NINTH-GRADE HIGH SCHOOL STUDENTS' COPING AND ADAPTATION: A COUNSELLING PERSPECTIVE ON RESPONSES TO STRESSES OF EVERYDAY LIVING

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Ninth-Grade High School Students' Coping and Adaptation

Abstract

This study describes and analyzes within the cognitive-phenomenological theory of psychological stress developed by Lazarus and his colleagues the coping strategies used by 95 9th-grade adolescents in specific stressful events in their daily lives.

Four research instruments were administered three times at five- to six-week intervals: (1) the Semi-Structured Interview Schedule; (2) the Ways of Coping Checklist; (3) the Daily Hassles and Uplifts Scales; and, (4) the Hopkins Symptoms Checklist.

Results of the study indicate the most frequently reported hassles and uplifts are consistent with the age and developmental level of this sample. The concerns are primarily frequent, chronic minor events associated with activities of daily living. Hassles and uplifts were positively correlated with each other, as well as with symptomatology and coping strategies. Coping strategies were positively related to symptomatology. Female adolescents reported higher levels of uplifts intensity, more coping strategies, and higher levels of symptomatology than male adolescents. Although significantly fewer coping strategies were reported over time, both problem-solving and emotion-regulating strategies were used in the majority of stressful events. Significant differences in levels of symptomatology appeared as a function of the language-group to which subjects belonged.

While further investigation of adolescents' coping behaviors is warranted, the results of this study identified the need for stress management education for adolescents as well as for teachers, counsellors, and other professionals who work with them.

Abrégé

Cette étude décrit et analyse les stratégies utilisées par 95 adolescents de 9ième degré, pour faire face à des événements spécifiques dans leurs vies quotidiennes comportant du stress. Cette étude a été faite suivant la théorie connaissance-phénomène du stress psychologique, développée par Lazarus et ses collègues.

Quatre instruments de recherche ont été administrés à trois reprises dans des intervalles de cinq à six semaines: (1) Le tableau de l'entrevue semi-structurée; (2) La liste de manières de faire face aux situations; (3) Les échelles des problèmes et des élévations journaliers; et, (4) La liste des symptômes de Hopkins.

Les résultats de l'étude indiquent que les problèmes et les élévations mentionnés le plus souvent conséquents avec l'âge et le niveau de développement de cet échantillon. Les soucis sont surtout des événements mineurs, fréquents et chroniques, associés avec les activités de la vie quotidienne. Les problèmes et les élévations étaient en corrélation positive entre eux, ainsi qu'avec la symptomatologie et les stratégies pour y faire face. Les stratégies pour faire face aux situations avaient une relation positive avec la symptomatologie. Les jeunes femmes ont signalé des niveaux plus hauts dans l'intensité des élévations, davantage de stratégies pour faire face aux situations et des niveaux plus hauts de symptomatologie que les adolescents mâles. D'une façon significative, bien que, au fur et à mesure que le temps passait, les rapports des stratégies pour faire face aux situations ont diminué, des stratégies pour résoudre des problèmes et pour contrôler les émotions ont été utilisées dans la plupart des événements comportant de la tension. Des différences significatives dans les niveaux de symptomatologie ont apparu comme une fonction du groupe de langage auquel le sujet appartenait.

Tout en reconnaissant que davantage de recherches daps le comportement des adolescents et leurs manières de faire face aux situations sont nécessaires, les résultats de cette étude ont constaté le besoin d'instruction pour l'administration du stress pour les adolescents, ainsi que pour leurs instituteurs, conseillers et les autres professionnels qui travaillent avec eux.

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CHAPTER I

Adolescent Coping and Adaptation: A Statement of the Problem

It has been postulated that a major factor in physical and mental health may be an individual's capacity to adapt to life changes which have the potential to create stress (Bakal, 1979; Mendez, Yeaworth, York, & Goodwin, 1980; Zegans, 1982).

Traditionally, stress has been equated with unusual emergency situations which disrupt normal behavioral, physiological, and emotional functioning and interfere with everyday adaptation (Roskies & Lazarus, 1980). Thus conceptualized, stress constitutes an abnormal state, a deviation from the norm. With the rapidly accelerating rate of change in society, to confront harm, threat, or challenge in a way which taxes or exceeds adaptive capacities is no longer perceived as the fate of the particularly vulnerable, or of those exposed to an exceptional set of circumstances (Roskies & Lazarus, 1980). Rather, it is part of the average, expectable environment. It is no longer correct, if indeed it ever was, to speak of the absence of stress, but only of variations in its intensity and quality.

In our society adolescence has traditionally presented special adjustment problems. In addition to having to adapt to the physical and physiological changes associated with puberty, the adolescent is expected to master a number of critically important, interrelated developmental tasks.

Although adolescence is a particularly vulnerable period for exposure to life changes and stress, only a limited number of studies have considered the

effects of major rapid, social, and physical changes on individuals in this developmental phase of their lives (Elkind, 1981; Newcomb, Huba, & Bentler, 1981; Rubinstein, 1980; Tyerman & Humphrey, 1983). Furthermore, although normal adaptive responses to stressful events have become the focus of recent studies, relatively little is known about the normal coping processes in adolescence (Folkman & Lazarus, 1980; Hyson, 1983; Murphy & Moriarty, 1976; Offer & Offer, 1975; Pearlin, Lieberman, Menaghan, & Mullin, 1981; Pearlin & Schooler, 1978).

Despite the increasingly popular and scientific concern regarding health consequences of stress, relatively few reports have involved children or adolescents compared with the number of studies involving adults. Moreover, most of the research has been concerned with unusual populations or extreme situations (Garmezy & Rutter, 1983; Goldberger & Breznitz, 1982).

In view of the significant number of difficult life tasks which need confronting, it is not surprising that many forms of social and personal pathology make their first appearance during adolescence: alcoholism and other addictions, delinquency, depression, and schizophrenia (Coleman, 1980; Horrocks, 1976; Klerman, 1980). It is not clear to what extent the typical stresses of adolescence contribute to the origins of these problems. While disturbed behaviour in adolescence has been studied, far less is known about the normal processes of coping and adaptation. Preliminary evidence has suggested that many of the relationships observed between life changes and personal functioning in adults are also prevalent at younger ages (Newcomb et al., 1981). The coping styles developed during these critical life periods will influence the manner in which future life events will be managed (Hyson,

1983; Murphy & Moriarty, 1976).

To determine what constitutes normality and pathology in mental function is a difficult task, but for the adolescent population this appears to have been particularly enigmatic (Mitchell, 1980). Interest in normality, a difficult concept, is often overshadowed by the interest in pathology, the latter seemingly more easily defined (Blotcky & Looney, 1980). However, any conception of the abnormal or deviant, requires an understanding of the normal if therapeutic goals are to be established (Offer & Offer, 1975).

A critical issue in the study of coping is the ability to evaluate the adequacy of coping, that is, to distinguish effective from ineffective coping (Roskies & Lazarus, 1980). Therapeutic interventions that can change maladaptive coping strategies into effective ones may prove to be the most powerful clinical tool yet devised for treating and even preventing stress-related illnesses (Roskies & Lazarus, 1980). Before this goal can be attained however, a system needs to be devised to describe, measure, and evaluate coping.

Value judgements are frequently made by clinicians about their clients' coping processes, but the criteria by which these evaluations are made are rarely explicit (Roskies & Lazarus, 1980). Predetermined standards, usually of outcome, are used to judge coping adequacy. However, it is highly questionable whether a particular coping act, when it can be defined, is a sufficient predictor of long term mental functioning.

The development of a repertoire or range of coping patterns, their consistency and/or variability across life situations and across time, requires the observation of many types of people in varied encounters.

Description and classification is essential in order to categorize the data on coping processes in a manner which permits intraindividual and interindividual comparisons.

Before the relationship between coping processes and adaptational outcomes can be examined, it is necessary to have a pragmatic approach to the measurement of coping. It is also necessary to have a preliminary understanding of the consistency of the coping process across stressors, and of some of the determinants of coping. Hence, the purpose of this study was to examine the nature of the relationship between adolescent stresses and normal adolescent adjustment (coping and adaptation).

This study has described and analyzed the coping strategies used by adolescents in specific stressful events in their daily lives. Within the general framework of the problem stated above, a number of general questions have been addressed which, for the purpose of clarity, are listed below. In the course of this dissertation these questions will be specified and responses will be offered that are deemed to be merited by the analyses.

(1) What is the nature of specific events experienced as stressful by adolescents?

(2) To what extent are these specific events experienced as stressful over time?

(3) What strategies (thoughts and actions) are used by adolescents to deal with specific stressful events?

(4) To what extent are adolescents consistent in their use of particular strategies to deal with stressful events over time?

(5) How do gender and mother tongue influence strategies chosen by

adolescents to deal with stressful events over time?

(6) To what extent are the stresses experienced by adolescents, and the use of particular coping strategies to deal with the stressful events in their daily lives and over time, related to their level of psychological symptomatology (adaptation)?

CHAPTER II

Review of the Literature

Formulations of Adolescent Development

> Of all the fretful stages of human development, adolescence is the most infamous. It is an age nobody loves. The mere mention of the subject among parents is enough to set them exchanging commiserative anecdotes about perverse and ungovernable teenagers. For adolescents themselves, it is the age of anomie - a time of struggling to balance the capacities and desires of adults with the social franchise of children.
> (Newsweek, 1986, January 20, p. 52)

The popular as well as scholarly literature evidences a preoccupation with adolescence. A stage beginning at puberty and ending when the individual reaches maturity, adolescence is universally acknowledged to be a critical phase in human development (Coleman, 1980). What makes this period important and complicated is the concurrence of physical, mental, emotional, and social maturational variables.

In comparison with other stages of the life cycle, it is only in recent years that knowledge about adolescent development has expanded substantially, or even been deemed to exist as a stage. Although theory as well as research findings are generally consistent in their formulations of basic adolescent tasks, on the one hand, and the stresses of growing up in modern society, on the other, they differ considerably with respect to their predictions regarding adolescent functioning (Blotcky & Looney, 1980). Most psychiatric and psychoanalytic theoreticians describe one specific route as best typifying adolescent development, a route in which adolescent turmoil

is the "sine qua non" of healthy development (Erikson, 1963; Mitchell, 1980).

The concept of normative adolescent turmoil has not been universally accepted. A number of longitudinal and epidemiologic studies have focused on defining and understanding normal adolescent development. In a longitudinal study of 102 boys from suburban, middle-class environments conducted by Offer and Offer (1975), three major types of growth patterns were identified in 79% of their subjects: continuous, surgent, and tumultuous. Their findings determined that the turmoil to be experienced in adolescence by some individuals is related more to the psychological developmental pattern of the particular individual than to an age-grouped necessity that adolescents must react to adolescence with turmoil before proceeding into the developmental phase of young adulthood. Tumult is aggravated during transitional periods, and in this way, adolescence may qualify as a catalyst for those individuals who are prone to meet changes with emotional upheaval.

In a survey of the general population of adolescents in Great Britain, depending on the criteria used, the prevalence of psychiatric disorders was approximately 10% to 21% (Lewis, 1982, p. 296). Nearly one half of the 14-year-olds in this study reported that at times they cried or "needed to get away from it all" because they felt so miserable (Rutter, 1982). About one quarter of the group sometimes felt that people were looking at, talking about, or laughing at them, and approximately one fifth expressed feelings of self-depreciation and worthlessness. One adolescent in 12 admitted to occasional suicidal ideas which rarely persisted. Rutter (1982) reported that very few parents or adolescents reported parent-child alienation. He

emphasized that although feelings of "inner turmoil" described by some of the adolescents in his study were common among 14-year olds, about 50% of the adolescents in this age group did not report feelings of this kind. What is most important about these results is the fact that this level of "turmoil" is very similar to that found in child or adult populations (Coleman, 1980).

Incidence and Prevalence of Adolescent Morbidity and Mortality

While there is considerable epidemiological literature on the incidence and prevalence of such problems as suicides, drug abuse, psychiatric disorders, and accidents, the methodology used has varied so widely that it is difficult, if not impossible, to generalize from them. In the United States, national data show a decline in adolescent alcoholism, drug abuse and serious crime and a plateau in adolescent suicide since 1980. Despite these data some mental-health practitioners are certain that adolescents' problems are worsening, both in psychological support requirements for this age group and in the severity of the presenting pathology (Staff, 1986).

Between 1980 and 1984, adolescent admissions to private psychiatric hospitals in the United States increased more than 350%, from 10,765 to 48,375 (Staff, 1986, p. 52). In many cases, these hospitalizations were for diagnoses such as "conduct disorder" and "adolescent adjustment disorder". The majority of the parents had tried various measures before resorting to psychiatry or hospitalization; this increase in admissions may be a reflection of their increased sophistication about seeking psychological help for their children. Other reasons for this increase may be that the

availability of insurance to pay for such treatment has also increased. Furthermore, media coverage may have contributed by heightening parents' awareness of teenage suicide and of the signs of severe depression which necessitate treatment. Another reason for the increase in admissions may be that before the 1970s adolescents were placed in juvenile-detention centers and reform schools for committing such offences as drinking and truancy, whereas many are now referred to psychiatric facilities for treatment.

In 1980, the mortality rate in Canada for adolescents aged 12 to 17 was 6 per 10,000; 72% of these deaths were caused by accidents, poisoning, and violence (Health and Welfare Canada, 1983, p. 12). On closer examination of these data, approximately 73% of all adolescent deaths from accidents, poisoning and violence occurred among the male population. Motor vehicle accidents accounted for 42% of all adolescent deaths and represented 63% of accidental deaths. Suicides represented approximately 9% of all deaths among adolescents and 11% of all deaths in the 16 to 17 age group. Between 1970 and 1980, the suicide rate for males aged 15 to 19 increased from 10.1 to 19.5 per 100,000 - a relative increase of 93%. It should be noted many accidents may also have been disguised suicides.

Morbidity as measured by the utilization of acute care hospital services paralleled the most common causes of mortality among adolescents. In 1978 approximately 21% of all hospital days for adolescents, 31% for males and 12% for females, were attributable to accidents. An additional 1,192,612 days were utilized by adolescents aged 12 to 17 for psychiatric hospital services, accounting for 11% of all hospital days in this age group.

It is likely that many of the behaviors which place adolescents at

risk are amenable to health promotion intervention. However, in order to evaluate any health promotion program or problem, it is essential to consider the changing age distribution of the population, and the trend of age-specific incidence or prevalence rates prior to the program intervention (Health and Welfare Canada, 1983).

Clinical Psychiatric Syndromes

Although the roots of serious troublesome behavior and delinquency occur frequently in early and middle childhood, adolescence is the time when youths come before the courts, thereby bringing these problems to public awareness. Rutter (1982) has classified children's clinical psychiatric syndromes in operational terms that (a) are relevant to the clinical situation, (b) have predictive value, and (c) differentiate disorders among children and adolescents. The major classifications which he has identified are emotional and conduct disorders, adjustment reactions, developmental disorders, and schizophrenia.

The main difference between emotional and conduct disorders exhibited during childhood and those of adolescence is that depressive conditions are much more frequent in adolescents. Emotional disorders are those in which the main problem involves an abnormality of the emotions evidenced as anxiety, fear, depression, obsessions, hypochondriasis, and the like (Rutter, 1982, p. 28). These occur somewhat more frequently in girls than boys, and most children recover completely from them. Conduct disorders are those in which the chief characteristic is persistent abnormal behavior which gives

rise to social disapproval (Rutter, 1982). About one third to one half of those children with a conduct disorder recover completely (Rutter, 1982, p. 29). Adjustment reaction or adaptation reaction are terms used to describe mild transient disorders. Developmental disorders constitute a group of disorders in which a specific delay in development is the main characteristic. They frequently coexist with other psychiatric disorders. The majority of children with developmental disorders, such as speech disorder and specific reading retardation are free of psychiatric problems in adulthood, however many continue to experience difficulties reading and spelling. While schizophrenia does not begin until late childhood, the majority of such disorders begin in late adolescence or early adulthood. Schizophrenia is slightly more common in boys than girls, and afflicted individuals remain handicapped to some degree for life. There are other conditions such as enuresis, encopresis, and anorexia nervosa which do not fall into any single well-defined category.

Effects of Health Education

The recent emphasis in the health field on prevention and wellness underlines the importance of identifying those variables that contribute to illness, but which may be changed by appropriate interventions. Large population studies have demonstrated that cardiovascular diseases, for example, result from the interaction of multiple causative factors which can be traced to heredity on the one hand, and to past and present lifestyle and environmental factors on the other (e.g., Lalonde, 1974). The latter two

factors are both prominent and changeable. A longitudinal study to determine the effectiveness and measurability of comprehensive health education among high school students and young men after they had left school demonstrated that a long-term health education program can exert a measurable positive influence on physiological functions and daily habits (Riener, 1975). More recent evidence for the effects of health education on health-related behavior has led to the conclusion that schools can favourably affect adolescent health behavior, particularly in relation to smoking, oral hygiene, and teenage fertility, and potentially in the field of diet and exercise (Reid & Massey, 1986).

