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Youth stress, support, coping skills and depression: Developing a model for primary prevention in the high schools

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Youth Stress, Support, Coping Skills and Depression: Developing a Model For Primary Prevention in the High Schools

By

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Bachelor of Arts, Wilfrid Laurier University, 1987

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ABSTRACT

This study examined the needs and resources of Galt Collegiate Institute and the City of Cambridge in order to develop a primary prevention program for adolescent stress, support, and coping skills. Two hundred and ten high school students (grade 9 to OAC) completed an adolescent experiences questionnaire including measures on daily hassles, social support, coping skills, depression, and affect. As well, ten individuals from the community completed an interview focussing on program ideas and available resources. Multiple regression analyses of the student data revealed that hassles were directly related to negative affect and depression, and coping skills were directly related to positive affect and inversely related to depression. Social support was directly related to positive affect and inversely related to depression. Negative affect was directly related to depression while positive affect was inversely related to depression. There were also significant gender and age differences in stress, support, coping, affect, and depression which are discussed. Overall, the results indicate that there is a need for adolescent prevention programs in the Cambridge area. A model for a primary prevention program for high school students is discussed in relation to the results of the present study.

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Overview and Statement of Purpose

My thesis is derived from a proposal written by the Canadian Mental Health Association (CMHA) of Waterloo Region and submitted to the Ministry of Health to provide funding for a suicide prevention project at Galt Collegiate Institute in Cambridge. The proposal was written in October 1987, but because of the vague research background of the proposal, the Ministry did not support the project. The proposal outlined a two year primary prevention pilot project in which a needs assessment and resource mobilization would be carried out in the first year and the following year would entail the implementation of the program. Unfortunately, the Ministry of Health required more substantial evidence of a need in the area than could be assessed at that particular time. The project was then put on hold since the resources to continue further research were lacking. Recently, an advisory committee consisting of school personnel, agency representatives, and community members was established to collect information on needs and resources, propose a model for suicide prevention, and assist CMHA in rewriting the proposal.

It is my belief that to provide a successful intervention, one must search for the precipitating factors which influence adolescent suicide rather than targeting the end result. Presently, suicide prevention programs are targeted toward suicide awareness and education. Having reviewed the literature on school-based suicide prevention programs, attended the first national conference on suicide prevention in Canada, and had several discussions with the advisory committee, I became concerned that these programs did not deal with the risk factors that lead to suicide and depression and that these programs were not effective primary prevention for the problem of adolescent suicide. For example, Shaffer et al. (1990) found that after participating in a suicide prevention program, high school students who had previously attempted suicide still believed that suicide was a solution for their problems. Moreover, many of the students who had attempted suicide stated that they would not recommend the program to other students who had contemplated suicide because of the negative feelings it might engender.

The considerations mentioned above have led me to redefine the problem. Redefinition or reframing of the problem is often a critical step for community intervention (Rappaport & Seidman, 1986). A key distinction that has guided my thinking is the difference between primary and secondary prevention. Primary

prevention efforts seek to prevent the problem (in this case, suicide) from ever occurring by reducing risk factors and strengthening resistance factors that are known to be associated with the problem. Secondary prevention, on the other hand, is a form of early intervention soon after the problem develops. In this case, secondary prevention would focus on students who are contemplating suicide with the goal of preventing suicide attempts or completions.

Bearing this distinction between primary prevention and secondary prevention in mind, I have focused on two separate goals for this project. The first goal is to develop a model for the primary prevention of depression in adolescence. The model focuses on the prevention of depression, rather than suicide per se, for three reasons. First of all, previous research has shown that depression is strongly correlated with suicide ideation in adolescents (Reynolds, 1988). Second, after considerable thought and consultation with my thesis committee, I decided that I did not want to include a suicide ideation questionnaire in my research. I was concerned that such a questionnaire might engender negative and potentially destructive thoughts and feelings in the young men and women who were asked to complete the questionnaire. Third, I wanted the research to highlight and emphasize the risk and resistance

factors associated with suicide and to de-emphasize the focus on suicide. Focusing on risk and resistance factors would orient the advisory group and me to primary prevention programs emphasizing stress management, coping skills training, and social support, rather than to the predominant programs which focus on suicide education and awareness.

Two steps are undertaken to develop a model of primary prevention of depression and suicide for adolescents. First, I review the literature on risk and resistance factors associated with depression and suicide. The literature review is used to generate a model of adolescent depression which I tested on students at Galt Collegiate. Second, I review programs which could be used at Galt Collegiate to prevent depression and suicide. These programs focus on strengthening resistance factors (e.g., coping skills, social support) and reducing risk factors (i.e., youth stress).

Another goal of this project is to propose a secondary prevention program for students who have suicidal thoughts. The secondary prevention model attempts to coordinate peers, school counsellors, and community agencies. Through key informant interviews and archival information, data on the number of suicide threats and attempts were gathered from the school guidance counsellors and the local police department.

Secondary prevention was targeted to students at risk for developing suicidal thoughts and actions as well as school counsellors, agencies, and teachers. The secondary prevention program focused on suicide awareness, education, and intervention. My thesis, in partial completion of an M.A. degree in community psychology, provides the necessary evidence that is required in order to validate a need for both primary and secondary prevention programs aimed at preventing teen-age depression and suicide in the region of Cambridge, particulary Galt Collegiate Institute.

As a graduate student in community psychology, I am working within the framework of collaborative research. Collaborative research allows for the development of a shared vision amongst all of the individuals involved in the project. It is a participatory approach in which all members have a stake in the development, implementation, follow-up and evaluation of the primary prevention program. The shared ownership of this project was ensured through the school\community advisory committee in which all members of the committee have an opportunity to guide the research process.

It is important to me that I not do research for the sake of research itself, but that I have a practical committment which is stimulated by a community need. Several secondary

schools in the Cambridge area have acknowledged a need for primary and secondary prevention programs for their youths, specifically suicide prevention. The community, therefore, has stimulated my need for further research into the area of adolescent prevention programs in the school system. Value issues cannot be avoided in community research and therefore must be made explicit to all parties involved; it is essential that as researchers we acknowledge our values. The community psychology perspective allows one to give to the community setting rather than to take from the community. "One of the most important measures of the success of the research enterprise has to do with whether the product of that research actually enhances the functioning of the setting" (Price & Cherniss, 1977, p. 226). Finally, the collaborative approach to research requires that evaluation of the project is an ethical obligation. Price and Cherniss (1977) point out that if the community researcher fails to demonstrate an adequate basis for measuring the influence of an intervention, the well-being of the members of the community can be profoundly affected.

The next section begins with a model for adolescent depression and suicide, followed by an outline of the recent literature on adolescent stress, support, coping, affect, and depression. As well, several prevention programs are examined

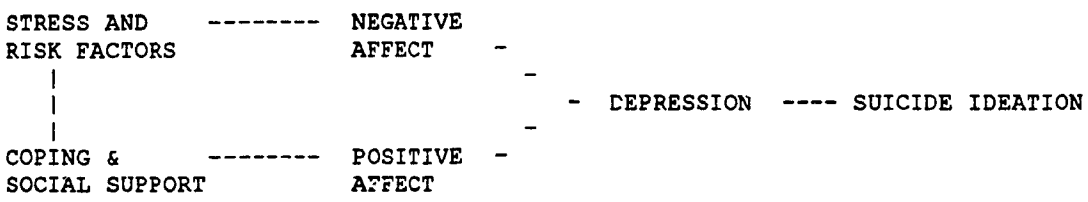
within the framework of the model. Following a review of the literature, several research and action goals are proposed. The methodology section describes the process of the research and the strategies used for collecting data, including a student survey, key informant interviews, and indicator approaches. A review of the findings from the student survey, key informant and student interviews as well as the social indicators, will be followed by a discussion and implications for school interventions.

Literature Review

Model of Adolescent Depression and Suicide

I begin by explaining the model within which I am working. Reviewing the literature on adolescent suicide has caused me to become aware of the numerous factors involved in the experience of being an adolescent. There are several main areas which will be explored as precipitating factors in suicide amongst adolescents, including: stress, social support, coping, affect, and depression.

Table 1
Adolescent depression and suicide model



The first area, stress factors, includes those which occur at any time in a person's life and which influence a person to become uneasy. Hobfoll (1989) has introduced a model of "conservation of resources" to understand the stress process. He argues that losses of individual resources are at the root of stressful circumstances. The model describes a person as, "striving to retain, protect, and build resources and that what is threatening is the actual or potential loss of these valued resources" (Hobfoll, 1989, p. 516). Examples of resources defined by Hobfoll include, but are not limited to: self-esteem, employment, socioeconomic status, and mastery. The personal characteristics, such as self-esteem and skills, act as stress-resistance factors, whereas money and knowledge resources help in attaining other kinds of resources (e.g., tenure, seniority, housing). Adolescents experiencing stress would therefore try to regain a balance in their personal resources, such as increasing their self-esteem or social support. Stress-related

experiences are risk factors because they predispose adolescents to depression and suicide ideation (Cohen, Burt, & Bjorck, 1987). Stress-related factors include hassles experienced by adolescents on a daily basis. Three different sources of stress will be considered in this study: family, peers, and school.

Social support and coping skills are stress-resistance factors that can be related to affect and depression in two ways. First, support and coping can be inversely related to affect and depression. Second, support and coping can buffer the negative impact of stressors on depression and negative affect (Cohen & Wills, 1985). When an adolescent experiences a stressful life event, the chance of that adolescent exhibiting depressive behaviors depends largely on the amount of social support from family, friends, and school, and the level of the adolescent's coping skills. When an adolescent experiences stress without the support of a social network or without adequate coping skills, the adolescent is at a greater risk of developing depression than if she or he has adequate support and coping skills. The indirect effect of coping and social support on affect and depression is referred to as the "stress-buffering" hypothesis (Cohen & Wills, 1985).

The next component of the model is positive and negative affect. Psychological well-being has been described in the

research as composed of two separate entities: positive and negative affect (Bradburn, 1969). Positive affect is the extent to which one feels happy, energetic, and alert. The absence of positive affect reflects a lack of energy, sadness, and lethargy. In contrast, negative affect is the extent to which one experiences negative feelings, for example, anger, disgust, guilt, and fear. These two concepts originated from the early work of Herzberg (1966) on the basic needs of people. He argues that there are two basic needs: the need to grow and the need to avoid pain. Fulfilment of the "growth need" can lead to positive affect, whereas failure to meet the "pain-avoidance need" produces negative affect. Bradburn (1969) also argues that positive affect and negative affect are independent of one another, which is the basis of two-factor theory.

Research has confirmed that positive affect and negative affect are not strongly correlated (Watson, Clark, & Tellegen, 1988). Moreover, positive affect and negative affect each tend to have different correlates. For instance, life stress or hassles is related to negative affect, whereas social support is related to positive affect. Positive events have been found to be directly related to positive affect but unrelated to negative affect (Zautra & Reich, 1983). On the other hand, negative affect is related to the experience of negative events.

Similarly, Nelson (1990) found that life strains were directly related to negative affect, whereas social support and coping were directly related to positive affect in a study of 90 women.

The final component of the adolescent model involves the development of depression and the formation of suicide ideation. Suicide ideation is defined as "the domain of thoughts and ideas about: death, suicide, and serious self-injurious behaviors, including thoughts related to the planning, conduct, and outcome of suicidal behavior" (Reynolds, 1987, p. 4). The adolescent questionnaire does not provide a measure for suicide ideation, however, a question about hurting oneself will be extracted from the depression scale in order to examine any significant relationships between suicide and the precipitating factors outlined in the model. Examples of the symptoms of adolescent clinical depression include: problems sleeping, change in eating patterns, withdrawal or moodiness, or any other unusual behaviors (Polly, 1986). If an adolescent explores the possibility of suicide long enough, such thoughts may then become threats, attempts, and eventually deaths. Part of the intervention of this project is to prevent the occurance of the final stage of the adolescent suicide model. This requires one to intervene at the level of stress, support, and coping, as outlined in the model. While it is difficult to prevent

adolescents from experiencing stress, there is a lot that can be done to lessen the impact of this stress.

The research will also consider the role of gender in the stress and coping process. Adolescent stress, support, and coping may be different for young women and men. Gender differences may arise in support systems, coping skills, daily hassles, affect, and depression. The role of gender will be considered throughout the literature review, and the research will test to see if any gender differences/similarities appear among the students at G.C.I. on the stress process variables. The following literature review describes the components of the adolescent suicide model in detail.

Daily hassles. Family and other life stressors are important sources of risk for adolescent depression and suicide. The literature illustrates a strong relationship between life stress and negative affect and depression (Compas, et al., 1986). The relationship between life stress and depression has been demonstrated to exist not only for people who have committed suicide but also for people who have thought about or attempted suicide (Patros & Shamoo, 1989). Stress is a natural occurrence in the experience of adolescence. Peer pressure and family and school expectations are sources of stress. However, stress factors present a risk to youth who are not equipped with

the appropriate coping skills and support systems. Cohen et al. (1987) argue that the period of early adolescence is one that is characterized by physical changes, conflicts with parents, the importance of peer relationships, and demanding educational experiences. When young people do not have the necessary resources (i.e., coping skills and support systems), these situations can stimulate thoughts of hopelessness and lead to self-destructive behavior.

There is some controversy as to whether one should examine the existence of major stressful life events\experiences within the adolescent's life, or whether one should determine on a daily basis the number of hassles the adolescent endures. Daily hassles are everyday occurrences that are annoying and stressful. A bad mark on a test, an argument with a boyfriend\girlfriend, or a missed bus on the way to school are all examples of hassles. These hassles are not large enough by themselves to cause a crisis in one's life. However, when several hassles occur everyday and are not dealt with effectively (by talking to someone about them or learning to cope with them), they can become a major influence on developing episodes of depression. On the other hand, stressful life events or life stressors are major occurrences that may appear several times throughout a person's life span, for example, a

death in the family, parental divorce or separation, or failing a grade in school. As well, these life events can have a major influence on adolescent depression if they are not dealt with. For the purpose of this study, a daily hassles scale was used in the student questionnaire, since hassles correlate higher with depression than do negative life events (Reynolds, 1987).

There are several scales in existence today that measure life events\hassles (Swearington & Cohen, 1985; Cohen, Burt, & Bjork, 1987; Reynolds & Waltz, 1988). A study that tested the longitudinal effects of negative events on adolescents' psychological functioning found that negative life events were positively related to depression and anxiety and negatively related to self-esteem (Cohen et al., 1987). Swearington and Cohen (1985) also found stress factors to be highly correlated with psychological problems. "An accumulation of recent negative events is positively related to psychological and physical health problems" (p. 69). An adolescent who experiences a great deal of hassles or stressors becomes "on edge", especially when there are no social networks to support him or her. The accumulation of these hassles can cause an adolescent to become depressed. Stress does not always cause depression or lead to suicide, but it is one of the major risk factors for depression.

Gender differences appear in the kinds and amount of stress experienced by adolescent boys and girls. Wagner and Compas (1990) examined the relationship between gender, stress, and psychological symptoms during adolescence. They suggest that self-esteem is perceived in different ways by young men and women, and, depending on this perception, men and women may view different kinds of events as stressful. For example, self-esteem among adolescent women is closely linked to interpersonal relationships, whereas self-esteem among adolescent men is related to achievement. Females reported more stress in their relationships with peers and family members than did males (Wagner & Compas, 1990). As suggested by Slavin and Rainer (1990), adolescent females may be at risk for developing stress related to negative events occurring in the lives of others in their social network. Female support networks are demanding and require a lot of attention to others' needs (Slavin & Rainer, 1990). However, adolescent boys, as suggested by Wagner and Compas (1990), may also be at risk for experiencing stress and psychological symptoms related to achievement-oriented events. These gender differences need to be examined when studying the stressful life events experienced by adolescents, particularly if prevention programs focus on these factors to reduce adolescent depression and suicide ideation.

Social support. In studies of social support as a resource for coping among adolescents, researchers have examined both the direct relation between social support and adjustment and the interaction of life events and social support in relation to affect and depression (Compas, 1987; Cauce et al., 1982; DuBois & Hirsch, 1990). Cohen and Wills (1985) distinguish between the main effects and "buffering" effects of social support. The main effects model suggests that social support has a beneficial effect on positive and negative affect and depression even if the person is not experiencing stress. A large social network provides a person with regular positive experiences related to an overall sense of well-being. In contrast, the "buffering" effects model suggests that support protects or "buffers" a person from the harmful influence of stressful life events or daily events (Cohen & Wills, 1985). Cohen and Wills (1985) outline four social resources that operate as stress buffers, which include: emotional support (increasing one's self-esteem), informational support (helping one understand and cope with problems), social companionship (spending time with others), and instrumental support (providing financial aid or material goods). Evidence suggests that social support moderates or "buffers" the effects of significant life events by an interaction with the level of stress experienced

(Rudd, 1990). An adolescent who receives positive social support, either through friends or family, will be able to handle the stress experienced by life events\hassles better than the adolescent who lacks appropriate social support.

