID NUMBER section using the **number stamped on the upper right hand corner** of the answer sheet. Remind them **NOT** to fill in their name or to use their own student ID.)

3. **Turn to page 2 and answer the Background Information.**

(Point out to them that only one of lines of #4 and #5 will be filled out on the answer sheet. This will leave one line blank.)

4. **Turn to the first question and read the Instructions carefully. Answer the remainder of the questions in the same way. Feel free to ask for help if you need it.**

(If your students have questions you cannot answer, please call the Main Office. Someone will be available to assist you.)

III. Completed Surveys

At the end of the period have your students hand in their surveys in one pile and the answer sheets in another. Please return any unused envelopes, pencils, student surveys and answer sheets to the main office.

Thank-you for your co-operation

Partners for Healthy Living Committee