Etiology and Onset of Illness

The recent surge of interest in the adolescent years is one aspect of a growing interest in human development. This interest also springs from an increasing awareness that experiences other than in the first 5 years of life (for example, in adolescence) have critical implications for later adult development as well as for the health of society in general (Colemen, 1980; Mitchell, 1980; Thomas & Chess, 1977, 1980). Increasingly, it is recognized by social scientists and health professionals that factors other than the presence of a disease agent are significant in the etiology of illness (Barsky & Klerman, 1983; Katon, Kleinman, & Rosen, 1982; Maier & Laudenslager, 1985). Models have been developed to explain the etiology and onset of illness. Such models are built on the assumption that it is necessary to examine the following: (a) the presence of stressful

environmental conditions, that is, problematic life situations; (b) perceptions by the individual as to the stressfulness of life circumstances; (c) the individual's ability to cope or adapt; (d) his/her genetic predisposition to a given disease or diseases; and (e) the presence of the disease agent (Dohrenwend & Dohrenwend, 1978; Hyman & Woog, 1982; Klerman, 1980; Simmons, 1977).

Biological Markers

An issue identified by McConville and Bruce (1985) in their summary of current knowledge and interest in child and adolescent depressive illnesses, is the presence of biological markers for adolescent behavior. The measurement of cortisol hypersecretion, growth hormone secretion, and sleep "architecture", referred to as polysomnography, is a possible indicator of altered psychobiologic states in adolescence. Preliminary findings cited by Howard (1985) from a study at the National Institute of Mental Health provide further evidence in support of a long-suspected link between hormones and adolescent behavior. Nottelmann, Susman, and their colleagues (cited in Howard, 1985) examined the physical development and behavioral characteristics of 108 normal adolescent boys and girls, aged 9 to 14, as a function of three groups of hormones - gonadotropins, sex steroids, and adrenal androgens- which together are responsible for the physical changes occurring during puberty. Their most consistent finding was that higher sex steroid and lower adrenal androgen levels were associated with a positive behavioral adjustment in this age group.

Coping Responses To Stressful Life Events

When considering how humans react to stressful life events, it is important to distinguish between exposure to a potential stressor and the actual physical and psychological responses to the event. Both these factors are influential in determining whether immune functioning will be affected and hence whether disease will develop (Maier and Laudenslager, 1985). In exploring the links between stress and health, Maier and Laudenslager (1985) have demonstrated in animal research that control over an event is very important in determining its psychological and physical effects. On the basis of these findings, they hypothesized that the immune responses of some people may also be suppressed when they cannot control severe negative events.

There is a growing conviction that how people cope with stress is more important to their physiological, physical, and social well-being than the frequency and severity of the stress episodes themselves (Hyman & Woog, 1982; Kessler, 1979; Murphy & Moriarty, 1976; Pearlin et al., 1981; Roskies & Lazarus, 1980). Although this belief is, in part, the result of empirical evidence linking effective or ineffective coping strategies to mental and physical health, it represents a change in the conceptualization of stress in human existence and the relationship between stress and illness.

Research pertaining to adult populations. Holmes and Rahe (1967) proposed that the readjustment required by major life changes, as measured by their Social Readjustment Rating Questionnaire, substantially increases the risk of physical illness, particularly in an already vulnerable individual (Bakal, 1979). Using a psychophysical technique, Holmes and Rahe (1967) rank

ordered a series of 43 life events. A high degree of consensus was reached about the significance of these items that transcended differences in age, sex, marital status, education, social class, generation-American, religion, and race. The 43 life events on the questionnaire pertain to major areas of dynamic significance in the social structure of the American way of life, that is, family constellation, marriage, occupation, economics, residence, group and peer relationships, education, religion, recreation, and health. Derived from clinical experience, the events are indicative of the life-style of the individual and of occurrences involving the individual that require a significant change in the individual's regular life pattern. As defined, social readjustment measures the intensity and length of time necessary to accommodate to a life event, regardless of the desirability of this event (Holmes & Rahe, 1967, p. 213). The approach of Holmes and Rahe is similar to Selye's (1956) concept that organisms have a finite capacity for tolerating stress which, when exceeded, will result in the organism's breakdown. This approach treats stress as life events that create change and require adaptation.

Based on the scale developed by Holmes and Rahe (1967), Linden (1984) derived an empirical list of life events (Life Event Scale for Students) likely to be characteristic for a college student population in the 18 to 23 year age range. Eighty-eight students were asked to indicate on the scale those events that had actually occurred within the previous 6 months. Linden's initial attempt to validate this new scale determined that there were significantly higher frequencies of medical illness, seeking of psychological assistance, and academic failures in individuals with above

average life change.

In another prospective study of 426 adults, designed to explore the relationship between social stress and health, Norman, McFarlane, and Streiner (1985) determined that individuals under stress experienced considerably more illness associated with greater levels of disability than those not under stress.

Research pertaining to children and adolescents. Although a few longitudinal studies have been published recently in which the authors have followed the behavioral development of children from early infancy to early adult life, the majority of the research literature in childhood and adolescence has focused on developmental crises and on life crises (Murphy & Moriarty, 1975; Thomas & Chess, 1984). Three discrete types of stress have been identified during the normal experiences of childhood: developmental crises, life crises, and tensions associated with activities of daily living (Tyerman & Humphrey, 1983). The investigators in the majority of stress-related studies of this age group have sought to determine whether there was an increased frequency of life events such as bereavement, admission to hospital, and other separation experiences in the histories of "problem" children and adolescents (Bruns & Shiro Geist, 1984; Forman, Eidson, & Hagan, 1983; Garmezy & Rutter, 1983; Hyson, 1983; Mendez et al., 1980; Newcomb et al., 1981; Novy & Donohue, 1985; Steinhausen & Radtke, 1986; Sweaningen & Cohen, 1985; Tyerman & Humphrey, 1983).

Utilizing the method described by Holmes and Rahe (1967), Coddington (1972a) developed a method of quantifying the significance of various life events that occur in the lives of children. Mental health workers, teachers,

and pediatricians employed in academic divisions of psychiatry were asked to rate a series of life events. The life events were selected from the literature as well as from experience with normal and abnormal children, as to their relative degree of necessary readjustment for children of four different age groups; preschool age, elementary school age, junior high school age, and senior high school age. While some discordance was found between the teachers and the other respondents, these differences were deemed to be small, and were explained by differences in their estimates of the amount of readjustment necessitated by a given life event, not by differences of opinion regarding the relative importance of the different events. The amount of readjustment undergone by a child during a specific time period could then be determined by summing the life change units to yield a life events score. The effect of different social and cultural factors influencing the amount of life change a child is exposed to was not examined in Coddington's (1972a) study.

Coddington (1972b) subsequently attempted (a) to establish normal values for children of different ages in the course of a year, and (b) to investigate the influence of the variables of sex, race, socio-economic class, and religion on these normal values. He surveyed 3620 individuals and found that an average of 3.37 life events had occurred in the previous year. Parents were asked to complete the preschool and elementary school age forms, while adolescents completed their own questionnaires in the junior high and senior high schools. As his study was designed to measure the effect of life events on the etiology of illness, the 94 children who indicated that they had a serious illness requiring hospitalization were excluded from the final

results. No differences were found between sexes, races, or members of different social classes. However, fewer events occurred in the lives of younger children. Because the investigators failed to determine how many times a particular event had occurred to a given individual in the course of the year, they recognized that this was a possible source of error.

Coddington (1972a) used adults to assign the weights for the amount of adjustment to life stress events required by children and adolescents. The question was asked by Yeaworth et al. (1980, p. 91): Can adults validly impute the psychological and physical adjustment required by adolescents and children when the latter experience specific changes? In a study to develop a life change event scale which utilized items of importance to adolescents and which were rated by adolescents, the question to be answered was: How do adolescents rate life change events in terms of the amount of stress created by them? (Yeaworth et al., 1980). Life change events referred to a variety of personal, social, family, and occupational life changes which required adjustment of the adolescent and therefore, presumably created stress. The Adolescent Life Change Event Scale (ALCES) listing 31 life change events was administered to 207 adolescents aged 11 to 18 years. The students were asked to rate the items on a scale of 1 to 5 to indicate how upsetting they believed the event was, and to indicate how many of the events they had experienced. Because the majority of children were Caucasian and because a non-randomized, voluntary middle-class sample was used, the authors recommended that the questionnaire be administered to subjects of differing socioeconomic levels, from different racial and cultural backgrounds. In addition they recommended that some of the items be clarified further, prior

to assigning the final weightings to items.

With the purpose of replicating the development of the ALCES, and expanding it to include items related to adolescent suicide, a modified form of the scale was administered to 96 white suburban adolescents. In this study the differential impact of life change events on gifted versus non-gifted adolescents was investigated (Ferguson, 1981). It was found that while the gifted in this sample experienced fewer stressful events than the non-gifted all the adolescents were sensitive to the occurrence of events. Furthermore, because stress was found to be significantly correlated with suicidal ideation and indirect self-destructive behavior among the adolescents in this study, Ferguson (1981) felt that it was necessary to include the suicidal items in future ALCES.

Forman et al. (1983) developed a brief, 24-item version of the ALCES which they administered to 94 students between the ages of 12 and 29. A high degree of correspondence in the ranking of items provided additional evidence that the scale could be a useful index of perceived stressful events among adolescents. It was emphasized, however, that further work was required to assess its relevance to experiences of adolescents of different socioeconomic, ethnic, and racial groups.

Novy and Donahue (1985) administered the ALCES to 55 adolescents ranging in age from 12 to 16 who were on probation or being held in detention for offenses ranging from a felony to conduct indicating a need for supervision. No relationship was found between stress events experienced and offences committed during the past year. However 87.5% of runaway subjects had experienced "hassling with parents", and 94.1% of truancy subjects had

experienced "failing one or more subjects in school". The adolescents' reports of these stress events led the investigators to suggest that further research on adolescent stress and impulsive behavior was warranted.

Research pertaining to functional illness in adolescence. Frequently the normal developmental struggles of adolescence are manifested through various problems at school, somatic symptoms, and other behavioral disturbances. As Sir William Osler (cited in Zeltzer & LeBaron, 1984, p. 164) stated, "It is more important to know what sort of patient has a disease than what sort of disease a patient has". The stress created for the adolescent and family by the psychological and physical changes of pubescence may be manifested through functional disease, such as headaches, dizziness, abdominal pains, and a variety of other symptoms, which can produce significant disability despite the absence of organic findings. In a random sample of 1,000 British school children, approximately 100 children were hospitalized for intensive diagnostic evaluation of chronic abdominal pain (Zelter & LeBaron, 1984). Only 8% of these children were found to have organic disease. In the remaining 92% the pain was considered to be of psychosomatic origin. The incidence of psychosomatic illness in childhood and adolescence is thought to be even higher when older adolescents are included in the studies.

In a study conducted by physicians at Vanderbilt University (Staff, 1985), a group of adolescents who were suffering from stomach aches, headaches, or chest pain, for which no organic etiology could be determined, were asked what stressful events they had recently experienced, and what impact the event had on their lives. The adolescents with recurrent stomach

and chest pain were determined to have significantly higher negative life stress scores than patients seen for routine checks or minor illnesses. The most frequently identified stressful events included failing grades (33.9%), increasing arguments between parents (28.3%), serious family illness (27.9%), and breaking up with a girl- or boyfriend (27.8%). The adolescents ranked the divorce of their parents (13.9%) 15th on the list of 20 most stressful events.

In an effort to address the direction of the life event-psychological disorder relationship, Swearingen and Cohen (1985) employed a prospective design to assess the etiologic role of negative life events in the maladjustment of early adolescents. A life events scale as measured by the Junior High Life Experiences Survey (JHLES), and a state and trait anxiety scale to measure psychological distress were administered at two points in time separated by about a 5-month interval. Although negative events were found to be a significant predictor of psychological distress at both points in time, the magnitude of the correlations was low. Recognizing the importance of chronic stresses in the psychological functioning of children, Swearingen and Cohen (1985) suggested that a useful approach for future research might be the development of a survey of chronic stresses, which could be administered to subjects concurrently with a measure of life experiences such as the JHLES.

In a study of 323 high school students, Thomas and Groer (1986) examined the relationship of selected anthropometric, lifestyle, demographic, and stress factors to blood pressure. The mean age of the subjects was 15.5 years. Life stress was measured by the ALCES (Yeaworth et al., 1980). The

overall incidence of hypertension found in this sample was 6.5%, the majority of the hypertensive subjects were male. While the dietary practices of the females were better than those of the males, the females were more likely to smoke, had more family members with a history of hypertension-related illnesses, and exercised less than the males. By comparing the students in the upper 25% of scores on the health questionnaire with those in the lower 25%, a notable difference was observed in life stress scores. However it was not clear whether health habits were neglected as life stress increased or whether neglect of health was an etiological factor in higher stress levels. The stressors reported most frequently by this sample of adolescents were hassling with parents (71%), hassling with siblings (61%), and making new friends (50%). Females reported higher levels of stress than males, particularly females living in urban areas. Gender differences were found in amount and types of other stressors. Females reported being more stressed than males by their physical appearance, by their peer relationships, and by "getting grounded". Males were more stressed than females by their school performance, and adjusting to a new job. Overall, the significant predictors of higher systolic pressure were found to be age, gender, body mass index, and urban residence. Significant predictors of diastolic pressure were body mass index, smoking, and lack of regular exercise.

Coping Responses to Activities of Daily Living

While the literature on coping is vast, only a few recent studies have focused on the events of daily living that individuals find stressful and on

the development of instruments and procedures to elicit information about their coping strategies. The majority of such studies have involved adult populations.

Research pertaining to adult populations. Pearlin and Schooler (1978) were the first to undertake a major longitudinal study to examine how individuals cope with the ordinary stressful events of their day-to-day lives. A sample of 2300 individuals between the ages of 18 and 65 years were interviewed about the potential lifestrains they experienced in major social role areas, the coping repertoires they employed in dealing with these strains, and the emotional stresses that they felt, as well as the extent to which they experienced symptoms of depression and anxiety. The results indicated that individuals' coping interventions were most effective when dealing with problems within the close interpersonal role areas of marriage and childrearing, and least effective when dealing with the more impersonal problems found in occupation. Males, the educated, and the affluent made greater use of coping methods which were efficacious in reducing measured life stress. Unfortunately Pearlin and Schooler's analyses were based largely on questions designed to elicit how the respondents usually coped with general sources of stress, rather than on actual coping behavior in specific situations. According to Folkman and Lazarus (1980, p. 223), there is generally a poor relationship between what people say they usually do and what they actually do in specific instances. Furthermore, because subjects were not asked about stresses they had resolved or were successful in overcoming, a large domain of coping responses was not addressed.

In 1980, Folkman and Lazarus reported a study of the ways 100

middle-aged men and women coped with the stressful events of daily living during 1 year.

> . . .information about recently experienced stressful encounters was elicited through monthly interviews and self-report questionnaires completed between interviews. At the end of each interview and questionnaire, the participant indicated on a 68-item Ways of Coping checklist those coping thoughts and actions used in the specific encounter. A mean of 13.3 episodes was reported by each participant. Two functions of coping, problem-focused and emotion-focused, were analyzed with separate measures.
>
> Both problem- and emotion-focused coping were used in 98% of the 1,332 episodes, emphasizing that coping conceptualized in either defensive or problem-solving terms is incomplete - both functions are usually involved. Intraindividual analyses showed that people were more variable than consistent in their coping patterns.
>
> The context of an event, who was involved, how it was appraised, age, and gender were examined as potential influences on coping. Context and how the event was appraised were the most potent factors. Work contexts favored problem-focused coping, and health contexts favored emotion-focused coping. Situations in which the person thought something constructive could be done or that were appraised as requiring more information favored problem-focused coping, whereas those having to be accepted favored emotion-focused coping. There were no effects associated with age, and gender differences emerged only in problem-focused coping. Men used more problem-focused coping than women. Contrary to the cultural stereotype, there were no gender differences in emotion-focused coping.
>
> (Folkman & Lazarus, 1980, p. 219)

In addition to reporting how they coped with the stressful events of daily living during 1 year, this sample of 100 middle-aged adults completed home questionnaires which focused on stressful day-to-day events referred to as "hassles and uplifts" (each of the first 9 months) and concurrent psychological symptoms (months 2 and 10) to determine if such an approach could be used to predict adaptational outcomes (Kanner, Coyne, Schaefer, & Lazarus, 1981). Some of the major findings included the following: that the overall frequency scores for both hassles and uplifts were consistent over

time, and that within the same month these two scores were moderately correlated. When the data reported by this middle-aged sample was compared with a sample of college students and Canadian health professionals, hassles and uplifts "themes" were identified which appeared to reflect the age and occupation of each sample. For example, with respect to hassles, the middle-aged group reported economic concerns, a theme consistent with their nearness to retirement, the students were concerned with the academic and social pressures related to attending college, and the health professionals were preoccupied with the responsibilities and pressures of their work and home life. With respect to uplifts, the middle-aged sample found pleasure in being at home with their family, while the students looked to entertainment, music, and being with friends. Furthermore, uplifts were positively related to symptoms for women but not for men.