Sandler and Barrera (1984) found that the relationship between stress and well-being is affected by the amount of social support a person has. As well, Miller and Lefcourt (1983) found that social intimacy is a moderator of stressful life events. In their study of 47 undergraduate students, Miller and Lefcourt (1983) concluded that individuals who do not have an intimate relationship are prone to high levels of emotional disturbance when many negative events and few positive events have occurred.

In the literature on social support and suicide attempters, the general consensus suggests that suicide attempters have smaller social networks and an overall low level of social support. Veiel, Brill, Hafner, and Welz (1988) studied the social supports of suicide attempters and the different roles of family and friends. They found some interesting results which suggest that suicide attempters do not lack in their frequency or intensity of contact but instead "the main deficiencies lay in the breadth and, probably, the variability of the social network" (Veiel et al., 1988, p. 854). Most

adolescents perceive themselves as having several friends with whom they have regular contact (e.g., in the classroom). However, many adolescents do not rely on these peers in times of severe stress. Rather they turn to family support to rely on during times of stress (Veiel et al., 1988).

The extent of social support networks in an adolescent's life has an effect on the well-being of the individual, and it may assist in the management of daily life hassles. Many prevention measures can be derived from the research on social support networks and can be effectively channelled through the school system. Veiel et al. (1988) suggest that support can be increased through "expanding the circle of friends and acquaintances with whom individuals have pleasant interactions, and to provide close relationships in which the individual finds reliable crisis support, instrumental and psychological" (p. 857). Enhancing an adolescent's social support network may serve to increase the adolescent's level of positive affect and decrease the likelihood of depression. Rudd (1990) found an interesting result when looking at social support offered by family and friends of 737 university students. He concluded that friendship networks were not as strong a support for individuals as was the support from family members. Identification of specific situations in which adolescents are

most in need of different kinds of support is essential to further refinement of prevention efforts (Dubois & Hirsch, 1990).

Research on adolescent support demonstrates gender differences. In a study of perceived emotional support among high school students, Slavin and Rainer (1990) confirmed that adolescent females report higher levels of support from nonfamily sources than adolescent males. These nonfamily sources include peers and adults (e.g., teachers and coaches). As well, Slavin and Rainer reported that adolescent females who are experiencing more depressive symptoms view their family members as less supportive to them than adolescents who are experiencing fewer symptoms. " Girls who are experiencing depressive symptoms tend to behave in such a way that their family relationships become less supportive over time" (Slavin & Rainer, 1990, p. 418).

Adolescent males develop many friendships, but with few strong emotional ties with other males, resulting in a large network which does not provide high levels of emotional support. Females, on the other hand, have a "range of caring" which involves a smaller, more supportive network than males (Slavin & Rainer, 1990). Adolescent girls see their relationships with others as an "ethic of responsibility", feeling they need to

take care of the needs of their friends (Wagner & Compas, 1990). Wagner and Compas (1990) argue that the relationships that adolescent girls maintain may in fact hinder the development of psychological symptoms by securing the support needed to meet the demands of the stressful event. However, as outlined by Slavin and Rainer (1990), adolescent female relationships could result in more distress because of the needs of their networks. It is important to note these differences when designing prevention programs that focus on increasing support among adolescents. For example, peer counselling programs and support groups may be of more benefit to girls than boys (Slavin & Rainer, 1990).

Coping. Coping has been considered to include all responses to stressful events. The research on coping distinguishes between two strategies of coping: problem-focused coping and emotion-focused coping (Folkman & Lazarus, 1980). Problem-focused coping refers to actions of problem-solving and decision-making to change the stressful situation. Emotion-focused coping, on the other hand, refers to relieving the stressful situation by altering one's emotional reaction to the stress. Folkman and Lazarus (1980) refer to coping as the efforts that are made in response to the appraisals of stressful situations. In their study of 1,530 senior public school

students, Glyshaw, Cohen and Towbes (1989) found that problem-focused coping was predictive of positive adjustment in adolescents, whereas emotion-focused coping was not. They stressed that problem-focused strategies should be the focus of preventive intervention programs in the schools. However, Swift et al. (1990) suggest that both problem-focused and emotion-focused coping are predictive of positive adjustment when adolescents are potentially confronted with a violent situation. They suggest that the differences between these two strategies lie in the amount of controllability of the particular stressor. They argue that stressors that are considered controllable are best solved by using problem-focused coping. However, uncontrollable situations (as perceived by the adolescent) are best solved through emotion-focused coping.

Nelson (1990) examined the relationships between stress, support, coping, and positive and negative affect in a study of women's life strains. Having interviewed 90 women at three different intervals over an 18-month period, Nelson suggested that coping could be related to affect, but not over a long period of time. Coping was not a significant predictor in the longitudinal analysis of positive affect. However, he suggested that if assessed in less than a few weeks following the initial interview, coping could exert a causal influence on affect

(Nelson, 1990). Learning to cope with an immediate situation (stressful life event) does not necessarily imply that one will cope with another situation in the same manner. Therefore, Nelson (1990) suggests that successfully coping with a stressful event increases one's positive affect, allowing the person to feel good about him or herself, but only while that event remains a potential stressor.

Adolescents who are depressed and possibly suicidal encounter many stressful conflicts, lack support and guidance, and have poor coping skills (Garfinkel, 1983). Garfinkel distinguishes between attempted and completed suicide in terms of gender differences in coping responses. He argues that male suicide tends to be viewed by family and friends as an impulsive "unexpected catastrophe". On the other hand, females, who attempt suicide more frequently than males, are viewed by family and friends as lacking support from within the family. Others are usually aware that something is troubling the adolescent girl (Garfinkel, 1983). However, adolescent boys' suicidal behavior is viewed as an example of male impulsivity, which can be seen as a lack of problem-solving coping. An impulsive reaction can be a response to inappropriate coping skills for dealing with long-term stress. Impulsivity represents the lack of problem-focused coping, e.g., not being able to think through

a problem. "Suicidal behavior likely represents an impulsive reaction to crisis, superimposed on pre-existing recurrent depression" (Garfinkel, 1983, p. 208). Impulsive behavior and coping strategies will be tested to see if gender differences occur. There has been some research which suggests that there are gender differences in types of coping strategies endorsed by young women and men. Men are more likely to use problem-focused coping, while women are more likely to use emotion-focused coping since women are socialized to be more interpersonally responsive and sensitive, while men tend to be more analytic and task-oriented (Pearlin & Schooler, 1978).

Positive and negative affect. Positive affect is concerned with positive emotional states (Bradburn, 1969), while negative affect refers to emotional distress. These two states are viewed as independent of one another, as suggested earlier by the two-factor theory. Two-factor theory suggests that positive affect is related to coping and social support, whereas negative affect is related to stressful life events. Also suggested by the model is that the interaction of support and coping with hassles may influence negative affect. Nelson (1990) has found support for these hypotheses in a study of women's life strains. He found that women who had a supportive network as well as coping skills scored higher on the positive

affect scale than those with lower levels of support and coping. Life strains were directly related to negative affect. Finally, coping and support both interacted with stress to reduce negative affect.

Gender differences are evident in positive and negative affect in many research studies. Wood, Rhodes, and Whelan (1989) have examined 93 research studies involving a measure of positive well-being for men and women. Throughout their extensive analysis, women reported greater life satisfaction and overall happiness. However, women also tended to report greater levels of fear and sadness than men (Wood et al., 1989). Wood et al. (1989) argued that women, on the average, tend to report more extreme levels of both positive and negative feelings than men, because the female social role model suggests that women are generally more in touch with their internal states and are more free to express these attitudes openly.

Depression. Research has shown that depression and hopelessness play a significant role in the etiology of suicide. Although depression has been found to be present in the majority of those individuals exhibiting suicidal behavior, it is not always depressive thoughts that cause suicide ideation. Some of the signs and symptoms of adolescent depression include the following: problems sleeping, change in school grades,

withdrawal or moodiness, accident proneness, change in eating patterns, or other changes in usual behavior (Polly, 1986). Depression in adolescents shows similar patterns to that of adults and must be taken seriously. Depression is usually a reaction to a combination of many stress factors, without the presence of adequate support networks. Self-destructive behavior is a common coping mechanism exercised by adolescents to deal with depressive states. It may take direct and highly lethal forms such as a suicide attempt, or it may be of a more indirect nature such as substance abuse, self-mutilation and acting out (Board of Education for the City of Hamilton, 1987).

Dysthymic disorders are less severe than major depression but usually last longer, and may be of particular interest to the study of school-based populations (Reynolds, 1987). Dysthymia is defined as, "a pattern of chronic disturbance of mood involving depressed mood (but perhaps an irritable mood in children or adolescents) that occurs in more days than not, for most of the day, for a period of at least one year in children and adolescents", (Rathus & Nevid, 1991, p.251). Typically, major depressive episodes receive attention because of their noticeable symptoms, whereas dysthymic disorders are not as noticeable and may go undetected. Depression is the final stage

of the suicide model before an adolescent begins thinking about suicide. A major antecedent in the depression of adolescents is the loss of a significant other, either through divorce, separation, death or family relocation (Curran, 1987). However, loss may also be experienced, more symbolically, through loss of childhood, loss of an ideal body image, loss of self-esteem, or loss of goals (Patros & Shamoo, 1989). Depression is the final result of a combination of negative life stressors, lack of social support and ineffective coping skills. Many adolescents who reach this stage already possess thoughts of suicide, and intervention at this point is crucial.

Research on adolescent depression has reported a consistent gender difference, with girls showing more depressive symptoms than boys (Reynolds, 1987). Reynolds (1987) has found that in hundreds of samples, girls consistently score 5 to 7 points higher than boys on the Adolescent Depression Scale. Weissman and Klerman (1977) explain that "the long-standing disadvantaged social status of women has psychological consequences that are depressing" (p. 106). They go on to argue that young adolescent women learn to be helpless during their socialization and therefore develop a "limited response repertoire" when they are encountering stressful life events.

Weissman and Klerman (1977) argue that suicide and depression are on the rise for young women.

Prevention Programs

Prevention is one way to deal with adolescent problems. Primary prevention refers to reducing, limiting, or softening one's exposure to a hazardous event or situation (Johnson & Maile, 1987). Primary prevention attempts to reduce the incidence of a problem in the community. Primary prevention strategies can be distinguished from crisis intervention or secondary prevention. Crisis intervention is a secondary mode of prevention in which efforts are made to intervene soon after a problem has developed so as to prevent the existing problem from becoming worse. The program to be developed at Galt Collegiate Institute will include both primary and secondary prevention components. The following section will include a review of some of the documented school-based programs, including suicide prevention.

Review of suicide programs. Many schools, communities, and organizations have responded to the problem of adolescent suicide by developing and implementing suicide awareness and education programs. In the process of achieving all of this, many researchers have neglected to document or report their

programs. Therefore, there is a lack of reference material available on the thousands of programs that have been developed throughout North America. Research on Canadian programs is particularly lacking. Fortunately though, several authors have explored the process of developing suicide prevention programs specific to school populations and have provided a wealth of knowledge for anyone wishing to develop and implement such a program (Polland, 1989; Smith, 1989; Curran, 1987; Johnson et al., 1987; Board of Education for the City of Hamilton, 1987; Polly, 1986; Report on the National Conference on Youth Suicide, 1985).

The Board of Education for the City of Hamilton (1987) has developed a comprehensive suicide prevention program that is frequently used as a model for other school systems. The program focuses on several areas of prevention: increased public awareness, seminars, suicide courses (at the college level), and the development of a curriculum for the schools in the area to address the needs of adolescents at risk. Specifically, the suicide program developed at the school level originates around five key ideas: 1) it does not hurt to talk about suicide; 2) suicide can be considered from different points of view; 3) there are often clues to the intent of suicide; 4) everyone can play a role in saving lives; and 5) a

discussion about loss and the reality of pain while recovering from the loss is important (Board of Education for the City of Hamilton, 1987). The Board has developed an extensive support network of community caregivers and has provided a "handbook for the caregiver on suicide prevention". The program focuses on suicide rather than on stress management, coping, and social support.

Also situated in Canada are several suicide prevention programs in the Western provinces. One of these programs, a crisis centre established in Vancouver, provides training and information to teachers on the myths and attitudes of adolescent suicide. In addition to teacher training, they also provide classroom sessions for secondary students which include: basic awareness (covering myths and facts about suicide, signs and symptoms of adolescents at risk, and how and where to get help) designed for grade 9 or 10 students; and a more intensive session on why adolescents commit suicide (covering the process of problem formulation and negative feelings and self-image) designed for older students (Fris, 1990). This session also deals with the overall picture of the adolescent's life from three perspectives: family, peers, and school. Also in the Vancouver area, a suicide prevention program was integrated on a regular basis into the grade 9 guidance curriculum in two area

schools. The program, three to five hours in length, examines the sources of teenage stress, as well as presenting the myths and facts about suicide, discussing the warning signs of depression and giving guidelines for intervention (Fris, 1990).

Community Connections, an organization which offers suicide prevention programs in Edmonton area schools, gives classroom presentations on suicide prevention as part of the junior high school curriculum. The program covers many of the issues that have already been discussed. One important component to this program is the administration of a questionnaire completed (anonymously) by students before the program begins. The questionnaire deals with the fact that many individuals have been affected by suicide, and then discussion around the issues takes place during the presentation. Also, just outside of Edmonton, another program has been established, which provides teacher training, and a six lesson suicide prevention unit which includes: teaching students that suicide is preventable, presenting the facts and myths about suicide, allowing students to explore their own attitudes and beliefs about suicide, providing information to help students understand depression, teaching strategies for dealing with stress and disappointment, developing students' awareness of their potential role in

suicide prevention, and providing students with the available information on helping agencies (Fris, 1990). There is also an optional unit entitled, "dealing with crisis", for high school teachers, if they wish not to specifically focus on suicide. This program emphasizes that many students will experience various crises in their lives, and then attempts to build the individuals' coping skills to help them deal with the crises (Fris, 1990).

South of the border, there is also a lot of action surrounding suicide prevention in the schools. A suicide prevention project, developed in Denver, Colorado in 1980, was the first in-school, federally funded project in the country (Jurnovoy & Jenness, 1984). The purpose of the program is to create public awareness of the problem and to provide an immediate support system for those who need it. As part of their required health course, students discuss the warning signals of a potential suicide (verbal threats, personality changes, depression, and giving away prized possessions). The program also provides teachers and counsellors with guidelines for identification of adolescents "at risk" (Jurnovoy & Jenness, 1984).

The Adolescent Suicide Awareness Programme (ASAP) was established in Hackensack, New Jersey (1980) in response to the

rise in suicide rates of adolescents. The program brings together local mental health experts with the secondary school community, including parents and students (Ryerson, 1987). The main focus of this program is on the students' knowledge of suicide. "Students need to have information about suicide, which could be a matter of life and death for themselves or a friend...since another student is the most frequent confidant of a suicidal peer, teenagers should learn to recognize warning signs and know when, how and where to get professional assistance" (Ryerson, 1987, p.175).

Other resources are also available for developing suicide prevention programs in the school system, and several books have been published which offer specific curricula for the school population. These resources include a "Living Alternative Program" designed by Polly (1986) and a "Crisis Intervention Curriculum for Teenagers and Young Adults" written by Smith (1989).

The programs described in this section rest on the assumption that suicide can be prevented by educating students about the facts of suicide. Yet that assumption may not be tenable because there are no data showing that knowledge about suicide is associated with lower suicide risk, as will be shown in a subsequent section in a study by Shaffer et al. (1990).

In fact, there is evidence that knowledge about suicide is associated with an "imitation effect" (Davidson, Rosenberg, Mercy, Franklin, & Simmons, 1989). An imitation effect refers to a situation in which a person imitates a particular suicide method from someone who has previously attempted or completed suicide. The previous suicide may have been a person who was very popular or the behavior may have gained that person recognition and/or popularity resulting from his or her actions. Thus, it is extremely important that these programs, which are widely implemented across Canada and United States, be evaluated carefullly.

Review of problem-solving and support programs. Many schools and organizations throughout Canada have also responded to a variety of other adolescent needs. Primary prevention programs have been established in areas such as: alcohol and drug abuse, self-esteem, teenage sexuality, and eating disorders. Most, if not all, of these programs deal with the very basics of adolescent needs: social support, coping skills, stress management, self-esteem, social competence, and decision-making skills. Since these variables have been shown to be of central importance in the previously described model of adolescent depression and suicide, these programs may also help

in reducing suicidal thoughts and actions. A few of these prevention programs will be described in this section.

The Life Skills Training Program described by Dusenbury, Botvin and James-Ortiz (1989) is a primary prevention program for adolescent substance abuse. The program focuses on the promotion of personal and social competence, as well as emphasizing self-improvement and the development of personal and social skills. A 10 week, school-based program is designed to address the needs of all students (not just for students experiencing abuse problems). Three areas of concentration are provided over the 10 week period. The first session outlines the facts of substance abuse among teenagers and explores the knowledge, attitudes and beliefs of the students. The next area includes seven sessions focusing on personal skills and well-being. Learning to cope effectively with stress, promoting a sense of personal control, decision-making, and improving self-image are all discussed in this area. The final chapter of the program is designed to enhance social skills and interpersonal competence. Sessions evolve around communication skills, social skills, and assertiveness training (Dusenbury, Botvin, & James-Ortiz, 1989). The prevention program is designed to aid students with the pressures of peer relationships and the reality of alcohol and drugs as a way of coping. Through

educational preventive health interventions, many adolescent problems, including depression and suicide, can be prevented.