More recently, Folkman and Lazarus (1985) studied a naturalistic stress situation, a college midterm examination, to enhance their understanding of what transpires during a particular event. They identified three criteria which must be satisfied to study coping as a process: (1) Coping must be examined within the context of a specific stressful encounter, (2) what the individual actually does must be described, and, (3) there must be multiple assessments during the stressful encounter to examine changes in coping over time. Although their specific findings will not be discussed, this reference is particularly important because it affords support for a theoretical approach that has been used in this study.

According to Lazarus and Folkman (1984), at the present stage of our knowledge, the most effective research design appropriate to a transactional

theoretical model which views the person and the environment in a dynamic, mutually reciprocal relationship is an "ipsative-normative" design in a naturalistic setting. Ipsative-normative research allows for the observations of many facets of the same individual in one context, and/or one facet in a variety of contexts thereby yielding intraindividual information which can later be used for interindividual comparisons. By repeatedly assessing an individual's coping processes in a variety of contexts, it is possible to determine the patterns the person uses and the extent to which those patterns vary across encounters. Importantly, mediating processes are studied repeatedly through self-reports about appraisals and coping, or through behaviors that imply the use of particular forms of coping.

Lazarus and Folkman (1984) have addressed a number of methodological problems inherent in the style of assessment which they advocate. The problems of memory, the desire of subjects to present themselves in a positive light, language ambiguity, and the use of verbal reports as an ego defense are some of the limitations and disadvantages of self-report data. In addition there are the difficulties associated with precisely identifying the coping act or thought that is connected with different phases of the stressful event. Method variance refers to the dilemma that arises from the fact that how a phenomenon is measured affects the content of the observed variance and the findings of the research.

A common solution to some of these problems is to analyze physiological, behavioral, and subjective data simultaneously in order to make the fullest sense out of what is happening in stressful situations. Unfortunately this solution is often financially and technically impractical.

At this stage of knowledge Lazarus and Folkman (1984) favor the sole use of self-report data to generate what appear to be stable findings leading to empirically based principles. They argue that only after stress levels and adaptational outcomes can be predicted from self-reports about appraisal and coping is there justification to go beyond self-report to do experiments using behavioral and physiological data.

Research pertaining to healthy families. Using a different approach from the studies previously discussed, Curran (1983) attempted to identify the 15 positive traits most commonly found in healthy families from the perspective of the professionals who work closely with families. Respected professionals in each of five fields, education (principals, counsellors, teachers), church (pastoral staffs, counsellors, educators), health (pediatricians, school nurses, family physicians, pediatric nurse practitioners), family counselling (counsellors, therapists, mental health personnel, social workers), and voluntary organizations (directors, leaders, coaches) were asked to develop a list of possible traits of a healthy family. A total of 56 possible traits were isolated. The professionals surveyed were asked to prioritize 15 traits from this list. Their selections follow.

The healthy family . . .

1. communicates and listens.
2. affirms and supports one another.
3. teaches respect for others.
4. develops a sense of trust.
5. has a sense of play and humor.

6. exhibits a sense of shared responsibility.
7. teaches a sense of right and wrong.
8. has a strong sense of family in which rituals and traditions abound.
9. has a balance of interaction among members.
10. has a shared religious core.
11. respects the privacy of one another.
12. values service to others.
13. fosters family table time and conversation.
14. shares leisure time.
15. admits to and seeks help with problems.

(Curran, 1983, pp. 26-27)

Curran subsequently attempted to identify the 10 most common everyday stresses that healthy families face and to describe how they deal with them. After asking 210 respondents in four geographically scattered areas to rank the top 25 of 45 stressful situations commonly found in family life, she refined her survey instrument to the 25 most selected stressors and included a request for information on gender, marital status, ages of children and family income. Curran's (1985) results are based on the responses of 169 couples, 239 married women, and 42 single mothers. Of the couples who responded, the spouses each completed a separate survey. Interestingly, 4 of the 10 stresses selected by the spouses were different within the same family. As a result of this finding, Curran ordered the stresses selected by married women, married men, and single mothers. These will now be presented:

Top stresses in order of priority:

Total Group

1. Economics/finances/budgeting
2. Children's behavior/discipline/sibling fighting
3. Insufficient couple time
4. Lack of shared responsibility in the family
5. Communicating with children
6. Insufficient "me" time
7. Guilt for not accomplishing more
8. Spousal relationship (communication,friendship,sex)
9. Insufficient family playtime
10. Overscheduled family calendar

Married Women

1. Economics/finances/budgeting
2. Lack of shared responsibility in the family
3. Insufficient couple time
4. Children's behavior/discipline/sibling fighting
5. Housekeeping standards
6. Insufficient "me" time
7. Guilt for not accomplishing more
8. Insufficient family playtime
9. Spousal relationship (communication,friendship,sex)
10. Self-image/self-esteem/feelings of unattractiveness

Married Men

1. Economics/finances/budgeting
2. Insufficient couple time
3. Communicating with children
4. Children's behavior/discipline/sibling fighting
5. Spousal relationship (communication,friendship,sex)
6. Overscheduled family calendar
7. Insufficient "me" time
8. Unhappiness with work situation
9. Insufficient family playtime
10. Television

Single Mothers

1. Economics/finances/budgeting
2. Guilt for not accomplishing more
3. Insufficient "me" time
4. Self-image/self-esteem/feelings of unattractiveness
5. Children's behavior/discipline/sibling fighting
6. Unhappiness with work situation
7. Housekeeping standards
8. Communicating with children
9. Insufficient family playtime
10. Lack of shared responsibility in the family

(Curran, 1985, pp. 20-21)

Research pertaining to adolescents. If the stress and coping paradigm

has proven valuable in identifying relationships between complex biological, psychological, and social processes in adults, then why should these constructs not prove equally helpful in understanding the same reactions in the adolescent? Although awareness and concern about the health of adolescents surged in the mid-1960s, coinciding with the so-called "teenage bulge" - legacy of the post-war baby boom, little population-representative information had been collected at that time concerning "normal" health changes that accompany the life course transition (Brunswick, 1980). Because this kind of information can become available only when "healthy" population-representative samples are followed over time into successive stages of the life cycle, considerations such as these led to the systematic investigation of self-perceived adolescent health problems, and their persistence and change over time.

Brunswick and Josephson (1972) were among the first to recognize that information was lacking on adolescents' general health status, behaviors, and attitudes, and medical care needs. Between 1968 and 1970 they conducted a comprehensive study of adolescent health, based on data collected through personal interviews, medical examinations, and information abstracted from the school records of 668, urban Black adolescents, aged 12 to 17 years.

Dental problems and needs for dental care were by far the most prevalent of all health problems presented by the adolescents. Nearly 9 out of 10 of the 12- to 15-year-old youths examined required referral for dental care. The condition of teeth and gums among 12- to 15-year-old boys was poorer than that of girls this age. Girls had more health problems than boys according to their own reports and physicians' findings. Visual problems were reported by

one in four; among girls the percentage was 32% and among boys 20%. Frequent colds were reported by one in five, girls more than boys. Repeated headaches were reported by one in five respondents. While no gender differences were found, headaches were the second most frequent of all the problems reported by boys while it ranked sixth among girls. Nervous or emotional problems were reported by one in six, including nearly 25% of the girls and 12.5% of the boys. Other indicators of emotional health that were included in the personal interview determined that, four in five youths aged 12 to 15 years indicated some concern about their school performance, and 3 in 10, more boys than girls, reported that they "worried a lot" about what their future would be like in 5 to 10 years. Between one in four and one in five reported some sleep difficulties - girls somewhat more often than boys. Stomach pains were reported by one in six, more girls than boys. Health problems and needs for health care increased with age during adolescence, with girls 16- to 17-years-old requiring the most care. High participation rates suggested that adolescents and their parents in this community were interested and concerned regarding health matters. While it was recognized that the study addressed the concerns of a particular sample, it was hoped that some of the findings would be useful to those responsible for improving the delivery of health services to adolescents.

Ninety-four percent of the original sample of 668 urban Black adolescents were relocated 6 to 8 years after the initial study, and personal interviews were again conducted with 536 of these adolescents, or 80% of the entire initial study group (Brunswick, 1980). Self-reported morbidity was the health indicator used to measure global health status (the number of

health problems reported) and to track specific problems over time. Similar health items and the same number were included at both times of study. The number of health problems increased for both sexes. The increase was significantly more among males whose greatest increase occurred between ages 17 and 18, 2 years behind the range of years for females. While most conditions showed increased prevalence from the period of adolescence to early adult life, with only a few exceptions, the same health problems persisted over time. It needs to be determined whether these findings would be consistent with those in comparable studies of other socioeconomic and other sociocultural groups, and when using clinical evaluations in addition to self-reports. One positive implication which might be drawn from the observed instability in health is the prospect that interventions broadly conceived as bio-psycho-social ones in adolescence can alter patterns of future health (Brunswick, 1980). The model employed in Brunswick's (1980) research posits that psychological factors (perceptual, cognitive, and affective), along with the social situation interact with biological factors to produce the phenomenon labeled "health".

Health care resources and health education programs for adolescents are frequently underutilized or poorly received because they are based on characteristics, needs, or problems of adolescents attributed to them by adults who plan such programs (Parcel, Nader, & Meyer, 1977). A study was conducted by Parcel et al. (1977) to obtain information directly from adolescents that could be used to plan and develop health education and health service programs. The highest ranked concerns and problems of 3,255

high school students, aged 15 to 18, from a triethnic urban population were school, drugs, sex, getting along with parents and adults, acne, depression, and weight problems. Females were more likely than males to identify problems requiring assistance. While the students appeared to be able to select appropriate community resources for dealing with specific problems, resources available in school were selected infrequently because the services were not perceived to be effective in serving the needs of the students.

It is obvious that because of regional population differences, accurate information is needed to plan and implement preventative and treatment progams that are effective in meeting the health care needs of the community. One method of evaluating whether the existing services are meeting the needs of the population is to survey the target population on its patterns and preferences for health care. Such a study was conducted by Hodgson and associates (Hodgson, Feldman, Corber, & Quinn, 1986) using 1,000 Canadian adolescents, ages 12 to 20 years. The results from the survey indicated that, in general, these adolescents received adequate medical attention. It was apparent, however, that many of the health concerns of the adolescents were of a personal rather than a clinical nature involving such issues as sexuality, peer and parental relations, drinking, and appearance-oriented factors such as weight and acne. It was emphasized by the investigators that the impact of these concerns on adolescent emotions and behavior must not be underestimated.

In 1984 and 1985, a major study was conducted in order to obtain a longitudinal perspective of the development of health attitudes and behaviors of Canadian children. The Canadian Health Attitudes and Behaviors Survey was

administered to a total of 33,111 students in Grades 4, 7, and 10, with an overall response rate of 99% (Health and Welfare Canada, 1985). The sample of students was selected in such a way that for each province, 90 times out of a 100, the responses could be expected to lie within 5 percentage points from the responses obtained, had the entire grade population been surveyed. The health topics covered in the survey instruments were nutrition, leisure-time activities, safety, parent-child relationships, peer influence, smoking, self-esteem, body image, dental health, and mental health. Questions related to alcohol, drugs, tobacco, sex, and family roles were excluded for the grade 4 students, however, they were included for the grade 7 and grade 10 students. Additional questions concerning sources of information about sex education were only administered to the grade 10 students. The findings which are particularly relevant to the present study are summarized below.

Nearly half the young people did not eat a balanced diet, and 20% of 15-year-olds rarely ate breakfast. Two out of five 15-year-olds drank alcohol at least twice a month, and 30% of the alcohol drinkers typically drank five or more drinks at one time. More than 25% of the 15-year olds smoked cigarettes - more girls than boys smoked. Boys' self-esteem was determined to be more positive than the self-esteem of the girls. More than 25% of the 9-year-olds reported difficulty sleeping because they worried about things. This percentage decreased to 22% for the grade 7 sample, and 20% for the students in grade 10. More than 50% of the grade 7 and grade 10 students reported feeling depressed "some, or most of the time". In order to be successful, 52% of the grade 10 students stated that physical appearance was important. While more boys than girls reported a positive relationship

with their parents, the quality of the relationship between parents and their children declined as they got older. Grade 10 students spent an average of more than 14 hours each week listening to music, and just less than seven hours per week reading books or magazines outside of school. Grade 10 students watched an average of 15 hours of television per week. Males watched an average of 3.3 hours more television per week than females.

Findings of particular interest were the relationships between the health attitudes held by the students and their behaviours. Strong relationships between these variables were only found for the 12- and 15-year-olds and included the following: the more physically-active young people were more likely than the less active to be involved in a variety of other leisure-time activities, to have self-confidence and to have a positive relationship with their parents. They were less likely to exhibit symptoms of mental health concerns. For Grade 10 students, the higher the level of physical activity, the less the likelihood of experiencing depression. The alcohol, marijuana, and cigarette users were much more likely than the non-users to spend more time listening to music, to have a negative attitude towards parents and school, and to have lower self-esteem and poorer mental health. Watching television between 15 and 30 hours per week did not appear to be related to negative health patterns. Finally, significant differences in the students responses on such measures as alcohol and cigarette use, nutritional status, and source of information about sex were found among the different provinces and territories in Canada.

It has been recognized recently that there is a need for sound epidemiological data on the "non-clinical problems" of adolescents to provide

a basis for the planning of appropriate services. Eighty-five percent of 1593 high school students surveyed in a rural county responded to a voluntary and anonymous self-administered questionnaire completed in school (House, Durfee, & Bryan, 1979). The students were presented with a list of 19 psychological and social problems and asked how frequently each problem occurred or was a concern for them. The most frequent personal concerns reported were the use of free time, personal appearance (weight, skin, and height), relationships with parents (talking with parents), and emotional stress (nervousness, headaches, stomachaches). The female students expressed more frequent concerns than the males in the areas of personal appearance, relationships with parents, emotional stress, and sex-related problems (getting pregnant, birth control, sexual development, venereal disease), while the males expressed more concern than the females in the area of substance abuse (smoking, alcohol, marijuana, other drugs). The younger students were more concerned about peer relationships while the older students were more concerned with substance abuse.

Two hundred and forty white middle-class adolescents were administered a 14-item questionnaire designed to assess the severity of typical adolescent problems (Eme, Maisiak, & Goodale, 1979). The results in order of those concerns ranked from highest to least in severity were: (1) physical appearance, (2) career, grades, future schooling, (3) parents, independence, peers, sexual impulses and siblings, and (4) alcohol, extra-curricular activities, smoking, and drugs. The females rated problem areas of physical appearance, grades, and future schooling significantly more worrisome than the males. When compared to work-bound students, college-bound students rated

the problem areas of grades, future schooling and extra-curricular activities as significantly more worrisome. As expected, older adolescents expressed more worry over career and independence than did the younger adolescents who reported more worry about physical appearance and sexual impulses.

Smith (1980) structured his survey to obtain spontaneous responses about personal ongoing concerns and interests from a wide age range of individual adolescents. The sample was 15% urban, 25% suburban, and 60% rural. Among the stronger concerns found were school/grades, dating, peer relationships, the future, parents, money, and sibling relations. What to do about dating relations, school/grades, sports, growing up/life, and the future were the most frequently selected items of informational interest. Gender differences were insignificant.

In 1985, Bibby and Posterski published the results of a Canadian survey, "Project Teen Canada", which was conducted during the four months of May, June, September, and October of 1984. This study was designed to provide a comprehensive profile of young people aged 15 to 19 years regarding their attitudes, values, beliefs, outlook, expectations, and behavior. Participation was voluntary, with students assured of anonymity and confidentiality. The 3,600 participants who returned questionnaires were from 152 of 200 randomly selected schools in Canada's five regions - a return rate of 76%. The significant personal concerns experienced by these adolescents, and their major sources of happiness will be described.

The authors of the survey found that the major personal concern of 70% of the Canadian young people was what they were going to do after high school graduation. Money matters ranked second on the list of concerns. One in two

students stated that school produced a high level of stress and anxiety. While 5 in 10 students expressed concerns related to insufficient time, an equal proportion said that boredom was a serious problem, and in some cases the boredom was associated with school. Physical appearance was also a source of anxiety for just under one in two of the adolescents surveyed. The purpose of life was questioned by more than 40% of this sample. Loneliness was stated as being a difficulty for 35% of these students, with females reporting a slightly higher level of loneliness than males. Approximately 35% of the female students and 23% of the male students admitted to having feelings of inferiority. Twenty-eight percent of the adolescents surveyed nationally expressed concerns about sexuality, and 20% of them expressed that they were troubled by their parents' marriage.

Of the 17 areas and activities itemized in the survey, friendship and music were the two major sources of enjoyment reported as "a great deal" by slightly more than 70% of the adolescents. Only about 4 in 10 teenagers reported that they got "a great deal" of personal enjoyment from their relationships with their parents. Another important source of gratification was sports (45%). An interesting finding was that while 57% of the adolescents reported watching television "very often", only 29% said that they received "a great deal" of satisfaction from so doing. Approximately 20% of the students indicated that cars and having a job were important sources of enjoyment. Other leisure activities which were reported included spending time on hobbies (34%), reading magazines and books (30%), going to a movie (17%), or visiting a video games arcade (13%). School (15%) and church life (8%) were enjoyed by relatively few.

With the objective of exploring and describing healthy Canadian adolescents' perceptions of stress, Bowering (1984) developed a questionnaire based on interviews with youths, consultation with health professionals, and a review of the literature. This questionnaire was administered to a convenience sample of 46 males and females, ages 14 to 19, in the Young Men's Christian Association (Y.M.C.A.) of Greater Vancouver youth group programs. The mean age of the respondents was 16 years and more than twice as many boys (N=31) as girls (N=14) completed the questionnaire. The girls rated all events as more stressful, reported more stress, and identified more symptoms of stress than did the boys. The most frequently listed items of stress perceived by these adolescents (70%) related to work and school performance, and to their interpersonal relationships with peers. Approximately 21% of the respondents selected the following causes of stress: family arguments; parental pressure; trouble with persons in authority; self expectations and body image; time pressure; loss (lost personal items, death, illness, injury); emotions of depression, nervousness; and change (not knowing what to do). The symptoms of stress listed most frequently were of a physiological nature, such as tense muscles, heart pounding, headaches, and nervousness. Next in frequency were items in the behavioral category such as short temper and bad mood, while the items listed least frequently were those in the affective category such as feeling sad, depressed, or irritable. The responses to stress identified by this sample of adolescents were (a) behavioral responses, defined as the actions employed to manage the stress, and (b) resource responses, or the available aids, which facilitated the management of stress. The most frequently listed response items (open-ended)

were those in the category labelled relaxation techniques (lying down, relaxing, drinking, smoking), followed by social support sources (friends, parents, pets), music and diversionary activities, and then physical activity. When the respondents were asked to select from a list of options, those behaviors used in response to stress, problem solving was most frequently selected (87%), followed by music, reading, or other diversionary activities (74%), physical activity (67%), and talking to someone (61%).

In another Canadian study, Siddique and D'Arcy (1984) analyzed the mental-health consequences of stress in a sample of 1,038 adolescent high school students who were registered in grades 9 through 12 in all nine collegiates in a prairie city of 162,000 population. The data were obtained through a structured self-response questionnaire administered during school hours. Topics included the socioeconomic background of the students, their academic performance and aspirations, their evaluation of school life, examination and teaching methods, the quality of their relationships with family and peers, the students' mental and physical health, health behavior, use of alcohol and drugs, and a locus of control scale. Perceived stress in family, school, and peer situations was found to be related to the four measures of psychological well-being that were examined (anxiety, depression, social dysfunction, and anergia), with family stress having the strongest negative health impact. The health protective role of locus of control was limited primarily to those stresses emanating from school and peer groups. With respect to gender, the results indicated that the female adolescents were highly susceptible to family and peer group stress and this contributed to their greater depression, anxiety, and other symptoms of distress.

Miller, Tobacyk, and Wilcox (1985) administered the Hassles and Uplifts

Scales (Kanner et al., 1981) to 38 high school students between the ages of 15 and 18 years to determine which specific experiences were perceived as stressful and pleasurable, respectively. Troublesome thoughts about the future, preoccupation with the physical/social self, and the influence of peers were found to be the major issues during these years.

As a result of the increasing number of adolescents who are employed on a part-time basis, there is a developing interest on the impact of early work experience on adolescent development. Manzi (1986) conducted a preliminary and naturalistic exploration of how 20 adolescents who worked part-time responded to work stress. Using the transactional stress and coping model of Lazarus and his colleagues (Lazarus, 1966; Lazarus & Folkman, 1984), the investigator obtained information relating to the cognitive appraisal, emotion, and coping strategies of three stressful work situations that the students encountered within a 3-month period. The subjects completed a Ways of Coping Checklist for each stressful episode. One significant finding supported Lazarus' transactional model of stress and coping in the specific context of adolescent employment. Consistent with previous findings on coping in college students and adults, there was substantial variation in the use of coping strategies by the adolescents in Manzi's study. It was suggested that the gender differences found in the assessment of coping options warranted further investigation.

Despite the increasing popular and scientific concern regarding health consequences of stress, there have been no longitudinal studies examining how adolescents cope with the stressful events of daily living and the nature of the relationship between adolescent stresses and adolescent adaptation.

Conceptual Framework

The conceptualization of stress and coping in adolescence in the present study falls within the cognitive-phenomenological theory of psychological stress developed by Lazarus and his colleagues (Coyne & Lazarus, 1981; Folkman & Lazarus, 1980; Lazarus, 1966; Lazarus & Folkman, 1984; Roskies & Lazarus, 1980).

Cognitive-Phenomenological Theory of Psychological Stress

In their articulation of the cognitive-phenomenological theory of psychological stress, Lazarus and his colleagues (Coyne & Lazarus, 1981; Folkman & Lazarus, 1980; Lazarus, 1966; Lazarus & Folkman, 1984) have formulated the following overall transactional, theoretical framework in which the individual and the environment are viewed in an ongoing relationship of reciprocal action, each affecting and in turn being affected by the other.

Stress. In contrast to the major-life-events approach proposed by Holmes and Rahe (1967) outlined previously, Lazarus and his colleagues have published a series of papers advocating another model, the adaptational significance of the relatively minor stresses and pleasures that characterize everyday life (Kanner et al., 1981; Lazarus & Folkman, 1984). In a regression-based analysis of life events and daily hassles, these authors have shown that hassles are far superior to major life events in predicting psychological and somatic symptoms. The Hassles and Uplifts Scales developed

by Lazarus and his colleagues (Kanner et al., 1981) focuses on relatively minor events of everyday life, rather than on life crises.

Hassles are defined as the irritating, frustrating, distressing demands that to some degree characterize everyday transactions with the environment (Kanner et al., 1981). Kanner et al. (1981) have proposed that the impact of hassles on health must depend on such factors as a chronically high frequency of hassles, the heightening of hassles during a given period, as in a crisis, or the presence of one or more repeated hassles of compelling psychological importance. While some hassles are situationally determined, and some hassles are rare, other hassles recur. Possible reasons for the latter may be caused by the person remaining in the same context that poses consistent and predictable demands or by the person's ineffective way of dealing with such situations.

To evaluate the impact of stressful events, Kanner et al. (1981) have suggested it may be of great importance to examine concurrent positive experiences. Uplifts, the counterpart of hassles, are positive experiences that may serve as "breathers" from regular stressful encounters, "sustainers" of coping activity, and "restorers" that contribute to replenishment of depleted resources (Kanner et al., 1981). The cumulative effect of hassles and uplifts, in tandem, is of particular theoretical and empirical interest to these authors. They cite evidence that a person's resources and deficits taken together predict adaptation better than either alone. Similarly, psychological morale is a function of the balance between positive and negative emotions. Finally, the balance between desirability and undesirability of life events is the critical element in their effect on

health status. Because the possible patterns of relationship between hassles and uplifts for health outcomes are varied, further study in this area might enhance one's understanding of the postulated relationship between stress and illness.

In the cognitive-phenomenological theory of psychological stress, consideration is given to the characteristics of the individual on the one hand, and to the nature of the environmental event that is appraised by the individual on the other. Appraisal and coping are the two key processes that mediate this relationship.

Appraisal. Appraisal is the cognitive process by which an event is evaluated with respect to (a) what is at stake, and (b) the coping resources and options that are available. The manner and extent to which an individual experiences psychological stress, in other words, feels harmed, threatened, or challenged, is determined by the relationship between the person and the environment in a particular situation. The stressful encounter is defined by both the evaluation of what is at stake (primary appraisal), and the evaluation of coping resources and options (secondary appraisal), as addressed by the question "What can I do?". Primary and secondary appraisal processes operate interdependently. For example, a situation may be perceived as highly threatening when the individual's coping resources are depleted, or as benign when resources are adequate.

Whether and to what extent an individual is threatened will depend on his or her evaluation of available coping stategies with respect to their cost and likelihood of success. The person's previous experiences with such situations, generalized beliefs about self and environment, and the

availability of resources will determine the nature of this secondary appraisal.

At least six categories of resources have been identified, some existing within the individual (health/energy, morale, problem-solving skills, system of beliefs) and others which can be drawn from a cooperative environment (social support, material resources) (Andrews, Tennant, Hewson, & Vaillant, 1978; Caplan, 1981; Chan, 1977; Cobb, 1976; Dean & Lin, 1977; Halpin & Ottinger, 1983; Roskies & Lazarus, 1980; Shaefer, Coyne, & Lazarus, 1981; Wallston & Wallston, 1978).

The appraisal process involves balancing competing concerns as the individual simultaneously evaluates those resources which can be mobilized, the adequacy of alternative coping strategies, and feedback from coping efforts. As cognitive appraisals change in response to new information about the person-environment relationship, or in an attempt to reduce distress, these reappraisals also need to be evaluated as to their adaptiveness and appropriateness.

Emotions are products of how individuals appraise their ongoing transactions with the environment (Folkman & Lazarus, 1985). The intensity and quality of emotions reveal how people think they are managing what is important to them in a particular context. As individuals' appraisals of situations change, so too will their emotions.

Coping. Coping is defined as the cognitive and behavioral efforts made to manage (master, tolerate, or reduce) a troubled person-environment relationship. Coping is best understood as being determined by the relationship between the individual and the environment, rather than by

independent person or situation factors. If coping is determined primarily by person variables, intraindividual coping patterns should be highly consistent across stressful events. Conversely, if situational variables are the major determinants, coping patterns will be situation specific and there will be low consistency. Coping efforts serve two main functions: (1) the regulation of stressful emotions (emotion-focused coping), and (2) doing something to improve the problem that is the source of the stress (problem-focused coping). In accordance with appraisal theory, in a threatening or harmful situation that was appraised as having few possibilities for beneficial change, the adults in Folkman and Lazarus' (1980) sample employed emotion-focused modes of coping. Where the situation was appraised as having the potential for amelioration by action, they used problem-focused coping more frequently to improve the situation which created the emotional distress.

In addition to function, coping strategies may be distinguished according to the mode used: direct action or palliative (Rakal, 1979; Coyne & Lazarus, 1981; Lazarus, 1966; 1977; Roskies & Lazarus, 1980). In direct-action coping, individuals attempt to alter their behavioral interactions with the environment by taking constructive action to meet the threat or, failing that, by demolishing, avoiding, or fleeing the threat. In some cases, these behaviors can lead to a sense of mastery before the threat is faced. On the other hand, palliative forms of coping are directed at reducing the affective, motor, and physiological disturbances that are distressing the individual by altering the internal environment through the use of defence mechanisms, alcohol, or tranquilizers, or through engaging in

behavior such as relaxation training, meditation, and hypnosis. These actions may permit an individual to deal with the problem at the direct-action level. As the cognitive behavior therapists have demonstrated, changing how a person thinks and feels in a situation can constitute an extremely effective form of problem-solving (Bakal, 1979; Roskies & Lazarus, 1980). These major coping modes are sufficiently broad to encompass a large range of discrete acts. Such a scheme provides a provisional means for ordering data concerning intraindividual and interindividual differences in the constellation of coping, over the period of one or several stressful encounters.

Coping efforts are made in response to stress appraisals. However, appraisal and coping continuously influence each other throughout an encounter such that the identification of appraisal as a determinant of coping, or coping as a determinant of appraisal depends upon where the ongoing, dynamic relationship between the two is interrupted.

Summary

No issue in the psychology of health is of greater interest and importance than whether and how stress influences adaptational outcomes such as well-being, social functioning, and somatic health. Developing a knowledge base about coping, including information about the conditions that shape it, the variety of coping processes and how they combine in stressful encounters, and above all the adaptational outcomes of coping, should ultimately contribute significantly to prevention and treatment of stress-related

illnesses. Adolescents are in the midst of rapid physical, psychological, and social growth in environments which are complex, varied and changing. The effects of environmental and/or internal disturbances can only be captured by greater specification of environmental conditions, and by longitudinal strategies that consider the great variability in the developmental responses in adolescents.

This review of the literature suggests that there are a number of questions which have yet to be answered, and which there are grounds to believe can now profitably be addressed. Within the present study attention was given to the examination of a number of assertions which will now be outlined, and which will be more explicitly specified in the Methodology Chapter.

First, it was asserted that the nature of the specific events of daily living appraised as stressful by adolescents will encompass the developmental tasks which they are striving to master in their social environments, primarily school and home, where these are to be achieved. The content of their hassles and uplifts will focus on the physical, emotional, mental, and social maturational variables which the adolescents are experiencing concurrently. Second, both problem- and emotion-focused coping functions will be used by the majority of adolescents in response to the stressful events of daily living described. Third, the coping strategies used by adolescents in response to stressful events of daily living will vary over time. Fourth, when it is appraised by adolescents that a stressful event has the potential for amelioration by direct action or by seeking more information, they will use more problem-focused- than emotion-focused strategies. For situations

which are appraised as ones which must be accepted or for which little can be done, they will report using more emotion-focused- than problem-focused coping functions. Fifth, adolescents reporting a high proportion of hassles to uplifts will describe using fewer coping strategies and experience lower levels of adaptation (symptomatology) compared with adolescents with the reverse pattern.

CHAPTER III

Methodology

This study was conducted at the exploratory-descriptive level of inquiry as the knowledge available on the coping strategies used by adolescents in specific stressful events in their daily lives is sparse. A semi-structured interview and a set of questionnaires were administered by four interviewers three times at five-to-six week intervals to a sample of adolescents attending four high schools in the Montreal area. The methodology will be described in the following sequential subsections: (1) subjects; (2) measures; (3) procedure; and, (4) statistical analyses.

Subjects

Because early adolescence (ages 12 to 14) is marked by the transition from elementary to high school, and later adolescence (ages 15 to 18) is a period of transition from high school to post-secondary education or to entry into the labor force, the decision was made to study adolescents in grade 9, who are primarily 15 years of age, and perhaps in the most stable period of these significant transitions. Practical considerations resulted in the randomized selection of a representative sample of 51 males and 50 females from the grade 9 population of four high schools in the Montreal area in which English is the language of instruction. The characteristics of the sample are outlined in Table 1.

Table 1

Description of Sample (N=101)

Characteristic		Frequency	%
Gender	Female	50	49.5
	Male	51	50.5
Mother Tongue	English	52	51.5
	Italian	24	23.8
	French	15	14.9
	Other	10	10.0
Parent(s)	Two (Original)	83	82.2
	One	11	10.9
	Other	7	7.0
Employed Father	Yes	93	92.1
	No	4	4.0
	Not Applicable	4	4.0
Employed Mother	Yes	56	55.4
	No	45	44.6

Settings

The major characteristics of the school environments from which the adolescents were selected will now be described.

High School A. High School A is comprised only of the first three secondary levels, that is, grades 7, 8, and 9. Over 90% of the almost 1,000 adolescents who attend the school are of a middle-class socioeconomic status, Italian children of first and second generation immigrants.

High School B. High School B is comprised of approximately 500 adolescents from families of middle- or higher-socioeconomic status. Grades 7 through 11 are offered. The school population is 100% Jewish, of which 95% are Anglophone and 5% are Francophone.

High School C. The student population of High School C, approximately 1800, is distributed in grades 7 through 11. Thirty percent of the student population are Black. The remainder of the students are primarily from Indian, Chinese, Greek, or Italian ethnic backgrounds. The community from which the student population is drawn is described as a middle-class or lower-middle-class socioeconomic group.

High School D. High School D has 5 grades, namely 7 through 11, and is comprised of approximately 500 students. The community in which these students live is described as a middle-class or an upper-middle-class socioeconomic environment. Although classes are given in the English language, the majority of the students live in families where the mother tongue is French. A small percentage of the students are of Greek, Portugese, or Italian background.

While High School A, C, and D are public schools (free tax-supported schools controlled by a local governmental authority), High School B is a private school that is established, conducted, and primarily supported by a nongovernmental agency.

Although 101 adolescents were to be interviewed and administered questionnaires at each of three time periods, the decision was made to delete the responses of 6 adolescents from the final analysis for reasons which will now be outlined.

High School A's sample was the only one to remain unchanged. The data from two female adolescents were deleted from High School B because too much data were unavailable. In one case a total questionnaire was lost and in the other, the adolescent was absent from school for several weeks during which time the second administration of the questionnaires occurred. The sample size of High School C was reduced from 25 adolescents to 22 adolescents because one male adolescent was suspended from school due to his misconduct, and two female adolescents on the final two administrations of the questionnaires stated that they had not experienced any stresses or symptoms, and therefore had no coping strategies to report relative to a specific stressful event. It was the interviewer's perception that while these latter two adolescents were not totally uncooperative, their attitude lacked the necessary motivation to complete the questionnaires in a meaningful way. One male adolescent was deleted from Sample D because he inadequately completed three of the questionnaires at the third time of administration. As a result of these deletions, a final sample population of 95 adolescents is included in this study. The characteristics of the sample are presented in Table 2.