Another primary prevention program developed to enhance students' support and lessen the effects of stressful events was created by Felner and Adan (1988). The program is called STEP (School Transitional Environment Project) and is an intervention designed to ease the transition of elementary school students into secondary school. The program is designed for all new incoming students (particulary grade 9 students) and is especially beneficial for students who lack appropriate social support and coping skills. STEP is made possible by reorganizing the school environment and presenting new roles and responsibilities for homeroom teachers. The reorganization of the structure of the school reduces the confusion that a new student encounters during the first year in a usually much larger school environment. The program enhances peer support by maintaining core groups of students in all classes, and reducing the distance between classrooms (i.e., trying to keep all classes on the main floor of the school). Also, support is created by increasing the responsibilities of the homeroom teacher to perform many of the duties of the guidance personnel and administration. This kind of program creates a strong social support network within the first few months of experience

of a new environment, as well as decreasing some of the stressors that occur during the first new school year (Felner & Adan, 1988).

Evaluation of programs. Few, if any, school-based prevention programs have been evaluated adequately. The reasons for this are the complexity of intervention strategies, a lack of valid or reliable measures of effectiveness, and difficulty in defining intended program outcomes (Barrett, 1989). Traditional approaches to evaluation do not always work in assessing prevention programs. Barrett (1989) argues that more creative and varied approaches to evaluation, such as case studies that employ interview and observation techniques, are necessary to determine program effectiveness. An evaluation component will be built into the prevention program established at Galt Collegiate Institute. The evaluation component will be established by the advisory committee. Only one study of which I am aware has evaluated a school-based suicide education program. Shaffer et al. (1990) evaluated suicide prevention programs for high school students and found that these programs may in fact stir up depression in some adolescents. Students were surveyed before and after a suicide prevention program on their attitudes toward suicide. Out of a total of 973 students

involved in the study, 63 reported having attempted suicide (on a 48-item questionnaire). These students ("attempters") reported that the same prevention program they received should not be targeted toward others because it may be harmful for nonattempters to discuss suicidal thoughts and actions, possibly resulting in some kids taking their own lives (Shaffer et al., 1990). The students also commented that they knew someone who was extremely upset by the program. After the program component, students who had previously attempted suicide still believed that suicide is a solution for problems and that they would not tell anyone if they thought about killing themselves again (Shaffer et al., 1990).

The study by Shaffer et al. (1990) provides no evidence that suicide education programs reduce or prevent suicidal thoughts or actions. The study does suggest, however, that some students find the program disturbing. Shaffer et al. (1990) suggest that suicide education programs should not be implemented on a wide-scale for all students as a primary prevention strategy. Alternatively, educating teachers, guidance counsellors, and peer helpers about suicide, its warning signs, how to intervene, and when and where to refer could be helpful as a secondary prevention strategy for students who talk about suicide. However, this type of intervention will

not address the problems that face so many adolescents on a daily basis, and if one is to teach the facts about suicide, one must also teach about the accompanying variables that allow suicide ideation to develop (e.g., stress, lack of support, and inappropriate coping skills).

The programs outlined earlier by Dusenbury et al. (1989) and Felner and Adan (1988) represent a new dimension of adolescent prevention programs. These types of interventions encompass an assortment of adolescent concerns and provide necessary skills and support systems which may carry over into other facets of adolescent experiences. Since these programs are not targeted toward a particular problem, evaluation of the effectiveness of the program is difficult to carry out. However, evaluations of both programs have shown some positive effects.

The STEP program has been shown to be beneficial, especially for students who are unmotivated and unsuccessful in academics. Felner and Adan (1988) reported that control students showed significant decreases in academic marks, increases in absenteeism, and lower scores in self-concept by the end of the first year. However, STEP students did not show similar effects. Over a long-term follow-up study, STEP students showed significant improvements. "The follow-up study

provided evidence of the enduring effects of the STEP program on academic achievement and absenteeism and its effectiveness in keeping high risk students above their threshold of vulnerability and in preventing the development of more serious problems" (Felner & Adan, 1988, p. 117).

Dusenbury et al. (1989) also reported positive effects of their substance abuse prevention programs. Following the prevention program, the experimental group reported 75% fewer new cigarette smokers than the control group. These effects were also shown to be significant for alcohol and marijuana use as well. After one and two year follow-up periods, the effects of the program were still significant, although the strongest effect over time appeared with cigarette smoking.

Research and Action Goals

One purpose of this research is to examine an integrative model of adolescent stress. Another purpose of my research is to develop a model for an effective prevention program which will decrease the number of adolescents at risk for depression and suicide. The model examines the relationship between daily hassles, social support, coping, and positive and negative affect influencing depressive behaviors and feelings in adolescents. The following research\action goals are made.

Research Hypotheses

1. Hassles will be directly related to negative affect and depression.

2. Coping skills will be directly related to positive affect and inversely related to depression.

3. Social support will be directly related to positive affect and inversely related to depression.

4. Negative affect will be directly related to depression and positive affect will be inversely related to depression.

5. Social support will interact with hassles to predict negative affect, consistent with the stress buffering hypothesis.

6. Coping will interact with hassles to predict negative affect, consistent with the stress buffering hypothesis.

7. The following gender differences will be evident in stress, support, coping, affect and depression.
   a. women will report more family and peer stress than men
   b. women will report receiving more support than men
   c. women will report using more emotion-focused coping, while men will report more problem-focused coping
   d. women will report higher levels of positive affect, negative affect, and depression than men

Action Goals

The action goals are:

1. to ascertain the level of depression and negative affect in students at Galt Collegiate Institute,

2. to test a model of how stress, support, coping, and affect relate to depression,

3. to develop school and community support and awareness for an adolescent stress, support, and coping skills program,

4. to ascertain key informants' impressions of need and ideas for a prevention program, and

5. to contribute to rewriting and resubmitting the proposal to the Ministry of Health.

The research questions follow from the model outlined in the first section of this paper. A question which must be addressed is as follows: Are adolescents who lack sufficient coping skills and a network of social support at a greater risk for depression than those who have an extensive network and the ability to deal effectively with stress? The answer to this question will help to determine the most appropriate place to intervene in providing social support to adolescents at risk. Questions which inevitably follow are: 1) Does increasing an adolescent's social support system lessen the effects of a stressful life event, and in turn lessen the incidence of depression? and, 2) Are adolescents who maintain sufficient skills for dealing with stress less likely to become depressed following a stressful life event? The research will try to show that there is a relationship between stress, support, coping, and depression, not prove that one causes the other. These questions will be the encompassing backbone of the research, expressing a resource and service need for the Cambridge area and for developing an appropriate primary prevention program at Galt Collegiate Institute.

Method

Research Process

In this section I describe the stages of fieldwork as outlined by Patton (1980). Pre-entry work includes the background research on adolescent suicide, and becoming familiar with the recent trends and terminology. Also, as part of the pre-entry phase, the proposal previously submitted to the Ministry of Health was reviewed to identify what was expected of the researcher's role in the project. Many ideas resulted from this proposal, in which a needs assessment was suggested.

During the entry stage, Patton (1980) suggests the "known-sponsor approach", in which someone within the setting is used to gain credibility. This approach can often be helpful when beginning to collect the data because that source will hopefully direct the researcher to other people. The entry stage involves the actual physical entry into the field setting to begin collecting data, actually being at Galt Collegiate. Gaining entry and credibility on one's own can be a difficult task. My approach into the community of Galt Collegiate was initially through the program director of CMHA, who wrote the original suicide prevention proposal and forwarded me on to the Waterloo County Board of Education. I made contact with the guidance

coordinator for Waterloo County, who directed me to the appropriate contacts at the secondary school. From there I made contact with the head of guidance at Galt Collegiate, and thus my initial entry into the setting. Meeting other contacts inside the setting was then made easy (administrative staff, teachers and students). During the entry stage, an advisory committee was established as mentioned previously, which included community members, students, teachers, administrators and guidance personnel. The advisory committee was formed in September at the beginning of the new school year, which helped the transition of my role as a researcher into the setting.

The next stage outlined by Patton (1980) is referred to as the work stage or data-gathering stage. This is the most tedious stage of all, concentrating on and carrying out the tasks of gathering data. This stage involved three separate data collection techniques including: indicator approaches, use of key-informants, and a student survey. These three approaches are described in detail in a later section on data collection. Reviewing the student survey was partly the responsibility of the committee, as well as deciding the time and place for distributing the questionnaires. Late Fall was the best time of the semester to initiate the survey, as the students were just getting back into their familiar roles and contacting their

old friends. The survey was completed the third week in October. It was also most appropriate from an interventionist's point of view to conduct the survey as early as possible in the school year so it could be an effective prevention technique for the remainder of the year. Students, teachers, guidance counsellors and administration became aware of the effects of stress, support and coping once the questionnaire and feedback were completed. The work stage of this project did not continue past the first semester (early January) although the school-based advisory committee continued until the end of February.

The final stage involved termination and closure from Galt Collegiate Institute. Part of my task, as a researcher and with the assistance of CMHA, was to complete, for the Ministry of Health, another proposal for funding to continue the development and implementation of a prevention project at Galt Collegiate. The intention of the needs assessment was to follow through rewritting the proposal for the Ministry of Health, as will be shown in a subsequent section in the discussion.

Another critical part of the termination stage was the role of feedback. Since there was already an advisory committee in place, feedback was given to them on a regular basis. The students who participated in the survey were given immediate feedback. On the advice of the committee, feedback was given in

written and verbal form. This was an extremely important issue as there was some indication, following the questionnaires, to a crisis situation among several of the students. The questionnnaire process involved in-class support throughout the questionnaire administration, by the classroom teacher, a guidance counsellor, a peer counsellor, and the researcher. The increased support was needed in the class, as the survey initiated emotional reactions by some of the students which were not anticipated. The survey questions enabled some students to address thoughts and feelings which had not been addressed for a long time or ever. Many students commented afterward that the questionnaire had been helpful in order to examine some problems in their lives, and how they were coping with these problems.

Key informants and those institutions which provided indicator data were given feedback in written form at the end of the data analysis stage.

Research Strategies

In order to provide a successful intervention at Galt Collegiate Institute, it was essential to examine the needs of the school. A needs assessment was used to identify and define the most pressing issues and concerns in the institution. Milord (1976) describes a needs assessment program as: "1) the compilation of community needs data by the application of an

appropriate assessment procedure, and, 2) the analysis and interpretation of the obtained data in order to ascertain the most salient needs and arrive at some prospectus for community planning" (p. 261). The process of a needs assessment is critical for planning interventions, but it is only one component of a much broader planning process, which includes, "the determination of service priorities, the implementation of an intervention program, and an eventual evaluation of program activities" (Milord, 1976). It is important to focus on broader issues and concerns (e.g., intervention and evaluation) before assessing the needs of the school.

There are some practical planning steps to address in the process of a needs assessment which cannot be avoided. A needs assessment should establish a steering group which aids the researcher in focusing on targeted key issues (i.e., school\community advisory committee). Data collection is an essential part of a needs assessment, and probably the most time consuming. Some examples of data collection techniques include: key informant interviews, questionnaires, nominal groups, telephone interviews, community forums, and social indicators. The most effective needs assessment draws on a number of these strategies to finalize the analysis of the data. For the purpose of the needs assessment at Galt Collegiate Institute, several

strategies were utilized, which included: student survey, key informant and student interviews, and social indicators.

Student survey

1. Sample. A sampling procedure called "stratified sampling" was used to determine the sample size for the student survey. Stratified sampling involves separate sampling frames from the larger population (student body at Galt C.I.) and then randomly choosing participants from these smaller sections. The sampling frame is a list from which the sampling units are obtained. The frame for this survey is the English classes at Galt Collegiate. To clarify this procedure, there were two English classes randomly selected from each grade to complete the survey. There were a total of twelve classes and 210 students who completed the questionnaire.

2. Instruments. The survey was divided into five sections as outlined in the model. These sections include: hassles, social support, coping, positive and negative affect, and depression. Each section examines the different parts of the adolescent experience. It is important to format the questionnaire following the sequence of the model, so the questions flow rationally from section to section (see Appendix A).

a. Adolescent Hassles Inventory: Hassles were assessed using a 32-item true-false-format measure designed specifically for use with adolescents (AHI; Reynolds & Waltz, 1988). Items assess three areas of hassles: 1) parents\family, 2) friends, and 3) academic, and include both minor events and chronic stressors. The correlations between the AHI total score and the measures of the adolescent support inventory and the Reynolds Adolescent Depression Scale (RADS) are -.35 and .61, respectively (Reynolds, 1987). In a sample of approximately 1,100 adolescents, Reynolds found the alpha reliability of the AHI to be 0.85. On the Adolescent Hassles Inventory, a high score equals a high level of hassles.

b. Adolescent Support Inventory: The measure of social support was a 16-item true-false format, developed to evaluate the adolescent's perceived level of social support from three sources: 1) family, 2) friends, and 3) school (ASI; Reynolds & Waltz, 1988). The correlations between the support inventory and measures of the hassles scale and RADS are -.35 and -.40, respectively (Reynolds, 1987). The adolescent support inventory is keyed in a positive direction; thus high scores equal high support. In a sample of approximately 1,100 adolescents, Reynolds found the alpha reliability of the ASI to be 0.79.

c. Coping Scale: A 30-item coping measure was used to examine the extent of adolescents' coping strategies (Wills, 1986). Each item is rated on a 5-point scale, indicating the frequency with which that coping strategy is used for problems (1 = never, 2 = occasionally, 3 = sometimes, 4 = often, 5 = always). The strategies were separated into five different coping scales: 1) problem-solving, 2) cognitive coping, 3) social support, 4) social entertainment, and 5) physical exercise. Five month test-retest reliabilities for the five coping scales are (1) problem-solving coping (.62); (2) cognitive coping (.55); (3) social support (.52); (4) social entertainment (.58); and (5) physical exercise (.53) (Glyshaw, Cohen & Tobes, 1989).

d. PANAS: The Positive and Negative Affect Scale is a 20-item list of descriptors indicating different feelings and emotions (Watson, Clark, & Tellegen, 1988). Each descriptor is rated on a 5-point scale, indicating to what extent the adolescent has had this feeling in the past month (1 = very slightly or not at all, 2 = a little, 3 = moderately, 4 = quite a bit, 5 = extremely). The alpha reliabilities for both positive affect and negative affect are each .87 (Cronbach's coefficient). The correlation between the positive affect scale

and the negative affect scale is -.22, indicating that the two measures are relatively independent (Watson et al., 1988).

e. RADS: The Reynolds Adolescent Depression Scale is a 30-item self-report measure developed to assess depressive symptomatology in adolescents (RADS; Reynolds, 1987). The RADS is rated on a 4-point scale (1 = almost never, 2 = hardly ever, 3 = sometimes, 4 = most of the time). The correlations between the RADS and measures of hassles and social support are .61 and -.40, respectively, indicating that depression correlates positively with hassles and negatively with social support. Reliability for the RADS is .91 using the Spearman-Brown split-half reliability procedure (Reynolds, 1987). In studies with over 10,000 adolescents, the RADS has been shown to be a reliable and valid measure of depression in adolescents (Reynolds, 1987).

3. Procedure. There was time allotted in the classroom for the students to complete the questionnaire. An information letter was given to parents\guardians or participants for all the students randomly chosen to participate in the study. Consent forms accompanied the information letter (Appendix B), and those students who were 18 years of age or older did not need parental consent, although parents were encouraged to ask any questions that they might have. The questions for all

measures were closed-ended, providing quantitative information based on Likert-type scales. A Likert-type scale is a rating scale in which one checks along a continuum the answer that best represents his or her opinion. The students completed the questionnaire in late October, 1990.

All of the information on the questionnaire met the approval of the other committee members before it was distributed. The researcher was blind to the identity of the questionnaire. In the case of a critical situation, the questionnaire was identified by a counsellor from the guidance department. Therefore, students were requested to supply their homeroom number as well as their birth date. Support was provided by including a guidance counsellor, peer counsellor, researcher, and the teacher while the questionnaire was being completed in the classroom. After all students had completed the questionnaire, time was available to the students to either form small groups and discuss some concerns that might have arisen while completing the questionnaire, or to sit alone and think about the questionnaire. Support was also provided following the classroom period. Students were informed that if they had any further questions or concerns regarding the questionnaire they could go to the guidance department, without an appointment, and talk with someone. Some of the classroom

discussions continued throughout the entire period (70 minutes), while other classess continued on with their class work without further discussion of the questionnaire. As mentioned earlier, there was an immediate follow-up for all the survey participants because of the nature of the questionnaire. Feedback was given within one month following the administration of the questionnaire in written and verbal form. As well, participants\parents who indicated on the consent form that they wished written feedback were mailed a letter (See Appendix C). There were about 60 students (mostly females) who wrote comments at the end of the questionnaire. The majority of the comments by the students stated that the questionnaire was helpful to them because they were able to express some of their feelings, and recognize some of the problems in their lives. A couple of students specifically wrote comments that were a cry for help, stating that their lives were miserable, they were very depressed and had thought about hurting themselves. These questionnaires were brought to the immediate attention of the guidance office.