While the mother tongue distribution of the adolescents in the sample was divided among English-speaking (50%), Italian-speaking (25%), French-speaking (16%), and other (10%) (see Table 2), it is interesting to note in Table 3 that the majority of Italian-speaking adolescents attended High

Table 2

Description of Sample (N=95)

Characteristic		Frequency	%
Gender	Female	46	48.4
	Male	49	51.6
Mother Tongue	English	47	49.5
	Italian	24	25.3
	French	15	15.8
	Other	9	9.7
Parent(s)	Two (Original)	77	81.1
	One	11	11.6
	Other	7	7.6
Employed Father	Yes	87	91.6
	No	4	4.2
	Not Applicable	4	4.2
Employed Mother	Yes	53	55.8
	No	42	44.2

School A and 100% of the adolescents in High School B spoke English at home. Most of the French-speaking adolescents attended High School D where the ratio of English to French speaking adolescents was almost the same, and together comprised almost 80% of the sample in that school. Eighty-one percent of the adolescents lived with two (original) parents and 12% lived with a single parent. Ninety-two percent of the fathers, and 56% of the

mothers were employed outside the home. The characteristics of the sample, by school, are outlined in Table 3.

Table 3

Description of Sample by School

Characteristic		School A (n=25)	B (n=19)	C (n=22)	D (n=29)
Gender	Female	44.0	42.1	54.5	51.7
	Male	56.0	57.9	45.5	48.3
Mother Tongue	English	4.0	100.0	68.2	41.4
	Italian	84.0	-	4.5	6.9
	French	12.0	-	4.5	37.9
	Other	-	-	22.8	13.6
Parent(s)	Two (Original)	92.0	89.5	68.2	75.9
	One	4.0	10.5	27.3	6.9
	Other	4.0	-	4.5	17.2
Employed Father	Yes	84.0	100.0	86.4	96.6
	No	8.0	-	4.5	3.4
	Not Applicable	8.0	-	9.1	-
Employed Mother	Yes	68.0	52.6	54.5	48.3
	No	32.0	47.4	45.5	51.7

Note. The values represent percentage frequency of characteristic by school.

Measures

Four research instruments were used: (1) a Semi-Structured Interview Schedule (SSIS) (Folkman & Lazarus, 1980); (2) the Ways of Coping Checklist (WCCL) (Lazarus & Folkman, 1984); (3) the Daily Hassles and Uplifts Scales (Kanner et al., 1981); and, (4) the Hopkins Symptoms Checklist (HSCL) (Derogatis, Lipman, Rickels, Uhlenhuth, & Covi, 1974).

(1) The Semi-Structured Interview Schedule (SSIS)

For the purposes of this study, the SSISs were used to elicit the adolescents' cooperation in identifying the specific stressful events to which they applied the WCCL. The actual question was the following:

> Take a few moments and think about the event or situation that has been the most stressful for you during the last month. By "stressful" I mean a situation which was difficult or troubling to you, either because it made you feel bad or because it took effort to deal with it. It might have been something to do with your family, with school, with your friends, with your health, or with some other kind of situation.
>
> Please describe what the event was about and what happened. Include such details as the place, who was involved, what you did, what made it important to you and perhaps what led up to the situation. The situation could also be one that is going on right now as well as one that has already happened. Don't worry about how you describe it. Just say the things that come to you.

A content analysis of the interviews was not done because the questions which were addressed in this study did not require such an examination or warrant the expenditure of resources that would otherwise have been necessary. Nevertheless, a semi-structured interview of the adolescent was selected as one of the measures for a variety of reasons. Adolescents' thoughts and actions (coping strategies) do not appear to have been studied

previously and this method encouraged the adolescents' freedom of expression. A semi-structured interview allowed the interviewer to choose the manner in which information was elicited and the timing of relevant questions. Furthermore, the interviewer was free to explore reasons and motives and to probe further in potentially productive areas.

The interviews were tape-recorded with the permission of each adolescent. In the future, these recordings will allow the principal investigator the opportunity to examine adolescents' exact words in describing particular kinds of situations and feelings. It will be important to know whether communications were offered or probed, because the validity of data is increased when responses are spontaneous rather than forced, and highly specific and concrete rather than diffuse and general.

(2) The Ways of Coping Checklist (WCCL)

The WCCL is a 66-item (see Appendix A), self-report measure designed to elicit the broad range of cognitive and behavioral strategies an individual uses to deal with a specific stressful event. The adolescents were asked to apply the checklist to the event they described during the SSIS, and to respond on a 4-point Likert-type scale (0 = does not apply and/or not used; 1 = used somewhat; 2 = used quite a bit; 3 = used a great deal). The checklist is a process measure which can be administered repeatedly to look for consistency across situations and to do intraindividual analyses.

Eight scales have been developed from the WCCL, of which one measures problem-focused coping (problem-focused coping), six measure emotion-focused

coping (wishful thinking, detachment, focusing on the positive, self-blame, tension-reduction, keep to self), and an eighth scale (seeking social support) contains both problem- and emotion-focused items. The scales were constructed by Folkman and Lazarus (1985) after gathering data from 108 students who completed the WCCL three times as part of a study of examination stress. Observations from the three occasions were pooled. Nine items were deleted from analysis because they showed high skewness and restricted variance. The remaining 57 items were submitted to common factor analysis with oblique rotation. A six-factor solution yielded the most conceptually interpretable set of factors. Fifteen items that did not load clearly on any one factor were deleted. One of the six factors contained three distinguishable groups of items. The three groups were rationally assigned to three factors to provide greater theoretical clarity. The factor loadings for the five empirically constructed scales, which range from .47 to .78, as well as the Cronbach alpha coefficients for all eight scales, which range from .59 to .88, are presented in Appendix B. Scores are calculated by summing the ratings. The average reliabilities and intercorrelations among the eight scales are also outlined in Appendix C.

Since one of the questions to be answered is whether problem- and/or emotion-focused coping are differentially influenced by appraisal, on the WCCL, the adolescents were asked to indicate which mode of secondary appraisal they used: (1) seeking information, (2) acceptance, (3) direct action, or (4) inhibiting action.

Folkman and Lazarus (1980) have outlined the advantages offered by the WCCL that are otherwise unavailable to those who wish to study coping. The

checklist is designed to assess coping in a specific encounter and can be used for both intraindividual and comparative analyses. It allowed the adolescent to describe his/her coping thoughts and actions complexly by indicating as many strategies as were relevant. As a checklist, the measure is easy to use and requires minimal training to administer. Although the findings of the study depended on self-reports, by asking for recent encounters the problem of memory and retrospective falsification was minimized. Theoretically, the reliability of the findings can be increased by repeatedly sampling coping strategies within the adolescent's domain.

(3) The Hassles and Uplifts Scales

The Hassles Scale (Kanner et al., 1981) was designed to assess the frequency and severity of daily hassles. It consists of a list of 117 hassles using the areas of work, health, family, friends, the environment, practical considerations, and chance occurrences as guidelines. Adolescents were asked to circle the hassles that they had experienced in the four weeks just elapsed and to rate each hassle for severity on a 3-point subscale, a score of 1, 2, or 3 meaning "somewhat," "moderately," or "extremely."

Similarly to the Hassles Scale, the Uplifts Scale (Kanner et al., 1981) consists of 135 uplifts that were generated using the content areas of the Hassles Scale as guidelines. Adolescents were asked to indicate which of the items made them feel good in the past month, and how often each of the experienced uplifts occurred, indicating by a score of 1, 2, or 3, "somewhat," "moderately," or "extremely."

When Kanner et al. (1981) constructed their Hassles and Uplifts Scales, they rated the hassles and the uplifts during the previous month on 3-point subscales for both "how strongly" and "how often". In the present study, scores for frequency (a simple count of the number of items checked), cumulated severity (the sum of the 3-point severity ratings), and intensity (the cumulated severity divided by the frequency) were obtained. The intensity score is an index of how strongly or intensely the average hassle or uplift was experienced, regardless of the frequency checked.

For the purposes of this study, hassles and uplifts which did not have obvious significance for a grade-9 adolescent population were deleted from the questionnaire. Such items included, for example: financially supporting someone who doesn't live with you (uplift); looking forward to retirement (uplift); and, job dissatisfactions (hassle). The revised Hassles Scale (see Appendix D) for the purpose of this study consisted of a list of 85 hassles, while the revised Uplifts Scale (see Appendix E) consisted of 106 uplifts.

(4) The Hopkins Symptom Checklist (HSCL)

The HSCL (Derogatis et al., 1974) (see Appendix F) is a 58-item, self-report symptom rating scale that is widely regarded as a reliable and valid measure of neurotic symptoms. It has demonstrated a sensitivity to low levels of symptoms in normal populations and is particularly likely to show alterations in clinical status arising from multiple therapeutic as well as nontreatment factors. This self-report scale possesses the singular advantage of reflecting information from the respondent directly experiencing

the phenomena. The adolescent was instructed to rate himself or herself on each of the HSCL items with reference to "How you have felt during the past 7 days including today". Distress levels are reported on a 4-point Likert-type scale circling 1 to represent "not at all distressed", 2 to represent "somewhat distressed", 3 to represent "moderately distressed", and 4 to represent "extremely distressed".

According to Derogatis et al. (1974), while there have been numerous alterations and revisions of the HSCL which can be identified, the present basic 58-item instrument represents a major landmark in the scale's evolution. The HSCL is composed of five primary symptom dimensions (factors) labeled somatization, obsessive-compulsive, interpersonal sensitivity, depression, and anxiety. The items that are subsumed under these factors are presented in Appendix G, together with the item-total correlations and internal consistency reliability coefficients. Internal consistency coefficients were calculated based on an anxious neurotic sample of 1,435 outpatients who were involved in a series of collaborative drug trials that took place at three outpatient clinics. All patients were new admissions to the clinics who presented functional neurotic complaints involving high levels of manifest anxiety. Patients exhibiting symptoms of overt psychosis, organic impairment, alcoholism, sociopathic personality disturbance, or neurotic disorders without high anxiety were excluded from the trials. The Cronbach alpha coefficients are all uniformly high, ranging from 0.84 to 0.87 for each of the dimensions.

Determination of the fundamental symptom constructs underlying the items of the HSCL proceeded in two distinct but coincident modes: (a) clinical-

rational clustering, and (b) empirical-analytic factor analysis. Working independently, Rickels and Uhlenhuth (Derogatis et al., 1974) employed highly experienced clinical raters to assign the symptoms of the HSCL to homogeneous subclusters; those symptoms that were assigned with a high degree of consistency by the raters were designated as comprising the respective HSCL clusters. The results of the two studies were highly congruent. The second approach to determining fundamental symptom constructs within the HSCL, i.e., the use of factor analysis, has been proceding in a series of studies. Derogatis et al., (1974) have assessed the constancy of the primary HSCL dimensions with regard to patient social status, psychiatrist versus patient rating, and diagnostic category. In all studies the symptom dimensions have demonstrated substantial levels of factorial invariance, with the somatization and obsessive-compulsive dimensions generally demonstrating the highest levels of constancy and the primary affective dimensions, anxiety and depression, reflecting the most configural variation among the various groups. For example, across three groups of outpatients (1) anxious neurotic ($\underline{N}$ = 641), (2) depressed neurotic ($\underline{N}$ = 367), and (3) diagnotistically heterogeneous ($\underline{N}$ = 432), the average invariance coefficients for the symptom dimensions were 0.96 for somatization, 0.85 for obsessive-compulsive, 0.72 for depression, 0.65 for interpersonal sensitivity, and 0.51 for anxiety (Derogatis et al., 1974, pp. 104-105).

The HSCL may be used as a screening measure to determine who requires professional attention or it may be used, as in this study, as a standardized source of information regarding the clinical status of an adolescent.

Although the presupposition is that the subject can and will describe

accurately his or her relevant symptoms and behaviors on the self-report scale, a number of problems associated with this mode of symptom assessment have been documented. Acutely disturbed patients are frequently unable to respond accurately. The subject's lack of clinical expertise makes accurate assessments of the level of severity of symptoms difficult. The desire to "please the doctor" or to report only socially desirable responses have been found to influence the accuracy of responses. Nevertheless Derogatis et al. (1974) point out that the self-report inventory is the most frequently used means of operationally defining "normality versus abnormality" found in the literature, because alternatives to self-report, such as clinical observer ratings, are not without serious biasing influences.

Pilot Study

A pilot study was conducted with a total of 12 adolescents who were randomly selected by the interviewers from their respective high schools. The investigator's specific objectives were: (1) to pretest the self-administered questionnaires to ensure that the wording used was comprehensible to this population; (2) to solicit input and feedback from the students on which items could be deleted from the Daily Hassles and Uplifts Scales because they were not age-appropriate; and finally, (3) to determine the length of time required for the adolescents to complete the interview and all of the questionnaires to ensure that the protocol was not too tiring. The content of the stress scales was revised on the basis of the students' feedback.

Procedure

The four interviewers were Master's students in the Counselling Psychology programme at McGill University who elected to do an internship in the Guidance Department of one of four different high schools in the Montreal area. The purpose and design of the study was discussed with the interviewers by the investigator to request their assistance with the data collection. After they agreed to participate in this capacity, the process by which the study was to be conducted and the details of the specific questionnaires to be administered were reviewed with them. The interviewers obtained written consents from their respective high school principals to conduct the study (see Appendix H). Once their respective adolescent samples were randomly identified, the interviewers met with the adolescents to inform them of the purpose of the study, to request their support and to obtain a signed consent (see Appendix I). The interviewers explained to the adolescents that they would be required to participate in a brief interview, and to complete four self-administered questionnaires three times at approximately five- to six-week intervals. Each administration would be carried out at school, take approximately one hour, and the questionnaires would be returned to the interviewer immediately after completion. On the first occasion only, the adolescent would be asked to provide basic demographic information (see Appendix J). Confidentiality would be strictly maintained throughout the study ~~by~~ assigning each adolescent a code number. All data would be identified by this number. The adolescents who agreed to participate in the study were given a letter of consent to be completed by a parent or guardian

(see Appendix K). The data were collected between December 1984 and April 1985.

The process by which the adolescent sample in each of the High Schools was randomly selected will now be described.

High School A

The 25 adolescents chosen from High School A were selected randomly from heterogeneous groups of geography classes that were compiled using a random number generator. All 25 adolescents and parents/guardians consented to participate. The interviews and questionnaires were administered by the interviewer on an individual basis.

High School B

Adolescents attending High School B were assigned to homerooms on a randomized basis. All adolescents in the selected homeroom, and their parents/guardians consented to participate in the study. To limit class disruption, the decision was made by the interviewer to administer the questionnaires to small groups of adolescents simultaneously rather than individually. The 21 adolescents were randomly assigned the letters A to U, and designated to be in one of three groups. The semi-structured interviews were carried out on an individual basis after each group administration of the questionnaires.

High School C

The adolescent sample was randomly selected by the interviewer who chose 14 male names and 14 female names separately from the total grade 9 population. The interviews and questionnaires were administered by the interviewer on an individual basis. Of the 28 adolescents contacted initially, four male adolescents did not agree to participate because of the "time commitment", and two female adolescents said they were "not interested" in the study. Two male adolescents' names and one female adolescent's name were subsequently drawn randomly from the class list, and they agreed to participate in the study.

High School D

Fifteen male and 15 female, grade 9 adolescents were randomly selected from the three classes of students attending this level. Two of the females originally selected did not agree to participate as one was concerned about the time commitment, and the other adolescent felt that it was not appropriate for her to discuss her problems with anyone outside her family. An additional two female names were therefore randomly selected from the remaining grade 9 student population and these adolescents agreed to participate. The interviews and questionnaires were administered on an individual basis.

Statistical Analyses

Although this study was conducted largely at the exploratory-descriptive level of inquiry, the analyses which were performed were both inferential and descriptive in nature.

Using the SPSSX Information Analysis System (1986), repeated measures analyses were performed using a three-factor design, S(A x B) x C, (see Table 4) with two between-subjects factors, namely, gender (A), and mother tongue (B), and one within-subjects factor, time (C), and each of the major dependent variables subscales - stress (hassles and uplifts frequency, cumulated severity, and intensity derived from the Hassles and Uplifts Scales); coping (eight coping scales and total strategies derived from the WCCL); and, adaptation (five symptom dimensions and total level of symptomatology derived from the HSCL).

Table 4

Three-Factor Design: S (A x B) x C

Gender (A)	Mother Tongue (B)	Time (C)		
		c_1	c_2	c_3
a_1	b_1 b_2 b_3 b_4			
a_2	b_1 b_2 b_3 b_4			

No differences were expected for mother tongue or time on each of the dependent variables. However, for gender, it was expected that female adolescents would report significantly more hassles, uplifts, coping strategies, and symptoms than male adolescents. Two-tailed tests were used in the estimation of probabilities. A level of significance of .05, or less was adopted. The Scheffé multiple comparison procedure was used to analyze the differences between pairs of means when effects were found significant. Every F that was obtained was compared to the F computed in accordance with the Scheffé method.