There was a pilot test of the questionnaire given to some students in the peer counselling class. The class consisted of 18 students in their senior years and is considered a credit course at the school. Students in the class were given a

separate information letter and consent form (Appendix D), requesting their participation in several areas. The students could take part in any one of the following areas: member of the advisory committee, key informant, pilot test of questionnaire, or through participation in the classroom on the day of the questionnaire as a peer helper.

Key informant and student interviews

The use of key-informants provides a source of information for ascertaining available community resources. The ideal time to conduct key informant interviews was also early in the Fall, since it was important to secure a committment from the community, as well as to determine a pool of available resources for those adolescents that needed an immediate intervention. The key informant interviews were completed the last week in November and the student group interview was completed in June. Patton (1980) suggests that one acknowledges data obtained from key informants as representing their perceptions of the situation, rather than the perceptions of an outside observer.

1. Sample. The key informants used for the qualitative interviewing section of the assessment were determined by assessing who should be approached and what expertise that person possessed. There was a total of 10 key informants interviewed, including: one teacher, one guidance counsellor,

and two students from Galt Collegiate, one staff member from the Cambridge Hospital, three members from community agencies, one city council member, and one law enforcement officer. As well, a group of six peer counsellors were also interviewed as key informants. The exact names of each of the key-informants were selected by the advisory committee.

2. Instruments. Interviews followed an interview guide, described by Patton (1980) as a list of questions that are to be approached throughout the interview. This approach was more informal than a standardized questionnaire and allowed for conversations around a particular issue to take place. The interview guide was the most appropriate for this study, because a number of different people from varying backgrounds were questioned. The interview guide kept the interview focused on the particular research questions, yet left room for spontaneity. The direction of the interview was somewhat controlled by the interviewee, since there was not a specific set of questions to be answered in a certain order. This allowed individuals to guide the interview in the direction they wanted it to follow. It is important to remember that the interview guide only provided a framework for conversation and did not specify questions to be asked, as these varied for each interviewee.

Examples of some issues which were approached in the interviews were: what type and amount of contact this person had with adolescents, knowledge of suicide and other adolescent problems, knowledge of resources in the Cambridge area for adolescents in crisis situations, and thoughts and feelings about a prevention program at Galt Collegiate focusing on youth stress, support, and coping skills. To view the complete interview guide, refer to Appendix E.

3. Procedure. A sampling procedure called "purposive sampling" was used to determine the sample for the key informant interviews. Purposive sampling is a technique in which one chooses certain people because of their perspective on the situation. These interviews took place in October and November, with contact letters being sent out at the beginning of September (Appendix F). The key informants were sent feedback letters at the end of the research study (See Appendix G).

Groups of students were also used as key informants to determine what their needs were. The group interview took place in June in the guidance office at G.C.I. It was important that their comments be recognized because the prevention program is ultimately for the students at the school.

Indicator approach

The third and final approach for collecting information for the needs and resources assessment was an indicator approach. Indicator approaches use data available in written documents, government sources, and hospital records. The information utilized for this study came from the Cambridge Police Department and the Galt Collegiate guidance office. These sources provided an estimate of the number of adolescents who have thought about or completed suicide, or have feelings of depression. The data were collected from the Police Department for 1989-1990, and from the guidance department at G.C.I. for the 1990-91 academic year.

Qualitative Data Analysis

The key informant interviews were tape recorded, as this allowed for a more personal relationship to develop between the interviewer and the interviewee. Tape recording permitted the interviewer to concentrate and focus on the issues that arose throughout the interview, instead of trying to write down everything that was said. The interview data was transcribed verbatim, and individual concerns were extracted and analysed separately. Major themes and codes emerged from the informants' responses on each question. Coding the qualitative data aided the interviewer in breaking down the enormous amount of information obtained into a manageable form.

Results

The results are presented in three separate sections: (1) the analysis of the student survey, (2) key informants' and students' responses on the interview questions, and (3) the data collected from the indicator approach which include guidance counsellors' reports, and police records.

Student Survey

There were 210 students who completed the questionnaire; 127 were female and 83 were male. Descriptive statistics for all the independent and dependent variables are listed in Table two. "Hurt oneself" is a question which was extracted from the depression scale and analysed independently for the purpose of indicating a measure related to suicide ideation. Therefore, there is no alpha indicated for this item.

Hypothesis 1 - The first hypothesis is that hassles will be directly related to negative affect and depression. The subscales for hassles consist of family, peer, and school stress. Analyses were performed separately for boys and girls.

The correlations between total hassles and negative affect were .29 for boys and .65 for girls, while the correlations between total hassles and depression were .54 for boys and .77

for girls. All of these correlations were significant (See Table 3). Thus, the first hypothesis that hassles would be directly related to negative affect and depression was supported.

Table 2
Descriptive Statistics for all Independent and Dependent Variables.

Variable (items)	Cronbach's Alpha	Mean	S.D.	Possible Range
Hassles				
Family (11)	0.75	3.37	2.56	0-11
Peer (6)	0.48	1.65	1.39	0-6
School (5)	0.48	1.67	1.12	0-5
Total (31)	0.80	10.18	5.16	0-31
Support				
Family (3)	0.73	2.56	0.86	0-3
Peer (5)	0.76	4.42	1.10	0-5
School (4)	0.64	2.36	1.30	0-4
Total (16)	0.81	12.50	3.20	0-16
Coping				
Problem-solving (9)	0.85	31.72	5.89	9-45
Cognitive (7)	0.75	22.33	4.97	7-35
Social support (5)	0.87	16.03	5.18	5-25
Entertainment (4)	0.75	14.04	3.78	4-20
Physical exercise (5)	0.78	13.23	5.07	5-25
Positive Affect (10)	0.82	32.36	6.06	10-50
Negative Affect (10)	0.86	23.12	8.04	10-50
Depression (30)	0.92	59.27	14.25	30-120
Hurt Oneself (1)		1.42	2.57	1-4

Hypothesis 2 - The second hypothesis is that coping skills will be directly related to positive affect and inversely related to depression. The five coping measures include problem-solving, cognitive, social support, social entertainment, and physical exercise. All analyses were performed separately for boys and girls.

For boys, the problem-solving, social support, entertainment, and exercise subscales were significantly positively related to positive affect, and the social support, entertainment, and exercise scales were significantly inversely related to depression. For girls, the problem-solving, social support, and exercise subscales were significantly positively related to positive affect, and all of the coping subscales were significantly inversely related to depression (See Table 3). Thus, the second hypothesis that coping skills would be directly related to positive affect and inversely related to depression was supported, for most scales.

Hypothesis 3 - The third hypothesis is that social support will be directly related to positive affect and inversely related to depression. The subscales for social support consist of family, peer, and school support. Total social support was significantly directly correlated with positive affect and significantly inversely related to depression for both boys and girls (See Table 3). These patterns held for each of the subscales as well. Thus, the third hypothesis that support would be directly related to positive affect and inversely related to depression received support.

Hypothesis 4 - The fourth hypothesis is that negative affect will be directly related to depression, while positive

affect will be inversely related to depression. Analyses were performed separately for boys and girls.

The correlations between positive affect and depression for boys and girls, respectively, were -.42 and -.50. The correlations between negative affect and depression for boys and girls, respectively, were .63 and .75. All of these correlations were significant (See Table 4). Thus, the fourth hypothesis that negative affect would be directly related to depression and positive affect would be inversely related to depression was supported.

There were also significant correlations between hurt oneself and other variables. The correlations between hurt oneself and total hassles for boys and girls, respectively, were .22 and .42.

Table 3

Correlations between Dependent and Independent Variables

Independent Variables	Dependent Variables: Positive Affect		Negative Affect		Depression		Hurt Oneself	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
Hassles								
Family	-.07	-.19[b]	.19	.41[a]	.43[a]	.53[a]	.21[b]	.24[a]
Peer	-.09	-.33[a]	.21[b]	.56[a]	.28[b]	.59[a]	.06	.34[a]
School	-.26	-.21[b]	.27[b]	.41[a]	.34[a]	.47[a]	.21[b]	.22[b]
Total	-.18	-.36[a]	.29[a]	.65[a]	.54[a]	.77[a]	.22[b]	.42[a]
Coping								
Prob. sol.	.38[a]	.31[a]	.24[b]	-.24[b]	-.18	-.18[b]	-.28[b]	-.16
Cognitive	.12	-.07	-.04	.19[b]	-.16	.20[b]	.01	.23[b]
Support	.35[a]	.23[b]	-.15	-.27[a]	-.45[a]	-.29[a]	-.15	-.18[b]
Entertainment	.22[b]	.14	-.12	-.27[a]	-.42[a]	-.35[a]	-.35[a]	.02
Exercise	.22[b]	.33[a]	.03	-.18[b]	-.24[b]	-.18[b]	-.01	-.12
Support								
Family	.25[b]	.21[b]	-.32[a]	-.30[a]	-.49[a]	-.45[a]	-.10	.28[a]
Peer	.30[a]	.19[b]	-.19	-.26[a]	-.45[a]	-.34[a]	-.09	-.24[a]
School	.36[a]	.36[a]	-.04	-.33[a]	-.36[a]	-.45[a]	-.10	-.25[a]
Total	.43[a]	.41[a]	-.18	-.42[a]	-.56[a]	-.61[a]	-.16	-.38[a]

Boys (n=62)
Girls (n=89)
[a] $p < .01$.
[b] $p < .05$.

For girls, the correlation between hurt oneself and peer hassles was .34. For boys, the correlation between hurt oneself and school hassles was .21. There were no significant correlations between hurt oneself and any of the support scales for boys. However, for girls, the correlations between hurt oneself and peer support, school support, and total support, respectively, were -.24, -.25 and -.38. There were significant correlations between hurt oneself and the cognitive, .23 and support, -.18 coping scales for girls. For boys, problem-solving, -.28, and entertainment, -.35, were significantly correlated with hurt oneself (See Table 3).

Hypotheses 5 & 6 - The fifth and sixth hypotheses are that support will interact with hassles, and coping will interact with hassles, to predict negative affect, consistent with the stress buffering hypothesis.

There were no significant interactions between support and hassles or coping and hassles to predict negative affect. Using a regression analysis, variables were entered in a stepwise fashion with stress entered first, then the support (or coping) variables, and finally the hassles by support (or coping) interactions. Thus, hypotheses five and six, more specifically, the stress buffering hypotheses, were not supported.

Table 4
Correlations Between Dependent Variables

	Posaffect		Negaffect		Depression		Hurt Oneself	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
Posaffect								
Negaffect	-.02	-.23[b]						
Depression	-.42[a]	-.50[a]	.64[a]	.75[a]				
Hurt Oneself	-.25[b]	-.19	.10	.49[a]	.39[a]	.53[a]		

[a] $p < .01$
[b] $p < .05$

Hypothesis 7 - The seventh hypothesis is that there will be gender differences in stress, support, coping, affect, and depression. Two-way ANOVAs were performed, with Age (2) and Gender (2) as factors. The age categories were 13-15 and 16-18 years.

(a) An ANOVA main effect for gender showed that females, in both age categories, reported more peer hassles than males, $F(1,203) = 6.72$, $p < .05$ (See Table 5). Gender differences were not significant for family or school hassles (See Table 5). Also, older students reported more peer hassles than younger students, $F(1,203) = 16.95$, $p < .05$.

(b) An ANOVA main effect for gender showed that women reported more peer support than men across both age categories, $F(1,203) = 4.85$, $p < .05$. Gender differences were not significant for family, school, or total support (See Table 5). Also, older students reported less family support, $F(1,203) = 11.35$, $p < .05$, school support $F(1,196) = 7.14$, $p < .05$, and total support, $F(1,189) = 5.60$, $p < .05$, than younger students.

(c) Contrary to prediction, there were no significant gender differences for problem-solving coping or emotion-focused coping.

However, gender differences were significant for other coping measures. The ANOVA main effect showed that women, in both age categories, reported using social support as a coping mechanism more than men, $F(1,201) = 26.67$, $p < .05$. As well, women reported using social entertainment as a way of coping more than men, $F(1,203) = 10.38$, $p < .05$. Men reported using physical exercise more than women, $F(1,204) = 11.77$, $p < .05$ (See Table 5). Older students reported less physical exercise than younger students, $F(1,204) = 9.67$, $p < .05$.

(d) The ANOVA main effect for gender showed that women, in both age categories, reported higher levels of negative affect than men, $F(1,192) = 5.32$, $p < .05$. Also, women in both age categories reported higher levels of depression than men, $F(1,195) = 4.97$, $p < .05$. There were no significant gender differences for positive affect (See Table 5). However, older students reported less positive affect, $F(1,193) = 5.98$, $p < .05$, and more negative affect, $F(1,192) = 7.48$, $p < .05$, and depression, $F(1,195) = 7.56$, $p < .05$, than younger students.

Overall, women reported more peer hassles and more peer support than did men. Also, women reported using more social support and more social entertainment as a coping strategy than men. However, men reported using physical exercise more than women. Moreover, women reported significant higher levels of negative affect and depression than men. Overall, older students reported more peer hassles than younger students. Older students also reported significantLY less family, school, and total support

than younger students. Older students reported significantly less physical exercise as a method of coping than younger students. Moreover, older students reported significantly less positive affect, more negative affect, and more depression than younger students.

The regression analyses for boys and girls with all dependent and independent variables, are listed in Appendix H.

Table 5
Mean Scores and ANOVA on Hassles, Support, Coping, Depression, Positive Affect, and Negative Affect. Measures for Boys and Girls of Different Age Groups.

Variables	Age	Boys	Girls	ANOVA Age	Gender	Age X Gender
Hassles						
Family	13-15	2.87(38)	3.10(42)			
	16-18	3.08(40)	3.77(78)			
School	13-15	1.45(40)	1.40(43)			
	16-18	1.85(41)	1.62(79)			
Peer	13-15	0.95(41)	1.26(42)	F (1,203)	F (1,203)	
	16-18	1.54(41)	2.13(83)	= 16.95[a]	= 6.72[a]	
Total	13-15	7.91(35)	8.51(39)	F (1,182)		
	16-18	9.84(37)	11.44(75)	= 11.35[a]		
Support						
Family	13-15	2.70(40)	2.75(44)	F (1,203)		
	16-18	2.49(41)	2.44(82)	= 5.13[a]		
School	13-15	2.66(41)	2.67(39)	F (1,196)		
	16-18	2.17(40)	2.15(80)	= 7.14[a]		
Peer	13-15	4.19(42)	4.74(43)		F (1,203)	
	16-18	4.24(41)	4.44(81)		= 4.85[a]	
Total	13-15	12.68(38)	13.58(38)	F (1,189)		
	16-18	11.80(40)	12.31(77)	= 5.60[a]		

[a]$p < .05$.

Table 5 continued

Variables	Age	Boys	Girls	ANOVA Age	ANOVA Gender	ANOVA Age X Gender
Coping						
Problem-solving	13-15	31.45(40)	32.10(40)			
	16-18	31.17(41)	32.47(80)			
Cognitive	13-15	21.60(42)	22.14(44)			
	16-18	20.93(41)	22.88(82)			
Social support	13-15	14.05(42)	18.37(41)		F (1,201)	
	16-18	14.02(41)	17.31(81)		= 26.67[a]	
Entertainment	13-15	12.60(42)	15.16(44)		F (1,203)	
	16-18	13.21(39)	14.24(82)		= 10.38[a]	
Physical exer.	13-15	15.76(42)	13.81(43)	F (1,204)	F (1,204)	
	16-18	14.05(41)	11.43(82)	= 9.67[a]	= 11.77[a]	
Positive affect	13-15	33.81(37)	34.05(39)	F (1, 193)		
	16-18	31.15(41)	31.83(80)	= 5.98[a]		
Negative affect	13-15	20.59(37)	21.82(39)	F (1, 192)	F (1,192)	
	16-18	22.35(40)	26.13(80)	= 7.48[a]	= 5.32[a]	
Depression	13-15	52.68(41)	57.79(38)	F (1, 195)	F (1,195)	
	16-18	58.90(40)	63.30(80)	= 7.56[a]	= 4.97[a]	
Hurt Oneself	13-15	1.40(42)	1.47(43)			
	16-18	1.32(41)	1.41(82)			

[a]$p < .05$

Key Informant and Student Interviews

In this section, I present the comments made by key informants and students. The sample of key informants consisted of five agency representatives, four school contacts, and one city official. The first section is a summary of the information collected through the first five questions of the interview guide regarding the amount of contact each person has with adolescents, the service she\he provides, resources available in the community, and understanding of stress, support, and coping skills. The remaining two questions, which deal with suggestions for an effective youth program at the school, have been summarized and highlighted through the use of direct quotations.

All of the individuals contacted had some connection with adolescents, except for one, the Cambridge city official. However, the key informants were chosen specifically because of their direct services to youth. Most of the key informants (60%) had daily contact with youth, while others mentioned contact on a weekly basis ranging from twice a week to once a week. One person mentioned that she sees 50 - 75 adolescent cases per year. The type of youth each agency provided services for included youth who were in trouble with the law, youth who had left home and were looking for employment, youth who were in

foster care, youth who were full time students, and/or youth who were seeking psychological counselling.

Some informants were very clear on the services that they provided to adolescents while others did not perceive themselves as providing a direct service. The Cambridge city official did not provide a direct service to youth, although she was involved in funding several neighborhood associations through which youth were serviced. The contact from the Youth Bureau did not see his role as offering a service but instead as maintaining justice. The remaining informants indicated counselling or consultation as a service provided for youth by their agency.

When the question switched from type of service provided to a more specific question regarding counselling youth who have thought about or attempted suicide, many informants indicated that they really did not provide professional counselling as might have been suggested in the previous responses. In regards to a general counselling role, several informants indicated that they were not professional counsellors.

Only one informant reported providing counselling services for youth who have thought about or attempted suicide. Most of the other individuals expressed that they would recognize a person at risk for suicide but would then refer to the Community Mental Health Clinic. This was the only informant who indicated

this service. The contact from the Community Mental Health Clinic was concerned that many caregivers will hang on to a distressed adolescent too long, trying to counsel or consult the youth without having the appropriate suicide counselling training. Many agencies were concerned that a referral to the Mental Health Clinic meant a three month waiting period. However, the informant from the Mental Health Clinic assured me that there has never been a situation where a person at risk has been on a waiting list. Perhaps agencies will hang onto a youth until they are at a high risk for suicide, so the youth does not have to be put on a waiting list. There seems to be a lack of communication regarding this issue.

The number one resource for adolescents who have thought about or attempted suicide, mentioned by 70% of the informants, was the Community Mental Health Clinic. More generally though, when asked about the resources available to youth in Cambridge, several locations were acknowledged. For a complete list of the resources mentioned in the interviews see Appendix I. Almost every person (seven out of ten interviews) indicated that the resources in the Cambridge community were inadequate. Although many informants indicated that they had a lot of faith in the Community Mental Health Clinic, the informants thought that this resource did not seem to be sufficient for the number of

adolescents in need. Informants were not expressing a need for more counselling services but rather a more general resource for youth, focussing on preventive services rather than treatment services.

When discussing hassles or support, most informants regarded family and/or peers as important factors for the adolescent's well-being. Most of the community contacts view the presence of a dysfunctional family unit as a cause for numerous adolescent difficulties. The informants had a variety of ideas on how teenagers cope in general. A few suggestions of unhealthy coping skills included not coping at all, drugs and alcohol, aggression, and internalizing the problem. Also, some positive coping skills were mentioned, consisting of problem-solving, physical exercise, or talking with someone (either a friend or guidance counsellor).

Many of the informants were very positive about a program for adolescents at the school, and gave several suggestions as to what they would like to see. Overall, every informant wanted to see more life skills programming (e.g., stress management course, coping skills workshop, building support networks, and increasing self-esteem) for students at the school level.

> *"It's crucial, we need it on a long term basis as well as a short term basis. We need to take a proactive stance rather than reactive."*

> *"I think that school-based programs benefit adolescents and I certainly see them as very positive. School is the most important institution in the life of students."*
>
> *"Very positive! A program dealing with stress, support, and coping skills would be beneficial and would help over a long term, until (adolescent) stresses were coped with and alleviated."*

One contact did not understand why there was a need for a suicide prevention program at the school level, because he did not believe that Cambridge youth had a problem with suicide. When the intervention, with its focus on stress, support and coping, and not on suicide per se, was explained in more detail, he was more supportive of the idea.

The key informants had a variety of program ideas that they would like to see implemented at Galt Collegiate. Confidentiality was the most important issue mentioned in all but one of the interviews. Some informants had problems with peer counselling, while others were concerned about the guidance department in general. There were a couple of individuals who were concerned that anything at the school level was difficult to keep confidential because "everyone knows what everyone else is doing". A few of the school contacts recommended that guidance counsellors, peer counsellors, and teachers should make time for more personal issues rather than academic ones.

"The most important thing is to have staff that really care, that are concerned about students and not teachers that are over concerned with their own discipline that they do not have time for kids."

"We need to increase support through peer counselling, counsellors willing to address students' needs, support groups (self-help), and through accessible resources in the library and the cafeteria."

"I like the idea of talking to other students and I think a lot of students do. It's easier to talk to students because I know that they won't turn around and tell an adult. Most students who come and talk to me believe that I will keep it confidential."

Another informant also suggested that the guidance department should only handle the student's personal academic problems and that social workers or psychologists should be available in the school to handle emotional problems.

Another key issue that arose in this question was the responsibility of the school and the community. Again, the concern of a few informants was the lack of networking and liaison between the school and the community. Many informants thought that resources and programs should not only be available at the school level, but in the community as well.

"If I was a student, I would feel more comfortable if there was an office that I could attend that was off the school property, a central place."

"___ a drop-in centre within the school as well as outside of the school for the kids that you are not

likely to reach within the school. We also need an in-school and out-of-school support network."

For a more complete list of quotations regarding program ideas, refer to Appendix J.

I also conducted a focus group interview with six senior high school peer counsellors (five females and one male). They all had parental consent for their participation, and they all verbally consented to participate in the group interview. The key informant interview guide was given to them as a guideline only. They were specifically asked about program ideas (the last two questions on the interview guide).

Many of the problems that concerned the students dealt with family issues (e.g., cultural differences, abuse, and poverty). The majority of the students believed that it should be the school's responsibility to handle all student problems. As well, they felt that the teachers and counsellors should work together more to address all student needs. However, one student believed that guidance counsellors are more specifically trained for academics and that they should make more referrals elsewhere for nonacademic problems.

Most of the peer counsellors were not aware of any resources available in the community. The peer counsellors knew that there were services to aid youth with a variety of

difficulties but could not give any specific location or name of agency. Many of the students relied on the information available from guidance counsellors. The Community Mental Health Clinic was never mentioned.

Program ideas were difficult to think of, yet they all felt that a support group, either at the school or another community location, would not be effective. They were all concerned about the confidentiality of a support group (e.g., self-help group) with other students. They indicated that the support they needed came from their friends. Most of the students felt that there were not enough suitable activities for kids to do at the school, and the only activities that were available were for the athletic students only.

I asked the students about the survey results regarding age differences. All of the students were not surprised at the differences between the two age categories (13-15 and 16-18). They agreed that there was definitely more stress in the senior grades (grade 11, 12, & 13) than in the junior grades (9 & 10). Their explanations for these age differences included: more school work; the presence of a part-time, sometimes full-time, job; boyfriend/girlfriend issues; parents having different expectations as they get older and offering less support; teachers having higher expectations and offering less support

(the work is more often left up to the students to do on their own); and more demanding peer relationships (most friendships have lasted for at least the length of high school). All of the above issues provide an adequate explanation for these age differences.

Social Indicators

The information presented in this section is an estimate from the guidance department. No records are kept on students' personal issues for confidentiality reasons. The counselling department at Galt Collegiate operates on a self-referral basis primarily. Students who request to see a counsellor consist of approximately half of the student body of 1300. Of those 650 students, approximately 30 percent (about 195 students) present statements related to depression (and in fewer cases some mentioned suicide). A student may also be referred to a counsellor by a teacher, parent, or friend as a result of concern over behaviour. Routine career and educational counselling involves all students and may stimulate another five percent of the total student body (about 65 students) to disclose statements relating to depression and suicide. Therefore, it is estimated that 260 students (or 20 percent of the total student body) per year speak to a guidance counsellor

about feelings related to depression and suicide. Of those 260 students, at least 80 percent are female. Of those 260 students seen by a counsellor, 15 percent (about 39 students, or three percent of the total student body) would be referred to various community counselling services.

The results from the student survey indicate that thirteen percent (27 students) of the 210 students who completed the questionnaire were clinically depressed, according to the cutoff score of the RADS (Reynolds, 1987). This figure of 13% for an overall rate of depression is slightly less than the guidance departments' estimate that 20% of the student body speaks to guidance counsellors about depression and suicide. Of those 27 students, 22 (80%) were female and 5 (20%) were male (see Table 6). This means that 17% of the girls and 6% of the boys surveyed fell into the clinical depression range. In several studies with hundreds of adolescents, Reynolds (1990) found that 14% of the girls and 8% of the boys in his sample scored in the clinically depressed range. One question in particular on the depression scale asked about hurting oneself, which is designated as a critical item by Reynolds. There were almost 10% (20 students) of the total student sample who indicated, "I feel like hurting myself", sometimes or most of the time. Of those students, twelve girls and three boys indicated

"sometimes", whereas three girls and two boys indicated "most of the time" (see Table 6). Thus, 75% of the students who indicated at least some suicide ideation (hurt oneself) were girls.

Table 6
Frequency Data For Depression and Hurt Oneself For Boys and Girls

Variable	Boys	Girls	Total
Depression Score			
77-80	2	5	7
81-85	2	5	7
86-90	0	6	6
91-95	0	3	3
96-100	1	1	2
> 100	0	2	2
Total	5	22	27
Hurt Oneself			
Almost Never	60	89	149
Hardly Ever	18	21	39
Sometimes	3	12	15
Most of the Time	2	3	5
Missing (2)			

Police records were obtained from two separate years, 1989 and 1990. The statistics are only available for adolescents (15-19 years of age) who attempted suicide. These figures are for the entire city of Cambridge. There is no information on adolescents who completed suicide. In 1990, two females (one 18 and one 19 year old) attempted suicide by an overdose of pills. In 1989, three females (15-18 years old) and four males (16-18 years old) attempted suicide. Female attempters

overdosed on pills, whereas male attempters tried overdose, hanging, or jumping. The majority of reasons given for attempting suicide were relationship problems, either between parents, siblings, or, most commonly, boyfriend/girlfriend. The statistics for the 19-24 year-old age category were double the attempts for the younger category for the Cambridge area.

Information from the Cambridge Community Mental Health Clinic regarding suicide referrals was not available for analysis.

Discussion

Research Hypotheses

The results of this study provide some support for the adolescent suicide model. According to the first hypothesis it was expected that the measure of daily hassles would be directly associated with negative affect and depression. For both boys and girls, peer hassles and the total hassles scale showed positive relationships with negative affect. Moreover, family and school hassles, for both boys and girls, were strongly positively related to depression. Cohen et al. (1987) found that negative life events and hassles were positively related to depression and anxiety. As well, Swearington and Cohen (1985) found stress factors to be highly correlated with psychological problems. This is consistent with data presented by Compas et al. (1986) in which negative life events were significantly correlated with symptoms of depression in senior high school students. In a study of positive and negative affect and its relation to perceived stress, Watson (1988) reported a positive correlation between stress and negative affect in a sample of first year university students. Thus, the literature strongly suggests that daily hassles are predictive of depression and negative feelings in adolescents.

The second hypothesis was that coping skills would be directly related to positive affect and inversely related to depression. The correlational data clearly support this hypothesis for some of the coping measures. For boys, problem-solving skills and seeking social support were positively related to positive affect, whereas problem-solving skills and physical exercise were related to positive affect for girls. Studies on coping suggest that coping behaviors increase one's positive affect and decrease depression. Glyshaw et al. (1989) found that problem-focused coping was predictive of positive adjustment in adolescents. Nelson (1990) also suggested that successfully coping with a stressful event increases one's positive affect. When an adolescent fails to use coping strategies, particularly problem-solving, to deal with a stressful event, the resulting consequence may be an impulsive, self-destructive act. Garfinkel (1983) explains that an impulsive reaction can be a response to inappropriate coping skills to deal with long-term stress.

The third hypothesis was that social support would be directly related to positive affect and inversely related to depression. Peer, school, and family support were significantly directly correlated with positive affect and significantly inversely related to depression. The main effects model by

Cohen and Wills (1985) suggests that social support has a beneficial effect on affect and depression even if the person is not experiencing stress. Social support may provide a person with positive experiences related to an overall sense of well-being. Veiel et al. (1988) explain that by enhancing an adolescent's social support network, the adolescent's level of positive affect increases and the likelihood of depression decreases. In a study of women's life strains, Nelson (1990) found that women who had a supportive network scored higher on the positive affect scale than those with lower levels of support. Compas et al. (1986), in examining the relationship between social support and psychological dysfunction among adolescents, found that low levels of social support were significantly related to symptoms of depression. Therefore, the influence of social support, through family, friends, and school, can have a positive effect on the adolescent's well-being.

The fourth hypothesis was that negative affect would be directly related to depression, whereas positive affect would be inversely related to depression. Negative affect was significantly directly correlated with depression, and positive affect was significantly inversely related to depression. Watson, Clark, and Tellegen (1988) also found evidence of a

relationship between depression and negative affect. They suggested that negative affect was directly related to a construct entitled "distress". However, positive affect was not related to distress. In a study of adult twins, Watson, Clark, and Carey (1988) also found a strong positive correlation between depressive disorders (including major depression and dysthymic disorders) and negative emotionality. As well, positive emotionality was inversely related to depressive disorders, as found in the present study.

The fifth hypothesis was that social support would interact with hassles to predict negative affect, consistent with the stress-buffering hypothesis. Several studies suggest that social support moderates or "buffers" the effects of life events by an interaction with the level of stress experienced (Cohen & Wills, 1985; Miller & Lefcourt, 1983; Nelson, 1990; Rudd, 1990). However, the results of the present study did not support the hypothesis that social support would interact with hassles to predict negative affect. Compas (1987) examined the interaction of life events and social support in relation to well-being in adolescents. He also failed to find any support for the interaction between life events and social support.

The stress-buffering hypothesis was suggested by the research on adult behavior rather than adolescent social support

and hassles. It may be that adolescent social support is not as effective a buffer of stress as is adult social support. Or, perhaps, the scales used to measure support, coping, and hassles were not sufficient to show the stress-buffering effects. Cohen and Wills (1985) distinguish between functional support (including esteem and informational support) and structural support. They argue that buffer effects are evident only when the support measures reflect the functional demands of stressors. Structural support measures are not expected to show buffer effects. Although the support measure used in the student questionnaire was a functional measure as defined by Cohen and Wills (1985), it did not show any buffering effects.

The literature on the buffering-hypothesis seems to be mixed. Cohen and Wills (1985) have not always found a buffering effect for functional support measures. Wagner and Compas (1990) suggest that when examining the moderators between stress and psychological symptoms one must look at the role of gender, instrumentality, and expressivity. They found that individuals with high self-esteem may be protected from the harmful effects of stress. Dubow and Tisak (1989) found stress-buffering effects for social support and coping skills in elementary school children. Teacher-rated and parent-rated behavior problems revealed that higher levels of social support and

coping skills (specifically social problem-solving skills) moderated the negative effects of stressful life events.

The sixth hypothesis was that coping would interact with hassles to predict negative affect, consistent with the stress buffering hypothesis. Again, the stress buffering hypothesis was not supported in this study. Nelson (1990) found that coping interacted with stress to reduce negative affect in a study of women's life strains. However, Wagner and Compas (1990) did not support the buffering effect, in a study of adolescent coping responses.

The seventh hypothesis was that there would be gender differences in stress, support, coping, affect, and depression. First, it was suggested that women would report more peer and family hassles than men. The results partially supported this hypothesis, showing that women reported more peer hassles than men, but not more family or school hassles. Wagner and Compas (1990) found that females reported more stress in their relationships with peers and family members than did males. They argue that self-esteem issues are linked to stress. Self-esteem among adolescent women is related to interpersonal relationships, and for adolescent men, self-esteem is related to achievement. Slavin and Rainer (1990) also support this finding that adolescent females report more stress than do

males. They associate this increased stress of adolescent women with being concerned about the problems of others in their social networks. Swearingen et al. (1985) consistently reported higher scores for girls on the life events scale for grade seven and eight students. Kessler and McLeod (1988) examined the health-damaging effects of providing social support and reported that women are especially burdened with the demands of their social networks. "We believe that women are not only exposed to more acute stresses than men, but also to more of the day-to-day chronic stresses that are associated with normal role functioning" (Kessler & McLeod, 1988, p.501).

There was also an age difference: older students reported more peer hassles and total hassles than younger students. Wagner and Compas (1990) reported age differences in their research on adolescent stress. The mean number of negative events (hassles) increased from junior high (grades seven and eight) to senior high (grades ten, eleven, and twelve) for family, peer, academic, and total events. As well, females were consistently higher across all categories than were males.