The hassles and uplifts, forms of appraisal, and symptoms reported most frequently by this sample of grade-9 adolescents on the Hassles and Uplifts Scales, the WCCL, and the HSCL, respectively, were calculated for each time of administration and averaged over the three times of administration.

Crosstabulations were performed to determine the frequency with which each of the eight and total coping scales derived from the WCCL was reported by the group over the three times of administration. Similarly the coping scales were crosstabulated with the four forms of appraisal to determine if there were relationships which could be described.

For each time of administration, Pearson correlation coefficients were computed to determine the nature of the relationships between: (1) hassles and uplifts, using frequency, cumulated severity (total), and intensity scores; (2) hassles and uplifts frequency and intensity scores, and coping strategy scales; (3) hassles and uplifts frequency and intensity scores, and the symptom dimensions; and, (4) coping strategies and symptom dimensions.

CHAPTER IV

Results

Certain results which will be presented are descriptive in nature. For the inferential statistics, only those specific data supporting the presence of significant differences and relationships will be presented in Tables. All results will be described in the order in which the dependent variables were addressed: (1) stress (hassles and uplifts); (2) coping; (3) adaptation (symptomatology); and finally, (4) the relationships between these major variables, that is, stress and coping, stress and adaptation, and, coping and adaptation.

Stress

Hassles

Table 5 lists the 10 most frequent hassles reported by 50% or more of this sample of grade-9 adolescents in at least one time period, and the percentage of adolescents checking the item averaged over the three administrations.

Table 5

Ten Most Frequent Hassles

Item*	%** Time 1	2	3	Average
1. Troubling thoughts about your future(5)	72	74	63	69
2. Not getting enough sleep(47)	65	62	68	65
3. Misplacing or losing things(1)	74	58	54	62
4. Family obligations(3)	63	54	59	59
5. Making silly mistakes(34)	56	60	58	58
6. School performance(exams,grades)(85)	58	59	54	57
7. Trouble making decisions(20)	56	53	60	56
8. Physical appearance(38)	52	55	56	54
9. Too many responsibilities(15)	55	50	48	51
10. Feel confused over what to do(67)	46	50	52	49

*Item scale number is in parentheses following the item.
**Figures represent the percentage of adolescents checking the item at each time, and averaged over the three administrations.

The 10 most frequent hassles reported by the total group are presented by gender over the three administration times in Table 6.

Table 6

Ten Most Frequent Hassles by Gender

Item*	%** Gender: Females	Males
1. Troubling thoughts about your future(5)	74	63
2. Not getting enough sleep(47)	69	59
3. Misplacing or losing things(1)	57	68
4. Family obligations(3)	59	59
5. Making silly mistakes(34)	60	56
6. School performance(exams,grades)(85)	55	56
7. Trouble making decisions(20)	60	53
8. Physical appearance(38)	55	49
9. Too many responsibilities(15)	47	56
10. Feel confused over what to do(67)	53	43

*Item scale number is in parentheses following the item.
**Figures represent the percentage of adolescents checking the item averaged over the three administrations.

Mean levels and standard deviations of hassles frequency, cumulated severity (total), and intensity scores for the total group for each of the three administration times, and averaged over the three administrations are presented in Table 7. No significant differences were found for time, gender, or mother tongue.

Table 7

Mean Levels and Standard Deviations of Hassles Frequency, Total, and Intensity Scores for Total Group by Time

Variable	n		Time 1	2	3	Average
Frequency	84	M	27.881	27.536	27.524	27.647
		SD	17.524	16.776	19.686	17.995
Total	90	M	49.978	44.289	43.311	45.959
		SD	31.521	31.121	33.301	31.981
Intensity	95	M	1.631	1.630	1.562	1.608
		SD	.319	.403	.383	.368

Uplifts

Table 8 lists the 20 most frequent uplifts reported by the total sample at each time, and averaged over the three administrations.

Table 8

Twenty Most Frequent Uplifts

Item*	Time**			
	1	2	3	Average
1. Listening to music(50)	86	93	91	90
2. Receiving a compliment(21)	83	78	74	78
3. Laughing(74)	79	73	74	75
4. Having fun(78)	72	81	70	74
5. Feeling loved(82)	75	72	62	69
6. Visiting, phoning, or writing someone(17)	70	73	66	69
7. Relating well with friends(23)	70	75	62	69
8. Entertainment(movies,T.V.,concerts)(65)	60	75	70	68
9. Performing well at school(grades,etc)(69)	75	66	63	68
10. Being visited, phoned, or sent a letter(44)	65	68	67	67
11. Having someone listen to you(62)	64	70	65	67
12. Getting enough sleep(1)	58	74	66	66
13. Liking your fellow students(7)	64	73	57	65
14. Staying or getting in good physical shape(14)	60	70	62	64
15. Socializing(being with friends,parties)(58)	70	66	56	64
16. Making a friend(59)	66	66	57	63
17. Giving a compliment(20)	66	62	58	62
18. Loving someone(90)	63	66	56	61
19. Your room or home is pleasing to you(104)	64	61	59	61
20. Feeling healthy(11)	59	65	60	61

*Item scale number is in parentheses following the item.
**Figures represent the percentage of adolescents checking the item at each time, and averaged over the three administrations.

Table 9 lists the 20 most frequent uplifts reported by the total sample, by gender, over the three administrations.

Table 9
Twenty Most Frequent Uplifts by Gender

Item*	%** Gender	
	Females	Males
1. Listening to music(50)	93	85
2. Receiving a compliment(21)	74	78
3. Laughing(74)	82	69
4. Having fun(78)	74	75
5. Feeling loved(82)	74	63
6. Visiting, phoning, or writing someone(17)	74	65
7. Relating well with friends(23)	77	63
8. Entertainment(movies,T.V.,concerts)(65)	64	71
9. Performing well at school(grades,etc)(69)	66	67
10. Being visited, phoned, or sent a letter(44)	76	59
11. Having someone listen to you(62)	73	57
12. Getting enough sleep(1)	64	69
13. Liking your fellow students(7)	72	59
14. Staying or getting in good physical shape(14)	63	65
15. Socializing(being with friends,parties)(58)	74	56
16. Making a friend(59)	70	57
17. Giving a compliment(20)	64	65
18. Loving someone(90)	64	59
19. Your room or home is pleasing to you(104)	63	57
20. Feeling healthy(11)	61	64

*Item scale number is in parentheses following the item.
**Figures represent the percentage of adolescents checking the item over the three administrations.

Mean levels and standard deviations of uplifts frequency, cumulated severity (total), and intensity scores for the total group for each of the three administration times, and averaged over the three administrations are presented in Table 10.

Table 10

Mean Levels and Standard Deviations of Uplifts Frequency, Total, and Intensity Scores for Total Group by Time

Variable	n		Time 1	Time 2	Time 3	Average
Frequency	94	M	49.213	51.245	47.266	49.241
		SD	22.769	22.939	26.147	23.952
Total	95	M	94.232	93.147	81.695	89.691
		SD	51.204	46.570	46.926	48.233
Intensity	95	M	1.907	1.826	1.768	1.834
		SD	.387	.348	.415	.383

An examination of the analyses of variance in Tables 11 and 12 indicated significant differences for time and mother tongue by time, for uplifts total, and gender and time, for uplifts intensity.

Using the Scheffé procedure, a significant decrease in the scores (see Table 10) was found for uplifts total between the first and third time of administration, $F(2, 174) = 8.62$, $p < .05$, and the second and third time of administration, $F(2, 174) = 7.19$, $p < .05$, and for uplifts intensity, between the first and third time of administration, $F(2, 174) = 13.70$, $p < .01$.

Table 11

Analysis of Variance for Uplifts Total

Source of Variation	df	MS	F	p
Between Subjects				
A Gender	1	12447.302	2.423	.123
B Mother Tongue	3	5927.748	1.154	.332
AB	3	3163.757	.616	.607
S (AB)	87	5136.663		
Within Subjects				
C Time	2	4583.919	5.294	.006*
AC	2	.442	.001	.999
BC	6	2470.158	2.853	.011*
ABC	6	870.647	1.006	.423
CS (AB)	174	865.872		

Table 12

Analysis of Variance for Uplifts Intensity

Source of Variation	df	MS	F	p
Between Subjects				
A Gender	1	1.552	5.442	.022*
B Mother Tongue	3	.299	1.048	.376
AB	3	.727	2.550	.061
S (AB)	87	.285		
Within Subjects				
C Time	2	.463	6.951	.001*
AC	2	.037	.552	.577
BC	6	.070	1.052	.393
ABC	6	.020	.297	.938
CS (AB)	174	.067		

The mean levels and standard deviations of uplifts total for mother tongue by time are presented in Table 13.

Table 13

Mean Levels and Standard Deviations of Uplifts Total for Mother Tongue by Time

Mother Tongue	n		Time 1	2	3
English	47	M	99.021	100.468	75.106
		SD	57.770	49.560	44.549
French	15	M	78.200	86.467	80.267
		SD	47.032	50.123	44.549
Italian	24	M	101.792	89.125	103.333
		SD	40.536	36.168	41.739
Other	9	M	72.000	71.600	57.800
		SD	40.367	54.174	53.326

Using the Scheffé procedure, a significant decrease in the uplifts total scores was found for the English-speaking adolescents between the first and third time of administration, $F(6, 174) = 15.52$, $p < .05$, and between the second and third time of administration, $F(6, 174) = 17.46$, $p < .01$.

The mean levels and standard deviations for uplifts intensity for gender by time, and overall for each gender are presented in Table 14. Female adolescents reported significantly higher mean scores than male adolescents (see Table 12).

Table 14

Mean Levels and Standard Deviations of Uplifts Intensity for Gender by Time

Gender	n		Time 1	Time 2	Time 3	Average
Female	46	M	2.005	1.885	1.845	1.912
		SD	.364	.319	.412	.365
Male	49	M	1.816	1.771	1.697	1.761
		SD	.390	.368	.408	.389

Correlations between hassles and uplifts scores

It can be observed in Table 15 that the correlations between the frequency (a simple count of the number of items checked) and cumulated severity (total) (the sum of the 3-point severity ratings) scoring techniques for hassles and uplifts mean scores were so high that it would seem redundant to consider both. For this reason, in subsequent analyses only the hassles and uplifts scores for frequency and intensity were utilized.

Also shown in Table 15 are the correlations between hassles and uplifts scores for the same time administration. Significant positive hassles-uplifts correlations using frequency scores and intensity scores were found at each time.

Table 15
Correlation Matrix of Stress Variables by Time

Stress Variables	Stress Variables 1.	2.	3.	4.	5.	6.	7.
Time 1							
1. Hassles frequency		.97**	.28**	.69**	.65**	.01	.44**
2. Hassles total			.45**	.62**	.58**	.04	.47**
3. Hassles intensity				.11	.23*	.34**	.24*
4. Uplifts frequency					.94**	.10	-.21*
5. Uplifts total						.43**	-.24*
6. Uplifts intensity							-.23*
7. Ratio (HR/UF)							
Time 2							
1. Hassles frequency		.93**	.07	.69**	.66**	-.04	.36**
2. Hassles total			.41**	.60**	.64**	.15	.32**
3. Hassles intensity				-.09	.09	.53**	.07
4. Uplifts frequency					.93**	.04	-.24*
5. Uplifts total						.35**	-.24*
6. Uplifts intensity							-.27**
7. Ratio (HF/UF)							
Time 3							
1. Hassles frequency		.95**	.19	.75**	.62**	-.17	.33**
2. Hassles total			.41**	.69**	.62**	-.05	.37**
3. Hassles intensity				.00	.14	.43**	.28**
4. Uplifts frequency					.88**	-.13	-.22*
5. Uplifts total						.28**	-.23*
6. Uplifts intensity							-.09
7. Ratio (HF/UF)							

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

Coping

The mean scores and standard deviations for the total strategies used by the total group during each of the coping events, and for the eight coping scales derived from the WCCL are shown in Table 16.

Table 16

Mean Level and Standard Deviation of Coping Scales derived from the WCCL for Total Group by Time

Ways of Coping Scales	n		Time 1	Time 2	Time 3
Total coping	94	M	76.340	65.287	57.138
		SD	22.749	25.990	26.615
Problem-focused coping	86	M	15.047	12.640	11.558
		SD	5.800	6.084	6.171
Wishful thinking	72	M	7.597	6.708	5.889
		SD	3.910	4.432	4.116
Distancing	76	M	5.868	4.921	4.355
		SD	2.609	3.174	2.755
Seeking social support	82	M	9.427	8.305	7.024
		SD	4.546	4.416	4.613
Emphasizing the positive	89	M	4.404	3.584	2.921
		SD	2.319	2.245	2.079
Self-blame	94	M	3.128	2.670	2.457
		SD	1.856	1.713	2.144
Tension-reduction	94	M	2.340	1.872	1.681
		SD	1.852	1.483	1.533
Self-isolation	94	M	3.266	2.787	2.319
		SD	1.797	2.063	1.947

Coping Scales: Significant Findings

An examination of the analyses of variance for each of the coping scales indicated significant differences were found for time and gender, however not for mother tongue. The mean scores for each of the coping scales decreased between time one and time three, and female adolescents reported higher mean scores than male adolescents for total coping strategies, problem-focused coping, wishful thinking, and seeking social support.

The analyses of variance and the data supporting the significant findings will be presented for each of the coping scales. Because the mean levels and standard deviations of the distancing-, emphasizing the positive-, self-isolation-, self-blame-, and tension-reduction coping scales for the total group, by time, were shown in Table 16, only the analyses of variance and the results of the Scheffé procedure supporting the time differences for these scales will be presented.

Total coping. The mean scores and standard deviations of total coping for gender, by time, are shown in Table 17. The data supporting the gender and time differences are shown in Table 18. When Scheffé's procedure was used, a decrease in mean scores between times of administration was found between times one and two, $F(2, 172) = 26.02$, $p < .01$, times one and three, $F(2, 172) = 78.53$, $p < .01$, and times two and three, $F(2, 172) = 14.14$, $p < .01$.

Table 17
Mean Levels and Standard Deviations of Total Coping for Gender by Time

Gender	n		Time 1	2	3	Average
Female	45	M	82.413	71.109	63.733	72.418
		SD	20.490	25.298	23.581	23.123
Male	49	M	70.347	59.102	51.082	60.177
		SD	23.268	25.752	28.008	25.676

Table 18
Analysis of Variance for Coping Scale - Total Coping

Source of Variation	df	MS	F	p
Between Subjects				
A Gender	1	11797.973	8.550	.004*
B Mother Tongue	3	901.300	.653	.583
AB	3	1087.165	.788	.504
S (AB)	86	1379.809		
Within Subjects				
C Time	2	8731.032	39.563	.0005*
AC	2	3.758	.017	.983
BC	6	147.597	.669	.675
ABC	6	257.961	1.169	.325
CS (AB)	172	220.685		

Problem-focused coping. The mean levels and standard deviations of problem-focused coping for gender, by time, are shown in Table 19. The data supporting the gender and time differences are shown in Table 20. When Scheffé's procedure was used, a decrease in mean scores between times of administration was found between times one and two, $F(2, 156) = 17.74$, $p < .01$, and times one and three, $F(2, 156) = 37.28$, $p < .01$.

Table 19
Mean Levels and Standard Deviations of Problem-Focused Coping for Gender by Time

Gender	n		Time 1	Time 2	Time 3	Average
Female	41	M	16.364	13.818	12.191	14.124
		SD	5.318	5.990	5.705	5.671
Male	45	M	13.596	11.044	10.286	11.642
		SD	5.926	6.037	6.652	6.205

Table 20
Analysis of Variance for Coping Scale - Problem-Focused Coping

Source of Variation	df	MS	F	p
Between Subjects				
A Gender	1	442.908	5.570	.021*
B Mother Tongue	3	81.106	1.020	.388
AB	3	18.520	.233	.873
S (AB)	78	79.515		
Within Subjects				
C Time	2	274.221	19.529	.0005*
AC	2	11.903	.848	.430
BC	6	9.000	.641	.697
ABC	6	5.091	.363	.902
CS (AB)	156	14.042		

Wishful thinking. The mean levels and standard deviations of wishful thinking for gender, by time, are shown in Table 21. The data supporting the gender and time differences are shown in Table 22. When Scheffé's procedure was used, a decrease in mean scores between times of administration was found between times one and three, $F(2, 128) = 18.38$, $p < .01$.