Second, it was suggested that women would report receiving more support than men. The study partially supported this hypothesis, showing that women reported more peer support than did men, but not more family, school, or total support. Slavin

and Rainer (1990) confirm that adolescent females report higher levels of support from nonfamily sources than do adolescent males. The research on adolescent support consistently confirms that female friendship networks are perceived as much more important than male friendships (Slavin & Rainer, 1990; Wagner & Compas, 1990). Males describe themselves as receiving less support from their friendship networks than females (Rudd, 1990). In a study of peer group behavior, Gavin and Furman (1989) revealed that girls reported having more positive interactions both in and out of the peer group, as well as fewer negative interactions with those outside of the peer group. They stated that girls are more "relationship-oriented" than boys. Many explanations have been given as to why female friendships are so important. Wagner and Compas (1990) describe this relationship for girls as involving an "ethic of responsibility" toward their peers. Adolescent males may not form an emotional, supportive network with other males. Rather, they develop many friendships with few emotional ties, and therefore experience less support. Adolescent girls perhaps report more stress since they take on the burden of their friends' problems, trying to be supportive to everyone in their friendship network, as noted above.

There were age differences as well in social support. Older students reported less family, school, and total support than did younger students. Gavin and Furman (1989) researched age differences in adolescent peer groups. They revealed that older adolescents (grade 11 and 12) perceived membership in peer groups as less important, increased the boundaries of their peer group, and decreased conformity toward group norms. They suggest that older adolescents become more "autonomous and self-reliant", while looking toward individual relationships to fulfil their needs. These findings are not consistent with the student survey and group interview, which suggest that older students report less support than younger students from family and school, but not peers.

Third, it was suggested that women would report using more emotion-focused coping, while men would report using more problem-focused coping. Pearlin and Schooler (1978) suggest that men are more likely to use problem-focused coping, while women are more likely to use emotion-focused coping. This hypothesis was not supported in the present research with adolescents. However, women reported using social support more than men, as well as more use of social entertainment as a form of coping. Men, on the other hand, reported using physical exercise more than women as a coping mechanism. In a study of

coping responses to stressful life events, Billings and Moos (1981) explained that men reported less frequent use of active-behavioral, avoidance, and emotion-focused coping than did women. Examples of active-behavioral coping include talking with a friend, family member, or other adult, and physical exercise. This finding is consistent with the theme that girls are more involved with their networks. The present study also found that older students reported less use of physical exercise as a coping method than younger students. Glyshaw et al. (1989) also found that physical exercise decreased from grade seven and eight to grade ten and eleven in a study of adolescent coping strategies.

Fourth, it was suggested that women would report higher levels of positive affect, negative affect, and depression. Women reported higher levels of negative affect and depression than men, but there were no gender differences in positive affect. Wood et al. (1989) demonstrated that women reported greater life satisfaction and overall happiness than men, as well as greater levels of fear and sadness. They stated that women are generally more in touch with their feelings and more free to express these attitudes openly. Therefore, women are expected to report higher levels of both positive and negative

affect. However, in the present study, women did not show higher levels of positive affect.

Research on adolescent depression has consistently shown that girls report more depression than boys. Reynolds (1987) has found that girls score consistently 5 to 7 points higher than boys, in hundreds of samples, on the Adolescent Depression Scale. The present results are consistent with this pattern. A model of suicide ideation developed by Rudd (1990) also indicates that females report higher levels of depression than males. Slavin and Rainer (1990) found a significant gender difference in adolescent depression, with girls consistently scoring higher than boys for all grades (grades 9, 10 and 11). It has been argued that young girls are socialized to be helpless, and that the social status of women can be depressing (Weissman & Klerman, 1977). The Canadian Mental Health Association's "Women and Mental Health in Canada" (1987) reports that "women tend to predominate in diagnostic categories characterized by depression and anxiety" (p. 17). The present study found that there were more than four times as many girls as boys who exceeded the cutoff score on the Reynolds Adolescent Depression Scale.

The variable, "hurt oneself", was extracted from the depression scale for an estimated indication of the relationship

between stress, support, coping, depression, and hurting oneself. Since there was no suicide behavior measure on the questionnaire, the question, "hurt oneself", acted as a reference point to suicide ideation. As indicated by the frequency data, the concept of suicide ideation was reported more often for girls than boys. There were, however, no significant age or gender differences for hurt oneself.

The study also showed a significant difference in age for positive affect, negative affect, and depression. Older students showed less positive affect, more negative affect, and more depression than did younger students. Only one other study showed a constant increase in adolescent depression scores from a junior high sample to a senior high sample (Glyshaw, Cohen, & Towbes, 1989). When I spoke to some of the students at Galt Collegiate about these age differences, they were not surprised. It seems that as a student gets older, he or she experiences more hassles, receives less social support from family and school and overall has much more to worry about. The generalizability of the students' perceptions of their support networks need to be examined cautiously. I have not found any studies which qualitatively examined age differences in adolescents. Moreover, the sample size of the student group interview was quite small compared to the school population.

Gavin and Furman (1989) also indicated that there is a decrease in peer social support to older adolescents. They argue that older students are more concerned with individual relationships, rather than peer groups, to fulfil their needs. The students in the present study agreed that they receive less support as they get older. As a student becomes older and consequently more independent, teachers and parents provide less support but hold higher expectations. These higher expectations are an aspect of becoming a more responsible adolescent. Teachers no longer pressure the student to hand in work or finish assignments. As well, parents lessen their close reins on their son/daughter, as he/she is becoming a responsible adult. Also mentioned in the student interview was the increase in hassles as one gets older. Many older students pursue part-time jobs, develop more intimate relationships, worry about future plans (i.e., college/university, or a full time job), and most often have more school work. The possible increase in hassles, and lack of support from family, friends, and school, are some of the factors that may account for older students reporting less positive affect, more negative affect, and more depression.

Action Goals

The results of the study showed several gender and age differences, with older female students reporting the most distress. Women, overall, reported more hassles, support, coping (support and entertainment), negative affect, and depression than men. Older students reported less support, exercise, and positive affect, and more hassles, negative affect, and depression than younger students.

Hassles, lack of support, and inadequate coping skills, as outlined in the model, are precipitating factors for depression. Hassles are risk factors for depression and suicide whereas support and coping are resistance factors. The results of the present study indicate that depression is positively related to hassles and negative affect. Support, coping, and positive affect, on the other hand, are inversely related to depression. The results of the questionnaire also indicated that 13% of the students sampled reported levels of clinical depression, according to Reynolds (1987) cut-off. This rate is slightly higher than the high school samples in Reynolds' study.

There are several implications for high school interventions from these findings. Felner and Adan (1988) created a program (STEP) to ease the transition from elementary school into secondary school. The program primarily increased

support systems throughout the first year of high school, by reducing the stress caused from the confusion of entering a (usually) much larger school environment. Unfortunately, the program only supports a very small portion of the school population. The present findings outline the point that students need continued support throughout each year of high school. It is especially important to increase support for the senior students, since many older students have indicated, through the questionnaire and group interview, a perceived lack of support from family and school. Although there has been a lot of discussion about the benefits of receiving social support, the health-damaging effects of students providing social support for other students, as outlined by Kessler and McLeod (1988) in a later section, should not be overlooked.

Another program focused primarily on life skills training for the prevention of substance abuse among adolescents (Dusenbury, Botvin, & James-Ortiz, 1989). The program encompassed coping with stress, decision-making, improving self-esteem, social skills, and assertiveness training. The ten week, school-based program is designed for all students (not just for students with abuse problems). The life skills program is an initial step toward an overall high school intervention.

While the program is effective at teaching about coping and stress factors, it does not seek to increase support, which must accompany stress and coping information for an overall primary prevention program focusing on adolescents.

The results have also indicated that high school interventions must be sensitive to gender differences. Adolescent girls may need more support than adolescent boys, as they take on the burden of being supportive to others. This is evident in the peer counselling program at G.C.I., where three-quarters of the peer counsellors are female. Female peer networks can be very stressful, as much of the literature has already indicated. Kessler and McLeod (1988) argue that there are serious personal costs associated with being a peer supporter, especially for women. It is crucial to examine the support that the female peer counsellors are receiving and providing in order to design a high school intervention for students.

The findings highlight many of the concerns of adolescent girls with their peer relationships. However, not as evident in the findings, adolescent boys are also at a risk for depression and suicide. Statistics constantly show that men are four times more likely to complete suicide than women. The signs and symptoms, which are extremely evident in women, are

not as visible in men, therefore prevention programs must be sensitive to the issues of young adolescent boys as well as girls.

Key informant interviews recommended that any high school intervention program should be aimed at providing support and developing coping and stress management skills. There were several concerns voiced about confidentiality, community networking, and school-based programming in general. However, every informant reacted positively to a program which would include the school as well as the community. The community informants and the student focus group agreed that there is a need for prevention programs for adolescents. The key informants feel that the services presently available to youth in the Cambridge area are inadequate.

Another action goal was to develop school and community support and awareness of an adolescent stress, support, and coping skills program through the establishment of an advisory committee and community interviews. The school-based advisory committee was established to oversee the research component of the needs assessment at the school. The committee consisted of school personnel, agency representatives, a parent, and a student. The committee provided feedback, support, and advice

on the student survey, as well as expert suggestions on which key informants to contact for interviews.

Throughout the needs assessment stage of the research the committee maintained a high involvement in the process. The second phase of the research, however, did not maintain the high energy level of the first few months. As the committee developed from an advisory board to a program development committee, the research project became vague and the members lost direction and leadership. When the Ministry of Health did not call for proposals at that time, the members became frustrated and lost their enthusiasm. Without external funding the advisory committee could not venture to explore other alternatives. The committee decided to end their involvement when the needs assessment was completed at the end of February with intentions of starting again in the fall.

In conclusion, the primary prevention of adolescent depression should focus on reducing the risk factors (daily hassles) and strengthening the resistance factors (social support and coping skills) that are known to be associated with depression. The findings from this study have provided the necessary evidence that is required in order to validate a need for both primary and secondary prevention programs aimed at

preventing teen-age depression and suicide in the region of Cambridge, particulary Galt Collegiate Institute.

Future Research and Action

Future research. This research could be extended in several directions. First, I relied exclusively on self-reports from the students; thus, I have information about the students' perceptions, but not necessarily about their behavior. It would be valuable to complement these measures with observations of students' behavior or parent/teacher reports of students' behavior.

The second area for future research involves the examination of gender patterns in hassles, support, coping, and depression. The results of the present study indicated that females reported more hassles and support from their peers than from other sources (i.e., family and school). Qualitative research on peer stress and peer support would serve to further clarify the context and meaning of the importance of female adolescent peer relationships. In addition, coping strategies for both boys and girls need to be examined further in order to understand the differences of adolescent coping responses. Specific questions need to be addressed regarding the kinds of physical exercises adolescent boys use as a coping response, as

discovered in the present study. Social support as a coping strategy for adolescent girls is another important factor which affects the results of this study. Further research in this area is essential for developing programs which focus on adolescent coping skills.

Third, an important task for future research is to identify the factors responsible for age differences in stress, support, coping, affect, and depression. The evidence from the present study indicates surprisingly significant age differences with all variables. The lack of research in this area is an important factor for prevention programs in the high school. Further qualitative research on these differences is crucial in order to understand the implications and the effects of primary prevention programs for adolescents.

Future Action. As discussed earlier, the school-based advisory committee lies dormant, while waiting for the resources (financial) to continue the development of a prevention program. However, there are some important results from this thesis which need to be examined before approaching an outline for a program. These results include: age and gender differences in stress, support, and coping; poor networking in the community; and contradictions in service demands. First, age and gender differences are vital to the development of a prevention program

for high school students. Many programs previously reviewed in the literature rarely acknowledged gender differences and never considered age differences as significant comoponents to a prevention program.

Second, key informants expressed a lack of knowledge and information exchange with other social services in the community. An effective prevention program must be developed and supported by both the community and the school in order to give youth the best possible resources essential for mental health promotion.

Third, the need for services in the Cambridge community has not been adequately defined. Contradictions of service needs were recognized through the key informant interviews. For example, several informants indicated a waiting period at the mental health clinic, although the mental health clinic denied such a waiting period for youth in crises. Many service providers rely on different definitions of an adolescent crisis situation. Therefore, the type of services needed for different adolescent problems is unclear.

In the fall of 1991 a practicum assignment may take place at Galt Collegiate Institute to begin phases of a pilot program focussing on stress, support, and coping skills. The assignment will be for a graduate student in the Social-Community

Psychology program at Wilfrid Laurier University. Recommendations from this study will be a guideline for the pilot program. A pilot program encompassing stress management, problem-solving skills, and social support will follow one class through four years of school in order to verify the results of extended preventive health programming. A program for high school students focussing on mental health promotion should continue throughout the students' academic career, not just for one year only, as many other prevention programs have proposed. Continued support, which is recommended from the results of this study, should also endure the length of time the students are in school.

References

Bradburn, N. M. (1969). *The structure of psychological well-being.* Chicago: Aldine.

Barrett, T. C. (1989). *Teens in crisis: Preventing suicide and other self-destructive behavior.* Arlington, Virginia: American Association of School Administrators.

Canadian Mental Health Association (1987). *Women and mental health in Canada: Strategies for change.* Toronto: Canadian Mental Health Association, National Office.

Cauce, A. M., Felner, R. D., & Primavera, J. (1982). Social support in high-risk adolescents: Structural components and adaptive impact. *American Journal of Community Psychology, 10,* 417-428.

Cohen, L. H., Burt, C. E., & Bjorck, J. P. (1987). Life stress and adjustment: Effects of life events experienced by young adolescents and their parents. *Developmental Psychology, 23,* 483-492.

Cohen, S. & Hoberman, H. M. (1983). Positive events and social supports as buffers of life change stress. *Journal of Applied Social Psychology, 13,* 99-125.

Cohen, S., & Wills, T.A. (1985). Stress, social support, and the buffering hypothesis. *Psychological Bulletin, 98,* 310-357.

Compas, B. E. (1987). Coping with stress during childhood and adolescence. *Psychological Bulletin, 101,* 393-403.

Compas, B. E., Slavin, L. A., Wagner, B. M., & Vannatta, K. (1986). Relationship of life events and social support with psychological dysfunction among adolescents. *Journal of Youth and Adolescence, 15,* 205-221.

Curran, D. K. (1987). *Adolescent suicidal behavior.* New York: Hemisphere Publishing Corporation.

Davidson, L. E., Rosenberg, M. L., Mercy, J. L., Franklin, J., & Simmons, J. T. (1989). An epidemiological study of risk factors in two teenage suicide clusters. *Journal of the American Medical Association, 262,* 2687-2692.

DuBois, D. L., & Hirsch, B. J. (1990). *Peer support and adolescent adjustment: A two-year longitudinal analysis.* Paper presented at the 98th convention of the American Psychological Association, Boston.

Dubow, E. F., & Tisak, J. (1989). The relation between stressful life events and adjustment in elementary school children: The role of social support and social problem-solving skills. *Child Development, 60,* 1412-1423.

Dusenbury, L., Botvin, G. J., & James-Ortiz, S. (1989). The primary prevention of adolescent substance abuse through the promotion of personal and social competence. In R. P. Lorion(Ed.), *Protecting the children: Strategies for optimizing emotional and behavioral development. Prevention in Human Services, 7,* 201-224.

Felner, R. D., & Adan, A. M. (1988). The school transitional environment project: An ecological intervention and evaluation. In R. H. Price, E. L. Cowen, R. P. Lorion, & J. Ramos-McKay (Eds.), *Fourteen ounces of prevention: A casebookfor practitioners* (pp. 111-122). Washington, D. C.: American Psychogical Association.

Folkman, S. & Lazarus, R. S. (1980). An analysis of coping in a middle-aged community sample. *Journal of Health and Social Behavior, 21,* 219-239.

Fris, J. (1990). Preventing teen suicide: How schools can help. *The Canadian School Executive, January,* 18-22.

Garfinkel, B. D., & Golombek, H. (1983). Suicidal behavior in adolescence. In H. Golombek, and B. D. Garfinkel (Eds.), *The adolescent and mood disturbance* (pp. 189-217). New York: International Universities Press, Inc.

Gavin, L. A., & Furman, W. (1989). Age differences in adolescents' perceptions of their peer groups. *Developmental Psychology, 25,* 827-834.

Glyshaw, K., Cohen, L. H., & Towbes, L. C. (1989). Coping strategies and psychological distress: Prospective analyses of early and middle adolescents. *American Journal of Community Psychology, 17,* 607-623.

Hamilton Board of Education (1987). *A handbook for the caregiver on suicide prevention.* Hamilton, Ontario: Council on Suicide Prevention, Hamilton and District.

Herzberg, F. (1966). *Work and the nature of man.* New York: World Publishing.

Hobfoll, S. E. (1989). Conservation of resources: A new attempt at conceptualizing stress. *American Psychologist, 44,* 513-524.

Johnson, S. W., & Maile, L. J. (1987). *Suicide and the schools: A handbook for prevention, intervention, and rehabilitation.* Springfield, Illinois: Charles C. Thomas Publisher.

Jurnovoy, J., & Jenness, D. (1984, July). Teenage suicide. *Good Housekeeping,* pp. 86-94.

Kessler, R. C., McLeod, J. D., & Wethington, E. (1985). The costs of caring: A perspective on the relationship between sex and psychological distress. In I. G. Sarason, and B. R. Sarason (Eds.), *Social support: Theory, research, and applications* (pp. 491-506). Dordrecht, Netherlands: Martinus Nijhoff Publishers.

Kurash, C. L., & Schaul, J. F. (1987). Depression and adolescent girls. In R. Formanek and A. Gurian (Eds.), *Women and depression: A lifespan perspective.* New York: Springer Publishing Company.

Miller, R. S., & Lefcourt, H. M. (1983). Social intimacy: An important moderator of stressful life events. *American Journal of Community Psychology, 11,* 127-139.

Milord, J. T. (1976). Human service needs assessment: Three non-epidemiological approaches. *Canadian Psychological Review, 17,* 260-269.

National Task Force on Suicide in Canada. (1986). *Suicide in Canada,* Ottawa, Ontario: Ministry of National Health and Welfare.

Nelson, G. (1990). Women's life strains, social support, coping, and positive and negative affect: Cross-sectional and longitudinal tests of the two-factor theory of emotional well-being. *Journal of Community Psychology, 18,* 239-263.

Patros, P. G. & Shamoo, T. K. (1989). *Depression and suicide in children and adolescents: Prevention, intervention, and postvention*. Massachusetts, Allyn and Bacon, Inc.

Patton, M. Q. (1980). *Qualitative evaluation methods*. Newbury Park, London: Sage Publications.

Pearlin, L., & Schooler, C. (1978). The structure of coping. *Journal of Health and Social Behavior, 19,* 2-21.

Poland, S. (1989). *Suicide intervention in the schools*. New York: Guilford Press.

Polly, J. (1986). *Preventing teenage suicide: The living alternative handbook*. New York: Human Sciences Press, Inc.

Price, R. H., & Cherniss, C. (1977). Training for a new profession: Research as social action. *Professional Psychology, 8,* 222-230.

Pronovost, J., Cote, L., & Ross, C. (1990). Epidemiological study of suicidal behavior among secondary-school students. *Canada's Mental Health, (March),* 9-15.

Rappaport, J., & Seidman, E. (Eds.), (1986). *Redefining social problems*. New York: Plenum.

Rathus, S. A., & Nevid, J. S. (1991). *Abnormal psychology*. Englewood Cliffs, New Jersey: Prentice Hall.

Report of the National Conference on Youth Suicide. (1989). *Community response to a national tragedy*. Washington, D.C: Youth Suicide National Centre.

Reynolds, W. M. (1987). *Reynolds Adolescent Depression Scale: Professional Manual*. Odessa, FL: Psychological Assessment Resources, Inc.

Reynolds, W. M. (1988). *Suicide Ideation Questionnaire: Professional Manual*. Odessa, FL: Psychological Assessment Resources, Inc.

Reynolds W. M., & Waltz, J. (1988). Events Questionnaire. Unpublished document.

Rudd, M. D. (1990). An integrative model of suicidal ideation. *Suicide and Life-Threatening Behavior, 20,* 16-30.

Ryerson, D. M. (1987). "ASAP" - an adolescent suicide awareness programme. In R. F. W. Diekstra, and K. Hawton (Eds.), *Suicide in adolescents,* (pp. 173-190). Dordrecht, Netherlands: Martinus Nijhoff Publishers.

Sandler, I. N., & Barrera, M. (1984). Toward a multimethod approach to assessing the effects of social support. *American Journal of Community Psychology, 12,* 37-52.

Schotte, D. E., & Clum, G. A. (1982). Suicide ideation in a college population: A test of a model. *Journal of Consulting and Clinical Psychology, 50,* 690-696.

Shaffer, D., Veiland, V., Garland, A., Rojas, M., Underwood, M., and Busner, C. (1990). Adolescent suicide attempters: Response to suicide-prevention programs. *Journal of the American Medical Association, 264,* 3151-3155.

SIEC - Suicide Information and Education Centre. (1990). *Facing the facts. Suicide in Canada*. pamphlet, Calgary Alberta: Canadian Mental Health Association.

Slavin, L. A., & Rainer, K. L. (1990). Gender differences in emotional support and depressive symptoms among adolescents: A prospective analysis. *American Journal of Community Psychology, 18,* 407-421.

Smith, J. (1989). *Suicide prevention: A crisis intervention curriculum for teenagers and young adults*. Holmes Beach, FL: Learning Publications, Inc.

Swearingen, E. M., & Cohen, L. H. (1985). Measurement of adolescents' life events: The junior high life experiences survey. *American Journal of Community Psychology, 13,* 69-85.

Swift, M., Masterpasqua, F., Cutler, P., Chapman, L., Frank, J., & Healey, K. (1990). *Stress, coping and adjustment among young, inner-city adolescents.* Paper presented at the 98th convention of the American Psychological Association, Boston.

Veiel, H. O. F., Brill, G., Hafner, H., & Welz, R. (1988). The social supports of suicide attempters: The different roles of family and friends. *American Journal of Community Psychology, 16,* 839-861.

Wagner, B. M., & Compas, B. E. (1990). Gender, instrumentality, and expressivity: Moderators of the relation between stress and psychological symptoms during adolescence. *American Journal of Community Psychology, 18,* 383-406.

Watson, D. (1988). Intraindividual and interindividual analyses of positive and negative affect: Their relation to health complaints, perceived stress, and daily activities. *Journal of Personality and Social Psychology, 54,* 1020-1030.

Watson, D., Clark, L. A., & Carey, G. (1988). Positive and negative affectivity and their relation to anxiety and depressive disorders. *Journal of Abnormal Psychology, 97,* 346-353.

Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: The PANAS scales. *Journal of Personality and Social Psychology, 54,* 1063-1070.

Weissman, M. M., & Klerman, G. L. (1977). Sex differences and the epidemiology of depression. *Archives of General Psychiatry, 34,* 98-111.

Wills, T. A. (1986). Stress and coping in early adolescence: Relationships to substance use in urban school samples. *Health Psychology, 5,* 503-529.

Wood, W., Rhodes, N., & Whelan, M. (1989). Sex differences in positive well-being: A consideration of emotional style and marital status. *Psychological Bulletin, 106,* 249-264.

Zautra, A. J., & Reich, J. W. (1985). Life events and perceptions of life quality: Developments in a two-factor approach. *Journal of Community Psychology, 11,* 121-132.

Appendix A

Adolescent Experiences Questionnaire

ADOLESCENT

EXPERIENCES

QUESTIONNAIRE

HOMEROOM :_____

BIRTHDATE: _____

AGE: _____

GENDER: MALE _____ **FEMALE** _____

STREET NAME (NEIGHBORHOOD) _____

ADOLESCENT EXPERIENCES QUESTIONNAIRE

This questionnaire is designed to tap into several areas that are part of being a teenager which include the following sections: stress, affect, depression, support and coping. I would like you to answer these questions as they relate to you, on the average, over the past month, not just the past couple of days. Should you feel distressed about any of the sections of the questionnaire you are not required to continue answering the questions. Some of the questions ask about feelings of depression. It is normal and OK to feel distressed when reading and answering such questions. There is support available if you need it before or after you have finished the questionnaire. Your name will not appear anywhere on the questionnaire to insure confidentiality. The reason why we are asking you to complete the information on the front page is so that we are able to identify any student who may be at a high risk for depression and possibly need some support through counselling and guidance. If you have any further questions regarding the questionnaire or any one of the sections please feel free to ask about them at any time.

SECTION I

The following statements describe some good and some not so good things that may have happened to you in the past month or two. Read each statement carefully and decide if the statement is true or mostly true about you, or if it is false or mostly false about you. Be sure to answer every item. Circle true or false as it relates to you. Remember, there are no right or wrong answers. Answer each item as things were in the past month or two, not as you wished they were.

1.	My grades in school got worse.	TRUE FALSE
2.	People talked about me behind my back.	TRUE FALSE
3.	I argued with a good friend.	TRUE FALSE
4.	My family had money problems.	TRUE FALSE
5.	I didn't have many friends.	TRUE FALSE
6.	My parents expected too much of me.	TRUE FALSE
7.	I missed my girlfriend or boyfriend.	TRUE FALSE
8.	I was hassled by my parents because of things I wanted to do.	TRUE FALSE
9.	I was bothered by how I looked.	TRUE FALSE
10.	I didn't have enough money to buy things I really wanted.	TRUE FALSE
11.	I had problems with my health that bothered me.	TRUE FALSE
12.	I wished I had more or different clothes.	TRUE FALSE
13.	I looked but I could not find a good job.	TRUE FALSE
14.	A friend treated me badly.	TRUE FALSE
15.	I had hassles with my girlfriend or boyfriend.	TRUE FALSE
16.	My parents bothered me about my grades.	TRUE FALSE
17.	I was pressured by others my age to do things I didn't want to.	TRUE FALSE
18.	I did not get along with people at work.	TRUE FALSE
19.	I didn't make a team or group that I wanted to.	TRUE FALSE

20.	A teacher did not like me.	TRUE	FALSE
21.	I did not do as well in school as I could have.	TRUE	FALSE
22.	My parents made me do too much work at home.	TRUE	FALSE
23.	My parents did not get along with each other.	TRUE	FALSE
24.	I couldn't do things I wanted because I did not have a car.	TRUE	FALSE
25.	I did not get along with my parents.	TRUE	FALSE
26.	My parents did not like my friends.	TRUE	FALSE
27.	I got into hassles at school.	TRUE	FALSE
28.	My parents treated me like a child.	TRUE	FALSE
29.	People teased or made fun of me.	TRUE	FALSE
30.	I didn't get along with my brother(s) and\or sister(s).	TRUE	FALSE
31.	I got into hassles at home.	TRUE	FALSE

SECTION II

Listed below are a number of words that describe different feelings and emotions. Read each item and then circle the appropriate answer corresponding to the scale below. Indicate to what extent you have felt this way during the past month. Use the following scale to record your answers.

Very slightly or not at all	A little	Moderately	Quite a bit	A lot
1	2	3	4	5

1.	Interested	1	2	3	4	5	
2.	Distressed	1	2	3	4	5	
3.	Excited	1	2	3	4	5	
4.	Upset	1	2	3	4	5	
5.	Strong	1	2	3	4	5	
6.	Guilty	1	2	3	4	5	
7.	Scared	1	2	3	4	5	
8.	Hostile	1	2	3	4	5	
9.	Enthusiastic	1	2	3	4	5	
10.	Proud	1	2	3	4	5	
11.	Irritable	1	2	3	4	5	
12.	Alert	1	2	3	4	5	
13.	Ashamed	1	2	3	4	5	
14.	Inspired	1	2	3	4	5	
15.	Nervous	1	2	3	4	5	
16.	Determined	1	2	3	4	5	
17.	Attentive	1	2	3	4	5	
18.	Jittery	1	2	3	4	5	
19.	Active	1	2	3	4	5	
20.	Afraid	1	2	3	4	5	

SECTION III

Listed below are some sentences about how you feel. Read each sentence and decide how often you have felt this way in the past month. Decide if you feel this way: almost never, hardly ever, sometimes, or most of the time. Circle the number that best describes how you really feel. Remember, there are no right or wrong answers. Just choose the answer that tells how you usually feel.

Almost never	Hardly ever	Sometimes	Most of the time
1	2	3	4

1.	I feel happy.	1	2	3	4
2.	I worry about school.	1	2	3	4
3.	I feel lonely.	1	2	3	4
4.	I feel my parents don't like me.	1	2	3	4
5.	I feel important.	1	2	3	4
6.	I feel like hiding from people.	1	2	3	4
7.	I feel sad.	1	2	3	4
8.	I feel like crying.	1	2	3	4
9.	I feel that no one cares about me.	1	2	3	4
10.	I feel like having fun with other students.	1	2	3	4
11.	I feel sick.	1	2	3	4
12.	I feel loved.	1	2	3	4
13.	I feel like running away.	1	2	3	4
14.	I feel like hurting myself.	1	2	3	4
15.	I feel that other students don't like me.	1	2	3	4

16.	I feel upset.	1	2	3	4
17.	I feel life is unfair.	1	2	3	4
18.	I feel tired.	1	2	3	4
19.	I feel I am bad.	1	2	3	4
20.	I feel I am no good.	1	2	3	4
21.	I feel sorry for myself.	1	2	3	4
22.	I feel mad about things.	1	2	3	4
23.	I feel like talking to other students.	1	2	3	4
24.	I have trouble sleeping.	1	2	3	4
25.	I feel like having fun.	1	2	3	4
26.	I feel worried.	1	2	3	4
27.	I get stomachaches.	1	2	3	4
28.	I feel bored.	1	2	3	4
29.	I like eating meals.	1	2	3	4
30.	I feel like nothing I do helps any more.	1	2	3	4

SECTION IV

The following statements describe some good and some not so good things that may have happened to you in the past month or two. Read each statement carefully and decide if the statement is true or mostly true about you, or if it is false or mostly false about you. Be sure to answer every item. Circle true or false as it relates to you. Remember, there are no right or wrong answers. Answer each item as things were in the past month or two, not as you wished they were.

1. I had friends who would be there if I needed them.	TRUE	FALSE
2. My parents helped me with problems when they could.	TRUE	FALSE
3. My family cared about me.	TRUE	FALSE
4. I had friends to do things with.	TRUE	FALSE
5. I spent time in extracurricular activities at school.	TRUE	FALSE
6. People at school included me in activities.	TRUE	FALSE
7. There were people who counted on me for help.	TRUE	FALSE
8. I knew my parents would be there if I needed them.	TRUE	FALSE
9. I was part of a group at school.	TRUE	FALSE
10. Teachers in school cared about how I was doing.	TRUE	FALSE
11. I had a good friend who I spent time with.	TRUE	FALSE
12. I had friends I could talk to about my problems	TRUE	FALSE
13. I had a group of friends that I did things with.	TRUE	FALSE
14. People I know cared about me.	TRUE	FALSE
15. I felt that I had something to give to others.	TRUE	FALSE
16. I did things at church or after school that I enjoyed.	TRUE	FALSE

SECTION V

Listed below are a number of coping strategies. Please indicate the frequency with which you would use the particular strategies to actually help you cope with a real problem. Circle your response corresponding with the scale below.

Never	Occasionally	Sometimes	Often	Always
1	2	3	4	5

Problem Solving:

1.	Think about choices before acting.	1	2	3	4	5
2.	Think about which information is necessary.	1	2	3	4	5
3.	Think about risks of different solutions.	1	2	3	4	5
4.	Think about possible consequences.	1	2	3	4	5
5.	Get needed information.	1	2	3	4	5
6.	Think about which is best alternative.	1	2	3	4	5
7.	Compromise to get something positive.	1	2	3	4	5
8.	Change behavior that contributes to problem.	1	2	3	4	5
9.	Change attitude that contributes to problem.	1	2	3	4	5

Cognitive Coping:

10.	Try to put it out of your mind.	1	2	3	4	5
11.	Tell yourself it will be over soon.	1	2	3	4	5
12.	Wait and hope things will get better.	1	2	3	4	5
13.	Try to notice only the good things in life.	1	2	3	4	5
14.	Tell yourself it's not worth getting upset about.	1	2	3	4	5
15.	Remind yourself things could be worse.	1	2	3	4	5
16.	Go on as if nothing happened.	1	2	3	4	5

Social Support:

17.	Find someone special to share the problem with.	1	2	3	4	5
18.	Let your feelings out with someone.	1	2	3	4	5
19.	Look for a person who may understand the problem.	1	2	3	4	5
20.	Talk with a friend.	1	2	3	4	5
21.	Talk with a brother or sister.	1	2	3	4	5

Social Entertainment:

22.	Go to the movies.	1	2	3	4	5
23.	Go shopping.	1	2	3	4	5
24.	Hang out with other kids.	1	2	3	4	5
25.	Go to a party.	1	2	3	4	5

Physical Exercise:

26.	Work it off by physical exercise.	1	2	3	4	5
27.	Go to the gym to work out.	1	2	3	4	5
28.	Play sports.	1	2	3	4	5
29.	Go jogging.	1	2	3	4	5
30.	Go bicycle riding.	1	2	3	4	5

REACTIONS/COMMENTS:

_____

_____

_____

_____

_____

Appendix B

Participant Information Letter and Consent Form

Dear Parent/Guardian and Participant:

My name is Jill Somerville and I am a graduate student in Psychology at Wilfrid Laurier University. Under the direction of Dr. Geoffrey Nelson, and with the approval of the Waterloo County Board of Education, and the Canadian Mental Health Association, I am conducting a study at Galt Collegiate Institute. The study is to determine students' levels of stress, support, coping and depression. It is up to the student and their parent/guardian as to whether they wish to participate in this research. Those students who are eighteen years of age or older do not need signed consent from their parents. However, parents are encouraged to ask any questions they may have. Students who need parental consent (under 18 years of age) are also asked to sign the consent form to ensure that their participation is voluntary.