Table 21
Mean Levels and Standard Deviations of Wishful Thinking for Gender by Time

Gender	n		Time 1	2	3	Average
Female	35	M	8.878	8.535	7.167	8.193
		SD	3.648	3.960	3.950	3.853
Male	37	M	6.932	5.364	4.787	5.694
		SD	3.750	3.895	3.605	3.750

Table 22
Analysis of Variance for Coping Scale - Wishful Thinking

Source of Variation	df	MS	F	p
Between Subjects				
A Gender	1	399.200	11.115	.001*
B Mother Tongue	3	42.452	1.182	.324
AB	3	17.982	.501	.683
S (AB)	64	35.916		
Within Subjects				
C Time	2	52.560	9.196	.0005*
AC	2	5.076	.888	.414
BC	6	2.462	.431	.857
ABC	6	7.956	1.392	.223
CS (AB)	128	5.715		

Seeking social support. The mean levels and standard deviations of seeking social support for gender, by time, are shown in Table 23. The data supporting the gender and time differences are shown on Table 24. When Scheffé's procedure was used, a decrease in mean scores between times of administration was found between times one and two, $F(2, 148) = 6.87$, $p < .05$, times one and three, $F(2,148) = 31.51$, $p < .01$, and times two and three, $F(2, 148) = 8.95$, $p < .05$.

Table 23
Mean Levels and Standard Deviations of Seeking Social Support for Gender by Time

Gender	n		Time 1	2	3	Average
Female	39	M	10.667	9.476	8.841	9.661
		SD	4.724	4.369	4.345	4.479
Male	43	M	7.792	7.213	5.449	6.818
		SD	3.968	4.038	4.336	4.114

Table 24
Analysis of Variance for Coping Scale - Seeking Social Support

Source of Variation	df	MS	F	p
Between Subjects				
A Gender	1	712.190	18.355	.0005*
B Mother Tongue	3	22.159	.571	.636
AB	3	50.838	1.310	.277
S (AB)	74	38.800		
Within Subjects				
C Time	2	118.492	15.769	.0005*
AC	2	1.412	.188	.829
BC	6	5.716	.761	.602
ABC	6	4.294	.571	.753
CS (AB)	148	7.514		

Distancing. When Scheffé's procedure was used, a decrease in mean scores between times of administration was found between times one and two, $F(2, 136) = 7.77$, $p < .05$, and times one and three, $F(2, 136) = 19.82$, $p < .01$, (see Table 25).

Table 25
Analysis of Variance for Coping Scale - Distancing

Source of Variation	df	MS	F	p
Between Subjects				
A Gender	1	45.880	2.934	.091
B Mother Tongue	3	1.749	.112	.953
AB	3	20.654	1.321	.275
S (AB)	68	15.638		
Within Subjects				
C Time	2	44.425	10.124	.0005*
AC	2	3.663	.835	.436
BC	6	6.711	1.529	.173
ABC	6	2.465	.562	.760
CS (AB)	136	4.388		

Emphasizing the positive. When Scheffé's procedure was used, a decrease in mean scores between times of administration was found between times one and two, $F(2, 162) = 9.43$, $p < .05$, times one and three, $F(2, 162) = 30.84$, $p < .01$, and times two and three, $F(2, 162) = 6.16$, $p < .05$ (see Table 26).

Table 26
Analysis of Variance for Coping Scale - Emphasizing the Positive

Source of Variation	df	MS	F	p
Between Subjects				
A Gender	1	28.734	3.653	.060
B Mother Tongue	3	12.138	1.543	.210
AB	3	11.593	1.474	.228
S (AB)	81	7.866		
Within Subjects				
C Time	2	49.127	15.481	.0005*
AC	2	2.255	.711	.493
BC	6	1.335	.421	.864
ABC	6	5.632	1.775	.107
CS (AB)	162	3.173		

Self-isolation. When Scheffé's procedure was used, a decrease in mean scores between times of administration was found between times one and three, $F(2, 172) = 17.91$, $p < .01$, (see Table 27).

Table 27
Analysis of Variance for Coping Scale - Self-Isolation

Source of Variation	df	MS	F	p
Between Subjects				
A Gender	1	9.227	1.354	.248
B Mother Tongue	3	1.434	.210	.889
AB	3	5.625	.811	.491
S (AB)	86	6.813		
Within Subjects				
C Time	2	21.067	8.954	.0005*
AC	2	1.544	.656	.520
BC	6	2.220	.944	.465
ABC	6	1.908	.811	.563
CS (AB)	172	2.353		

Self-blame. When Scheffé's procedure was used, a decrease in mean scores between times of administration was found between times one and three, $F(2, 172) = 11.60$, $p < .01$, (see Table 28).

Table 28
Analysis of Variance for Coping Scale - Self-Blame

Source of Variation	df	MS	F	p
Between Subjects				
A Gender	1	2.281	.313	.577
B Mother Tongue	3	8.886	1.220	.308
AB	3	6.364	.873	.458
S (AB)	86	7.286		
Within Subjects				
C Time	2	11.025	6.041	.003*
AC	2	1.781	.976	.379
BC	6	1.408	.771	.593
ABC	6	3.337	1.829	.096
CS (AB)	172	1.825		

Tension-reduction. When Scheffé's procedure was used, a decrease in mean scores between times of administration was found between times one and two, $F(2, 172) = 6.23$, $p < .05$, and times one and three, $F(2, 172) = 12.35$, $p < .01$, (see Table 29).

Table 29

Analysis of Variance for Coping Scale - Tension-Reduction

Source of Variation	df	MS	F	p
Between Subjects				
A Gender	1	.639	.134	.715
B Mother Tongue	3	4.909	1.028	.384
AB	3	4.779	1.001	.396
S (AB)	86	4.775		
Within Subjects				
C Time	2	10.823	6.547	.002*
AC	2	.104	.063	.939
BC	6	1.770	1.070	.382
ABC	6	1.087	.657	.684
CS (AB)	172	1.653		

It is evident in Table 30 that both problem- and emotion-focused coping were used in the majority of stressful events. The percentage of items checked and averaged over the three administrations was 72% for the problem-focused scale, 61% for the six emotion-focused scales, and 69% for the eighth scale, seeking social support, which contains both problem- and emotion-focused items.

Table 30

Nature of Coping Strategies Utilized by the Total Group by Time

Ways of Coping Scales	% Items Checked* Time 1	2	3	Average
Wishful thinking	80	72	66	73
Problem-focused coping	78	71	66	72
Seeking social support	72	70	64	69
Emphasizing the positive	72	63	56	64
Distancing	69	61	56	62
Self-blame	66	59	54	59
Self-isolation	66	59	49	58
Tension reduction	47	42	38	43

*Figures represent the percentage of items checked within each coping scale at each time of administration, and averaged over the three administrations.

While the percentage of items checked within each of the coping strategy scales decreased over the three time periods, the order of the frequency with which the strategies were reported remained the same, with wishful thinking, problem-focused coping, and seeking social support being reported the most frequently, and in that order, and tension-reduction activities being checked the least frequently on the continuum and over time.

Appraisal

Table 31 summarizes the classification as to secondary appraisal by the adolescents of their stressful events for each time period, and averaged over the three administrations. The majority of adolescents appraised that the event which they had described had the potential for amelioration by direct action, including the seeking of information, whereas approximately 35% of the adolescents appraised that their event held few possibilities for beneficial change and therefore required acceptance or the inhibition of action. Even when it was appraised by some adolescents that there was little to be done for their event, many of them used a combination of problem-focused- and emotion-focused strategies to cope with their stressful event (see Table 30).

Table 31

Secondary Appraisal of Coping Episodes by Total Group by Time

Form of Appraisal	Time* 1	2	3	Average
(1) Direct action	35	37	37	36
(2) Acceptance	33	23	24	27
(3) Seek information	18	18	15	17
(4) Inhibiting action	6	9	10	8
No response	3	8	9	7

*Figures represent the total number of adolescents who classified their coping episode by each form of appraisal for each time of administration, and averaged over the three administrations.

Table 32 summarizes the classification of secondary appraisal by the total group, by gender, over the three administrations.

Table 32
Secondary Appraisal of Coping Episodes by Gender

Form of Appraisal	Gender* Females	Males
(1) Direct action	42	35
(2) Acceptance	29	27
(3) Seek information	16	20
(4) Inhibiting action	8	9
No response	5	9

*Figures represent the percentage of adolescents who classified their coping episode by each form of appraisal over the three administrations.

Presented in Table 33, is the crosstabulation of coping strategies and secondary appraisal for the total group over the three administrations.

Table 33
Crosstabulation of Coping Strategies and Secondary Appraisal for the Total Group over the Three Time Periods

Coping Scales	Classification of Secondary Appraisal* Direct Action	Acceptance	Seek Info	Inhibit Action
Wishful thinking	28.8	22.0	12.5	6.4
Problem-focused coping	28.7	18.8	14.2	6.4
Seeking social support	27.8	18.2	13.3	6.5
Emphasizing the positive	24.1	17.0	13.7	5.6
Distancing	23.3	19.6	11.4	5.4
Self-blame	24.0	15.7	12.0	5.1
Self-isolation	20.5	18.4	10.4	5.6
Tension-reduction	16.7	11.2	9.4	3.3

*Figures represent the percentage of items checked within each coping scale corresponding to the adolescents' selection of specific forms of secondary appraisal over the three administrations.

Adaptation (HSCL)

The 10 symptoms reported most frequently by the total group on the HSCL at each time of administration and averaged over the three administrations are shown in Table 34.

Table 34

Ten Most Frequent Symptoms Reported by Total Group by Time

Symptom*	Time**			
	1	2	3	Average
1. Feeling confused(18)	99	97	53	71
2. Having to ask others what you should do(35)	99	96	52	71
3. Blaming yourself for things(26)	99	55	52	71
4. Feeling easily annoyed or irritated(11)	78	96	70	71
5. Feeling that people are unfriendly or dislike you(37)	99	96	44	71
6. Difficulty in falling asleep or staying asleep(44)	67	98	64	70
7. Trouble concentrating(55)	67	97	60	70
8. Difficulty making decisions(46)	66	95	55	70
9. Wanting to be alone(47)	61	96	55	70
10. Worried about sloppiness or carelessness(10)	61	95	50	70

*Item scale number is in parentheses following the item.
**Figures represent the percentage of adolescents checking the item at each time of administration, and averaged over the three administrations.

Presented in Table 35 are the 10 most frequent symptoms reported by the total group, by gender, over the three administrations.

Table 35

Ten Most Frequent Symptoms by Gender

Symptom*	%** Gender	
	Females	Males
1. Feeling confused(18)	76	49
2. Having to ask others what you should do(35)	63	53
3. Blaming yourself for things(26)	60	44
4. Feeling easily annoyed or irritated(11)	78	64
5. Feeling that people are unfriendly or dislike you(37)	45	43
6. Difficulty in falling asleep or staying asleep(44)	71	55
7. Trouble concentrating(55)	65	57
8. Difficulty making decisions(46)	69	51
9. Wanting to be alone(47)	64	47
10. Worried about sloppiness or carelessness(10)	43	55

*Item scale number is in parentheses following the item.
**Figures represent the percentage of adolescents checking the item averaged over the three administrations.

HSCL Dimensions

Presented in Table 36 are the mean levels and standard deviations of the five symptom dimensions, and the total symptomatology reported by the total group at each time of administration.

Table 36

Mean Levels and Standard Deviations of the HSCL Symptom Dimensions for the Total Group by Time

Symptom Dimension	n		Time 1	Time 2	Time 3
Somatization	92	M	16.826	16.174	17.200
		SD	4.221	6.114	5.800
Obsessive-Compulsive	71	M	14.521	13.254	13.197
		SD	3.960	4.683	3.686
Interpersonal Sensitivity	73	M	12.466	11.808	12.370
		SD	3.428	4.675	4.532
Depression	93	M	17.871	16.688	16.634
		SD	5.638	6.632	5.330
Anxiety	59	M	11.525	10.746	10.661
		SD	4.256	4.890	4.096
Total Symptomatology	94	M	92.915	86.521	87.713
		SD	21.764	27.774	24.606

The mean scores for the five HSCL symptom dimensions and for total symptomatology were analyzed for significant differences for gender and mother tongue by time of administration. The findings will now be presented.

Somatization. As shown in Table 37 and supported by the data in Table 38, Italian-speaking adolescents reported significantly higher mean scores than English-speaking adolescents, $F(3, 84) = 7.16$, at the $p < .10$ level, when Scheffé's method was used.

Table 37
Mean Levels and Standard Deviations of the HSCL Symptom Dimension - Somatization for Mother Tongue by Time

Mother-Tongue	n		Time 1	2	3	Average
English	46	M	16.370	15.426	16.192	15.996
		SD	3.952	4.211	5.926	4.696
Italian	23	M	18.292	19.000	19.565	18.952
		SD	4.563	6.600	5.151	5.438
French	15	M	16.400	14.600	16.933	15.978
		SD	4.050	8.467	6.595	6.371
Other	8	M	15.800	13.600	15.600	15.000
		SD	4.970	8.503	3.286	5.586

Table 38
Analysis of Variance for HSCL Symptom Dimension - Somatization

Source of Variation	df	MS	F	p
Between Subjects				
A Gender	1	167.013	2.976	.088
B Mother Tongue	3	186.900	3.331	.023*
AB	3	125.484	2.236	.090
S (AB)	84	56.116		
Within Subjects				
C Time	2	21.554	1.723	.182
AC	2	33.157	2.650	.074
BC	6	7.278	.582	.745
ABC	6	9.037	.722	.632
CS (AB)	168	12.512		

Obsessive-compulsive. An examination of the mean scores in Table 36 shows a significant decrease over time (see Table 40), specifically between times one and two, $F(2, 126) = 13.36$, $p < .01$, and times one and three, $F(2, 126) = 11.11$, $p < .01$, when Scheffé's procedure was used. Table 39 shows significantly higher levels of obsessive-compulsive symptoms reported by female adolescents than male adolescents which are supported by the analyses of variance shown in Table 40.

Table 39

Mean Levels and Standard Deviations of the HSCL Symptom Dimension - Obsessive-Compulsive for Gender by Time

Gender	n		Time 1	2	3	Average
Female	37	M	15.191	12.601	13.511	13.768
		SD	4.062	5.252	3.232	4.182
Male	34	M	13.143	12.415	11.796	12.451
		SD	3.475	4.444	3.807	3.930

Table 40

Analysis of Variance for HSCL Symptom Dimension - Obsessive Compulsive

Source of Variation	df	MS	F	p
Between Subjects				
A Gender	1	140.733	4.145	.046*
B Mother Tongue	3	61.765	1.829	.153
AB	3	33.400	.984	.406
S (AB)	63	33.954		
Within Subjects				
C Time	2	39.793	5.439	.005*
AC	2	9.052	1.237	.294
BC	6	10.168	1.390	.224
ABC	6	3.027	.414	.869
CS (AB)	126	7.316		

Interpersonal sensitivity. No significant differences were found between the mean scores for gender, mother tongue, or time.

Depression. An examination of the mean scores in Table 41 shows that female adolescents reported higher levels of depression than male adolescents. These differences were significant (see Table 42) at time one, $F(2, 170) = 20.99$, $p < .01$, and at time three, $F(2, 170) = 12.28$, $p < .01$, when Scheffé's procedure was used. Scheffé's method also supported a difference at the $p < .10$ level for time (see Table 42) between times one and two, $F(2, 170) = 5.08$, and times one and three, $F(2, 170) = 5.12$, (see Table 36).

Table 41
Mean Levels and Standard Deviations of the HSCL Symptom Dimension- Depression for Gender by Time

Gender	n		Time 1	2	3	Average
Female	46	M	20.261	17.674	18.478	18.804
		SD	5.527	7.778	5.640	6.315
Male	47	M	15.469	15.625	14.813	15.302
		SD	4.646	5.172	4.311	4.710

Table 42
Analysis of Variance for HSCL Symptom Dimension - Depression

Source of Variation	df	MS	F	p
Between Subjects				
A Gender	1	819.436	13.047	.001*
B Mother Tongue	3	150.230	2.392	.074
AB	3	129.437	2.061	.111
S (AB)	85	62.805		
Within Subjects				
C Time	2	45.430	3.364	.037*
AC	2	50.944	3.772	.025*
BC	6	15.683	1.161	.329
ABC	6	15.940	1.180	.319
CS (AB)	170	13.503		

Anxiety. Although Italian-speaking adolescents reported higher levels of anxiety than other adolescent-mother tongue groups (see Table 43) and mother tongue differences were significant (see Table 44), when Scheffé's procedure was used no significant differences were found even at the $p < .10$ level.