The students have been randomly selected, along with two hundred other students at the school, to complete a questionnaire regarding stress, social support, coping, and depression. Participation in this study will not effect the students' marks in any way. The student's name will not be recorded anywhere to insure confidentiality. The participation of all students is completely voluntary, and the student may withdraw from answering any of the questions at any point throughout the questionnaire.

Once available, a written summary of the results from the questionnaire will be provided to all those who participated and requested feedback information. Please return the enclosed consent form on Friday October 12th to the teacher that has handed it out to you. If you require further information regarding the study please do not hesitate to phone the school and we will send you some more detailed information.

Thank you for your time and cooperation.

Sincerely,

(Jill Somerville) (Geoffrey Nelson) (C.W. Wilson)

CONSENT FORM

As a student in one of the eight English classes in the school that has been randomly chosen, I agree to participate (or have consent to participate) in the study by Dr. Geoffrey Nelson and Jill Somerville at Galt Collegiate. All participation in this questionnaire is strictly voluntary, and participants have the right to withdraw at any point throughout the questionnaire.

NO_____ YES_____

Student's name_____

Grade: 9 10 11 12/OAC

Student's signature:_____

Parent\Guardian signature:_____
(if under 18 years of age)

Please state the period of your English class._____

Feedback Request:

I would like to be informed as to the results of this study, please include your home address below and a copy of the completed results will be sent to you by letter by January 1991.

_____

_____

_____

PLEASE RETURN THIS FORM ON FRIDAY OCTOBER 12 TO YOUR ENGLISH TEACHER OR THE GUIDANCE DEPARTMENT SO THAT WE CAN BEGIN OUR RESEARCH

THANK YOU FOR YOUR COOPERATION

Appendix C

Participant Feedback

Dear Parent/Guardian and Participant:

A needs assessment of students' stress, support, and coping skills at Galt Collegiate Institute (GCI) was completed in November 1990. A brief summary of the findings are outlined below.

The questionnaire was designed to determine a need at the school for an adolescent prevention program. There were a total of 210 students from grade 9 to OAC who completed the questionnaire. The results of the study indicate that a more than average amount of students showed signs of depression, were lacking in social support from either peers, school, or family, and showed signs of daily stressful events. Most students, however, perceived their coping skills as adequate, where problem-solving was perceived as the most used and physical exercise perceived as the least used. Overall, students perceived their emotional feelings as stable. The need for an intervention such as stress management, coping skills and building support networks is an effective primary prevention approach to aid teenage depression.

A school-community advisory committee was formed in September to recommend funding for a proposal to establish a prevention program at GCI. Presently, lack of funding has caused the committee to become dormant, while future alternatives are being considered. If you would like more information regarding the needs assessment of have any concerns about the questionnaire please feel free to contact the Guidance Department at GCI.

Again, I would like to thank all of the students who participated in the needs assessment for their time and cooperation.

Sincerely,

Jill Somerville

ADOLESCENT EXPERIENCES

QUESTIONNAIRE

The purpose of the questionnaire was to assess the personal needs of high school students. The results of the questionnaire will help determine what an appropriate intervention at the school will invclve. The questionnaire included sections on stress, support, coping, depression and positive and negative feelings (affect).

There were a total of 210 students who completed the questionnaire, ranging in age from 13 -19 years with a majority of students, 16 years old. There were 83 male students and 127 female students.

The students were divided into five areas in Cambridge depending on the name or their street. There were 85 students from the east side of Galt (east of the river), 13 students from west Galt, 42 students from south Hespler, 51 students from north Hespler, and finally 6 students from Preston. The stress and support scales (sections one and four) were divided into three areas: peer relationships, school, and family. Responses of "false" on the support scale indicated that the student was lacking support in one or more areas. Approximately, 10% of the students were lacking in some social support (answered false on at least 8 questions out of 16). Responses of "true" on the stress scale indicated that the student was experiencing some stress in one or more areas.

Approximately, 18% of the students in the sample were experiencing some stress or daily hassles (answered true on at least 16 questions out of 31) at the time of the questionnaire.

Section two on the questionnaire was a list of 20 words describing a variety of feelings both positive and negative. Words that are related to positive affect are: interested, excited, strong, enthusiastic, proud, alert, inspired, determined, attentive and active. Words that are related to negative affect include:

distressed, upset, guilty, scared, hostile, irritable, ashamed, nervous, jittery, and afraid. Most students rated themselves as low (not at all or a little) on the negative words. Whereas, the positive words were rated more toward the middle of the scale (moderately).

The coping scale (section five) contained five different ways of coping: 1) problem solving, 2) cognitive coping, 3) social support, 4) social entertainment, and 5) physical exercise. The majority of the students rated their coping skills as high, responding to "always" or "often" for most of the questions.

As stated earlier, the questionnaire is used to asses the personal needs of students. There is a relationship between the number of daily hassles a student encounters, the amount of social support the student has, and the level of their coping skills. Students may become depressed if they have trouble coping with the hassles that occur daily and lack the support of family and friends. Most students experience some hassles on a daily basis, some of these are stressful while others are not, however, the amount of stress that occurs depends on how each individual handles it.

Again, I would like to thank all of the students who completed the questionnaire. If you have any further questions please do not hesitate to contact me.

Jill Somerville
(researcher)

Appendix D

Peer Counsellors Letter and Consent Form

September 28, 1990

Dear Parent/Guardian and Participant:

My name is Jill Somerville and I am a graduate student in Social-Community Psychology at Wilfrid Laurier University. Under the direction of Dr. Geoffrey Nelson, and with the support of the Waterloo County Board of Education, and the Canadian Mental Health Association, I am conducting a needs and resources assessment at Galt Collegiate Institute. A community advisory committee at the school is helping to develop and eventually implement a project focusing on adolescent stress, support, and coping. The project will be aimed at developing coping skills and providing support that should help to promote healthy self-esteem and prevent poor ways of coping (such as feelings of depression and thoughts of suicide). It must be noted, that it is entirely up to the student and/or his or her parent/guardian as to whether he\she wishes to participate in this research. Those students who are eighteen years of age or older do not need parental consent however, parents are encouraged to ask any questions they may have. Students who need parental consent (under 18 years of age) are also asked to sign the consent form to ensure that their participation is voluntary.

I want to determine if the students at the school would benefit from a project which would focus on youth stress, support and coping skills. I would like to collect some information which will help the school determine if and where the most appropriate focus area lies for the project. Participation in this study will not effect the students' marks in any way. This class has been chosen to assist the researcher in several areas including: a student to be part of an advisory group, two students to complete an informal interview, four students to participate in a pilot testing of the questionnaire, and the remaining students may be used to help with the administration of the questionnaire.

In order to insure confidentiality, the student's name will not be recorded anywhere. The participation of all students is completely voluntary, and the student may withdraw from answering any of the questions (whether they are participating in the interview or questionnaire) at any point.

Once available, a written summary of the information obtained from the questionnaire and the interviews will be provided to all those who participated and requested feedback information. Otherwise, a feedback session will be available to all students who participated in the study within their class. Please return the enclosed consent form as soon as possible to the teacher that has handed it out to you or return to the guidance office.

Thank you for your time and cooperation.

Sincerely,

(Jill Somerville) (Geoffrey Nelson, Ph.D.) (C.W. Wilson, B.A., M.Ed.)

CONSENT FORM

As a student in the Peer Counselling class, I agree to participate (or have consent to participate) in the study by Dr. Geoffrey Nelson and Jill Somerville titled, 'A Needs and Resources Assessment of a Stress, Support, and Coping Skills Project' at Galt Collegiate. All participation is strictly voluntary, and participants have the right to withdraw at any point throughout the study.

NO_____ YES_____

Student's name_____

Grade: 9 10 11 12/OAC

Student's signature:_____

Parent\Guardian signature:_____
(if under 18 years of age)

Feedback Request:

I would like to be informed as to the results of this study, please include your home address below and a copy of the completed results will be sent to you by letter by January 1991.

_____

_____

_____

PLEASE RETURN THIS FORM ON MONDAY OCTOBER 1 TO YOUR TEACHER OR THE GUIDANCE DEPARTMENT SO THAT WE CAN BEGIN OUR RESEARCH

THANK YOU FOR YOUR COOPERATION

Appendix E

Interview Guide

KEY INFORMANT INTERVIEW GUIDE

1. How much contact do you or your agency have with adolescents? (on a daily, monthly, or yearly basis)

2. What type of service does your agency or you provide to adolescents?

3. Do you (or anyone within your agency) provide any type of counselling to youth who have thought about or attempted suicide?

4. What resources are available in this community to aid adolescents in crisis periods, particularly suicide? Are they adequate? What would you like to see available?

5. What is your personal understanding and experience with adolescent stress, social support, and coping skills as they relate to feelings of depression and thoughts of suicide?

6. What are your thoughts and feelings about a program focusing on stress, support and coping skills at Galt Collegiate?

7. Can you think of any suggestions as to what an effective teenage program including stress, support, and coping would include at the school level?

Appendix F

Key Informant Letter and Consent Form

September, 1990

Dear Key Informant:

My name is Jill Somerville, and I am a graduate student in Social-Community Psychology at Wilfrid Laurier University. Under the direction of Dr. Geoffrey Nelson, and with the support of the Waterloo County Board of Education and the Canadian Mental Health Association of Waterloo Region, I am conducting a needs and resources assessment at Galt Collegiate Institute. There is a community advisory committee at the school which is helping to develop and eventually implement a project focussing on adolescent stress, support and coping skills. The project will be aimed at developing coping skills and providing support which should aid the promotion of a healthy self-esteem and prevent poor ways of coping (such as feelings of depression and thoughts of suicide). This kind of prevention effort is known as primary prevention (attempting to prevent the occurrence of an incident, specifically, adolescent depression which stimulates thoughts of suicide).

I want to determine whether the students at the school would benefit from a program assisting teenagers with stress reduction, support and coping skills. I would like to collect some research information which will help the school to determine where the most appropriate intervention could take place (where teenagers need the most support). You have been selected as part of the interview process in which your involvement with adolescents on a regular basis has been noted. I would like to meet with someone within your department who would be willing to complete an informal interview speaking about their experiences with adolescents. Also, it would be helpful to obtain information about some of the adolescent resources in the Cambridge community which are available for adolescents experiencing crisis situations.

I would like to complete the interview as early as possible before the end of October. I will contact you within the next few weeks to confirm a time and place for an interview. If you do not wish anyone from your department to participate in this interview please feel free to contact me at Galt Collegiate Institute. At the beginning of the interview, you will be requested to complete a consent form ensuring your voluntary participation in the study. You will also be asked whether the interview can be tape recorded for the restricted use of the interviewer only. This will aid the interviewer in the processing of the information obtained and will be completely erased (approximately one month) after the information has been recorded. All of the information obtained will remain strictly confidential, and will only be used to gain knowledge of adolescent resources available and to build a network between the school and the larger community.

I will send a summary of the information obtained at the completion of my study as well as keeping you informed as to the progress of the youth stress, support and coping skills project. This information will be available early in the new year, 1991. Thank you for your support.

Yours truly,

(Jill Somerville) (Geoffrey Nelson) (C.W. Wilson)

CONSENT FORM

Having been selected (as a key informant) as part of the interview process, I agree to participate in an informal interview by Jill Somerville (researcher) under the supervision of Dr. Geoffrey Nelson in a study of a needs and resources assessment of a stress, support and coping skills project at Galt Collegiate Institute. Participation in this interview is completely voluntary and all particpants have the right to withdraw at any point throughout the interview.

NO_____ YES_____

Organization (if applicable): _____

Participant's name:_____

Participant's signature:_____

Use of tape recorder: YES_____ NO_____

Feedback Request:

I would like to be informed as to the results of this study, please include your address below and a copy of the completed results will be sent to you by letter by January 1991.

_____

_____

_____

THANK YOU FOR YOUR COOPERATION

Appendix G

Feedback Letter to Key Informants

Dear Key Informant:

Sometime ago I interviewed you for a study I was conducting for my Masters thesis on adolescent stress, social support, and coping. The purpose of the study was to determine a need for a high school prevention program at Galt Collegiate Institute. In addition, 210 students at G.C.I. completed a survey to assess the level of depression and suicide ideation.

Most of the key informants recognized a need for prevention programs for youth in Cambridge, stating that the present services were inadequate for the problems that face teenagers today. At this time, the pilot intervention program in the high school, aimed at providing support, and developing coping and stress management skills, is awaiting funding from the Ministry of Health.

I would like to thank you for taking the time to speak with me. Your participation in this study was an important factor in determining the needs and resources in the community. As well, the program ideas that you provided were a valuable contribution to the advisory committee.

If you have any interest in becoming a member of the advisory committee at G.C.I., or have any helpful suggestions for the development of the program, please contact Tish Hardy, Head of Guidance, at the beginning of the school term. If you have any questions or would like more information about the study, please call me at 884-1979 (ext. 2929) or my advisor Geoff Nelson at 884-1970 (ext.2314). Thanks again.

Sincerely,

Jill Somerville

Wilfrid Laurier University

Appendix H

Regression Analyses For Boys and Girls With All

Independent and Dependent Variables

Regression Analyses for Boys with all Dependent and Independent Variables

Dependent variables	Independent variables	Pearson r	Beta	R^2	t	Overall F (df)
Negative affect	Family support	-.334	-.30	.11	2.67	6.48[a]
	Peer hassles	.270	.23	.16	2.01	(2,67)
Positive affect	Problem solving	.421	.39	.18	3.70	
	School support	.383	.25	.27	2.34	10.01[a]
	Family support	.240	.22	.32	2.10	(3,65)
Depression	Family hassles	.501	.35	.25	3.59	
	Peer support	-.440	-.26	.37	-2.59	13.77[a]
	Social entertainment	-.372	-.22	.41	-2.27	(4,68)
	School hassles	.350	.21	.45	2.25	
Hurting oneself	Social entertainment	-.371	-.38	.14	-3.69	11.34[a]
	Problem solving	-.313	-.33	.24	-3.15	(2,70)

[a] $p < .01$.

Regression Analyses for Girls with all Dependent and Independent Variables

Dependent variables	Independent variables	Pearson r	Beta	R2	t	Overall F (df)
Negative affect	Peer hassles	.577	.44	.33	5.1	
	Family hassles	.434	.27	.40	3.3	23.83[a]
	School support	-.353	-.17	.43	-2.1	(3,95)
Positive affect	School support	.368	.30	.14	3.3	
	Problem solving	.351	.32	.26	3.7	13.63[a]
	Physical exercise	.355	.21	.30	2.4	(3,96)
Depression	Peer hassles	.538	.25	.29	3.2	
	Family hassles	.521	.31	.42	4.1	24.81[a]
	School support	-.428	-.21	.51	-2.8	(5,92)
	Peer support	-.386	-.23	.54	-3.2	
	School hassles	.439	.22	.57	2.7	
Hurting oneself	Peer hassles	.326	.30	.11	3.2	8.35[a]
	Peer support	-.237	-.19	.14	-2.0	(2,101)

[a]$p < .01$.

Appendix I

Resources in the Cambridge Community

Resources Available in the Cambridge Community

Mentioned by the Key Informants

- Cambridge Counselling Service
- High School Guidance Counsellor
- Family Doctor
- Interfaith Counselling
- Youth Employment Service (YES) - housing registry
- Crisis Phone Line (HELP line)
- Cambridge Ministerial Group
- Family Crisis Shelter
- Lion's Club
- Family and Children's Services
- Aslan Place
- Lutherwood
- Neighborhood Associations:
- Lang's Farm
- Greenway chapel
- St. Agatha Children's village

Appendix J

Key Informant Program Ideas

KEY INFORMANT PROGRAM IDEAS:

1. - "open atmosphere so you are approachable"
   - "central place to go and talk to someone outside of the school"

2. - "school-based prevention programs are seen as positive"
   - "family supports should be shared by the community"
   - "school is the most important institution in the kid's life, should build in supports at curriculum level"
   - "self-esteem issues, communication skills, stress management"

3. - "peer counselling drop-in centre"
   - "offer programs in class time therefore mandatory for most students (i.e. "dimensions in living", life skills programs taught in home-ec)"
   - "24 hr. Youth Line (suicide)"

4. - "increase support through peer counsellors, counsellors willing to address students' personal needs, self-help group (in school as well as outside of school), accessible resources (i.e. library and cafeteria)"
   - "drop-in centre within and outside of the school"

5. - "small peer support study groups"
   - "staff who are truly concerned about youth and not their discipline"
   - "listening and talking and being interested in the kids...give kids support every single day"

6. - "confidence is a major issue for teenagers - very few will talk to someone within the school"

7. - "study skills brought into the classroom around exam time, hitting students in a group rather than on-on-one"

8. - "increase more leisure activities that the students want to do (i.e. pool tables)"

9. - "small group programs (in class) part of curriculum - preventive mental health program - educational"
   - "should be a Help Line in every school, clearly advertised and run by students with teachers as advisory support"