Table 43
Mean Levels and Standard Deviations of the HSCL Symptom Dimension - Anxiety for Mother Tongue by Time

Mother Tongue	n		Time 1	2	3	Average
English	28	M	10.350	9.973	10.000	10.108
		SD	3.355	3.149	3.924	3.476
Italian	14	M	13.571	12.773	11.684	12.676
		SD	4.467	4.587	3.560	4.205
French	12	M	10.643	8.923	10.500	10.022
		SD	2.845	6.048	4.053	4.315
Other	5	M	9.000	7.500	9.250	8.583
		SD	2.708	4.042	3.862	3.537

Table 44
Analysis of Variance for HSCL Symptom Dimension - Anxiety

Source of Variation	df	MS	F	p
Between Subjects				
A Gender	1	71.320	2.126	.151
B Mother Tongue	3	187.320	5.584	.002*
AB	3	68.790	2.051	.118
S (AB)	51	33.548		
Within Subjects				
C Time	2	13.395	1.807	.169
AC	2	3.209	.433	.650
BC	6	12.254	1.653	.140
ABC	6	4.383	.591	.737
CS (AB)	102	7.415		

Total Symptomatology. As shown in Table 45 and supported by the data in Table 46, female adolescents reported higher levels of total symptomatology than male adolescents. When Scheffé's procedure was used, gender differences were found at time one, $F(2, 172) = 8.56$, $p < .05$, and at time three, $F(2, 172) = 7.58$, $p < .05$. Differences in the reported levels of symptomatology (see Table 36) were significant between times one and two, $F(2, 172) = 9.71$, $p < .01$, and times one and three, $F(2, 172) = 6.40$, $p < .05$. When Scheffé's procedure was used, a mother-tongue difference between the Italian- and other-speaking adolescents was found at the .10 level, $F(3, 86) = 7.75$.

Table 45

Mean Levels and Standard Deviations of the HSCL Symptom Dimension - Total Symptomatology for Gender, and Mother Tongue, by Time

Variables		n		Time 1	Time 2	Time 3	Average
Gender	Female	46	M	99.696	87.783	93.978	93.819
			SD	22.266	31.269	23.311	25.615
	Male	48	M	86.531	85.313	81.592	84.479
			SD	19.166	24.230	24.301	22.566
Mother Tongue	English	47	M	90.106	84.425	85.426	86.652
			SD	21.247	19.634	24.772	21.884
	Italian	24	M	102.583	99.792	95.417	99.264
			SD	22.773	25.406	24.819	24.333
	French	14	M	90.333	82.000	87.067	86.467
			SD	15.324	44.282	25.297	28.301
	Other	9	M	81.200	67.200	83.600	77.333
			SD	15.189	35.010	20.452	23.550

Table 46
Analysis of Variance for HSCL Symptom Dimension - Total Symptomatology

Source of Variation	df	MS	F	p
Between Subjects				
A Gender	1	6532.999	5.364	.023*
B Mother Tongue	3	3950.790	3.244	.026*
AB	3	3003.016	2.466	.068
S (AB)	86	1217.987		
Within Subjects				
C Time	2	1086.642	5.208	.006*
AC	2	872.857	4.183	.017*
BC	6	185.454	.889	.504
ABC	6	201.555	.966	.450
CS (AB)	172	208.657		

Frequency of HSCL Symptom Dimensions

Shown in Table 47 are the percentage of items checked by the total group within each of the five symptom dimensions for each time of administration, and averaged over the three administrations. Although the percentages decreased over time, the order with which the symptom dimensions were checked remained the same, with items of interpersonal sensitivity reported most frequently and somatization items reported least often.

Table 47
Nature of Symptoms Reported by Total Group on the HSCL by Time

	% Items Checked*			
	Time			
HSCL Dimensions	1	2	3	Average
Interpersonal Sensitivity	52.4	47.5	42.9	47.6
Obsessive-Compulsive	49.3	42.4	40.0	44.0
Depression	43.4	39.3	35.0	39.2
Anxiety	39.6	36.6	32.9	36.4
Somatization	29.5	28.9	29.8	29.4

*Figures represent the percentage of items checked within each dimension at each time of administration, and averaged over the three administrations.

Crosstabulation of Secondary Appraisal and Symptom Dimensions

The results of crosstabulating the symptom dimensions with the four forms of secondary appraisal for the total group over the three administrations are shown in Table 48.

Table 48

Crosstabulation of Secondary Appraisal and Symptoms Experienced by Total Group over Three Administrations

Symptom Dimensions	Secondary Appraisal*			
	Direct Action	Acceptance	Seek Info	Inhibit Action
Interpersonal Sensitivity	18.0	13.5	8.4	5.0
Obsessive-Compulsive	16.6	12.4	7.8	4.0
Depression	15.1	11.3	7.0	4.1
Anxiety	13.5	10.9	6.7	3.4
Somatization	11.8	7.7	5.6	2.5

*Figures represent the percentage of items checked within each symptom dimension over the three administrations, corresponding to the adolescents' selection of specific forms of secondary appraisal.

As one might expect, the symptoms dimensions described most frequently, when crosstabulated with the most frequently described forms of secondary appraisal, yielded the highest percentage of items checked over time, and vice versa.

Relationship Between Stress and Coping

Shown in Tables 49, 50, and 51 are the relationships between the stress variables and the coping strategies checked for time one, two, and three respectively. For each of the time periods, the mean level of total coping strategies was positively correlated with hassles frequency, hassles intensity, and uplifts frequency. Uplifts intensity was positively correlated with the mean level of total coping strategies at time two and time three only.

Table 49

Intercorrelations of Stress Variables with Coping Strategies at Time 1

	Stress Variables				
Coping Scales	Hassles Frequency	Hassles Intensity	Uplifts Frequency	Uplifts Intensity	Ratio (HF/UF)
Problem-focused coping	.32**	.31**	.38**	.18	-.02
Wishful thinking	.38**	.37**	.24*	.13	.19
Distancing	.04	.11	-.07	.05	.06
Seeking social support	.23*	.16	.25*	.20	-.02
Emphasizing the positive	.26*	.21*	.29**	.09	-.01
Self-blame	.29**	.11	.29**	.09	.08
Tension-reduction	.32**	.33**	.19	-.00	.20*
Self-isolation	.14	.27*	-.02	-.04	.20*
Total coping	.48**	.38**	.40**	.18	.13

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

Table 50
Intercorrelations of Stress Variables with Coping Strategies at Time 2

	Stress Variables				
Coping Scales	Hassles Frequency	Hassles Intensity	Uplifts Frequency	Uplifts Intensity	Ratio (HF/UF)
Problem-focused coping	.41**	.21**	.44**	.15	-.02
Wishful thinking	.36**	.27**	.31*	.20	.01
Distancing	.28*	.10	.24**	.20	-.01
Seeking social support	.27*	.12	.31**	.35**	-.12
Emphasizing the positive	.24*	-.10	.23*	.03	.04
Self-blame	.20	.10	.19	.05	-.04
Tension-reduction	.19	.09	.11	.02	.07
Self-isolation	.28**	.10	.11	-.03	.25*
Total coping	.46**	.21*	.44**	.21*	.00

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

Table 51
Intercorrelations of Stress Variables with Coping Strategies at Time 3

	Stress Variables				
Coping Scales	Hassles Frequency	Hassles Intensity	Uplifts Frequency	Uplifts Intensity	Ratio (HF/UF)
Problem-focused coping	.33**	.23**	.21*	.20	.16
Wishful thinking	.40**	.29**	.35**	.16	.07
Distancing	.18*	.03	.13*	.08	.05
Seeking social support	.27*	.37**	.21*	.31**	.01
Emphasizing the positive	.19	.12	.16	.15	.01
Self-blame	.22*	.19	.25*	.16	.02
Tension-reduction	.27**	.25*	.15	.06	.26**
Self-isolation	.18	.22*	.12	.01	.05
Total coping	.39**	.32**	.32**	.23*	.12

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

Relationship Between Stress and Adaptation

Among the most important findings of this study are the significant correlations that were found between levels of stress and psychological symptoms. These data are shown in Table 52. More specifically, hassles frequency and the mean level of total symptomatology, in addition to hassles frequency and the five symptom dimensions, were positively correlated for the total group at each of the three time periods. Hassles intensity was also positively correlated with each of the symptom dimensions and the mean level of total symptomatology, however, only at time one and time three. Uplifts frequency was positively correlated with all of the symptom dimensions and with the total mean level of symptomatology at time two and time three. The ratio of hassles frequency to uplifts frequency was positively correlated with the mean level of total symptomatology at each time of administration in addition to all of the HSCL dimensions except interpersonal sensitivity and anxiety on the final two times of administration. There was no relationship found between uplifts intensity and symptomatology at any of the time periods.

Table 52

Intercorrelations of Stress Variables with HSCL Dimensions by Time

Variables	Symptom Dimensions					
	Somatization	Obsessive Compulsive	Interpersonal Sensitivity	Depression	Anxiety	Total
Time 1						
Hassles Frequency	.34**	.45**	.43**	.47**	.54**	.51**
Hassles Intensity	.25*	.35**	.25*	.43**	.34**	.44**
Uplifts Frequency	.07	.15	.17	.19	.26*	.19
Uplifts Intensity	-.04	.06	-.12	.02	.04	-.02
Ratio (HF/UF)	.34**	.28**	.28**	.35**	.30**	.37**
Time 2						
Hassles Frequency	.36**	.42**	.45**	.48**	.45**	.51**
Hassles Intensity	-.02	.04	.17	.22*	.10	.19
Uplifts Frequency	.25*	.30**	.34**	.29**	.37**	.31**
Uplifts Intensity	-.05	-.10	.12	.01	-.05	-.01
Ratio (HF/UF)	.30**	.31**	.20	.29**	.21	.39**
Time 3						
Hassles Frequency	.45**	.56**	.50**	.51**	.57**	.59**
Hassles Intensity	.26*	.31**	.50**	.44**	.38**	.45**
Uplifts Frequency	.31**	.41**	.46**	.39**	.46**	.47**
Uplifts Intensity	-.06	-.07	.07	.00	.01	.02
Ratio (HF/UF)	.29**	.31**	.17	.28**	.19	.29**

*$p < .05$. **$p < .01$.

Relationship Between Coping and Symptoms

The correlations between the coping strategies and the HSCL dimensions for each of the three time periods are shown in Tables 53, 54, and 55 respectively. Overall, the mean level of total coping strategies utilized was positively correlated with the mean level of total symptomatology experienced. Increasingly over time this was the situation as well for the relationship between the majority of the specific coping strategies and the symptom dimensions. The only notable exceptions were the absence of a correlation between detachment behaviours and the level of somatization, and the strategy of self-isolation and the symptom dimension, somatization.

Table 53
Intercorrelations of Coping Strategies with HSCL Dimensions at Time 1

	Symptom Dimensions					
Coping Scales	Somatization	Obsessive Compulsive	Interpersonal Sensitivity	Depression	Anxiety	Total
Problem-focused	.17	.33**	.20	.33**	.29**	.33**
Wishful thinking	.34	.56**	.40**	.63**	.56**	.61**
Distancing	.16	.26*	.17	.34**	.22	.32**
Seeking support	.15	.23*	.22*	.24*	.36**	.29**
Positive	.04	.20	-.03	.15	.23	.17
Self-blame	.18	.40**	.28**	.35**	.50**	.40**
Tension-reduction	.19	.45**	.23*	.31**	.41**	.38**
Self-isolation	.15	.31**	.31**	.38**	.29**	.35**
Coping total	.30**	.57**	.38**	.55**	.57**	.57**

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

Table 54
Intercorrelations of Coping Strategies with HSCL Dimensions at Time 2

	Symptom Dimensions					
Coping Scales	Somatization	Obsessive Compulsive	Interpersonal Sensitivity	Depression	Anxiety	Total
Problem-focused	.22*	.34**	.45**	.35**	.37**	.38**
Wishful thinking	.26*	.30**	.37**	.43**	.32**	.37**
Distancing	.16	.29*	.40*	.32**	.23*	.33**
Seeking support	.31**	.25*	.32**	.21*	.33**	.29**
Positive	.26*	.35**	.28*	.18	.30**	.23*
Self-blame	.17	.22*	.34**	.28**	.26*	.26*
Tension-reduction	.22*	.26*	.15	.19	.26*	.30**
Self-isolation	.04	.13	.24*	.26*	.17	.18
Coping total	.32**	.42**	.54**	.42**	.45**	.47**

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

Table 55
Intercorrelations of Coping Strategies with HSCL Dimensions at Time 3

	Symptom Dimensions					
Coping Scales	Somatization	Obsessive Compulsive	Interpersonal Sensitivity	Depression	Anxiety	Total
Problem-focused	.25*	.46**	.34**	.28**	.30**	.41**
Wishful thinking	.38**	.55**	.60**	.60**	.50**	.61**
Distancing	.16	.31**	.20	.22*	.18	.27*
Seeking support	.33**	.38**	.35**	.36**	.34**	.44**
Positive	.38**	.37**	.24*	.26*	.28*	.38**
Self-blame	.22*	.27*	.37**	.37**	.35**	.40**
Tension-reduction	.28**	.33**	.23*	.20*	.26*	.30**
Self-isolation	.19	.23*	.35**	.31**	.26*	.33**
Coping total	.41**	.54**	.48**	.47*	.46**	.58**

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

Overall Summary of Findings

The major findings were: (1) for both hassles and uplifts, frequency scores were consistent over the three times of administration; (2) while hassles intensity scores did not change significantly over time, uplifts intensity scores decreased significantly between the first and third time of administration; (3) female adolescents reported significantly higher uplifts intensity scores than male adolescents; (4) significant positive hassles - uplifts correlations using frequency scores and intensity scores were found at each time of administration; (5) female adolescents reported significantly higher levels of total coping strategies, problem-focused coping, wishful thinking, and seeking social support than male adolescents; (6) significantly fewer coping strategies were reported over time; (7) both problem- and emotion-focused coping strategies were used by adolescents in the majority of stressful events; (8) the utilization of the coping strategies, wishful thinking, problem-focused, seeking social support and emphasizing the positive were reported more frequently than self-blame and self-isolation; tension-reducing strategies were described the least frequently; (9) whether it was appraised by adolescents that the event they had described had the potential for amelioration by direct action, as one that required more information, or as one that required acceptance, a combination of both problem- and emotion-focused strategies were reported; (10) female adolescents reported significantly higher levels of depression, obsessive-compulsive behavior and total symptomatology than males; (11) Italian-speaking adolescents reported higher levels of somatization and total

symptomatology than adolescents of other language-groups; (12) the mean level of obsessive-compulsive behavior and total symptomalogy reported by the sample decreased significantly between the first and third time of administration, while the level of depression remained about the same; (13) feelings of interpersonal sensitivity, obsessive-compulsive behavior, and depression were reported more frequently than anxiety or somatization; (14) at each of the three administration times, the mean level of total coping strategies was positively correlated with hassles frequency, hassles intensity and uplifts frequency; (15) at the second and third time of administration, uplifts intensity was positively correlated with the mean level of total coping strategies; (16) hassles and uplifts frequency was positively correlated with problem-focused coping, wishful thinking, seeking social support, and emphasizing the positive; (17) tension-reduction activities were described more frequently when hassles frequency or the ratio of hassles frequency to uplifts frequency was high; (18) uplifts intensity was positively correlated with seeking social support, whereas hassles intensity was positively correlated with problem-focused coping, wishful thinking, and tension-reduction strategies; (19) hassles frequency was positively correlated with the five symptom dimensions in addition to the total level of symptomatology at each time of administration, whereas hassles intensity was positively correlated with the HSCL dimensions only at the first and third time of administration; (20) uplifts frequency was positively correlated with the HSCL dimensions and with the total mean level of symptomatology at the second and third time of administration; (21) overall, the mean level of total coping strategies described was positively correlated with the mean level of total symptomatology experienced.

CHAPTER V

Discussion

This chapter will discuss the findings derived from the present study, highlight its methodological limitations, outline the implications for the counselling profession, and make recommendations for further research.

The purpose of this study was to describe and to analyze, within the cognitive-phenomenological theory of psychological stress, the coping strategies used by ninth-grade adolescents in dealing with specific stressful events in their daily lives. This theory views psychological stress and coping as interdependent, and stress is regarded as a complex construct consisting of many interrelated variables and processes, rather than a simple variable that can be readily measured and correlated with coping and adaptational outcomes. Because stress, coping, and adaptational outcomes were measured by different procedures, these variables will be discussed separately. The exploratory, descriptive findings within each subsection will be followed by a discussion of the inferential relationships between these variables.

Stress

The cumulative effects of hassles and uplifts, in tandem, are of particular theoretical and empirical interest in evaluating the ultimate impact of stressful events in this sample of adolescents. From an examination

of the content of the items, it was possible to isolate themes that distinguished this sample of adolescents from the groups studied previously (Kanner et al., 1981). The major themes that emerged were: (1) a concern about the future, as exemplified by "troubling thoughts about your future"; (2) a preoccupation with the psycho/physical/social self, for example, being hassled by "trouble making decisions", "feel confused over what to do", "making silly mistakes", "physical appearance", and having "too many responsibilities"; and, (3) the sheer happiness and pleasures associated with adolescence as reflected by such uplifts as "listening to music", "laughing", "having fun", "entertainment", and "socializing". Because these themes appear to be consistent with the process of identity formation and the associated cognitive, social, and physiological changes occurring during the developmental stage of adolescence, they will be discussed from this perspective.

According to Piaget's theory (Inhelder & Piaget, 1968), the development of formal operational thought allows the adolescent to think about and reflect upon his or her own thinking. The significance of the characteristics of formal operations lies in the expansion and freedom of thought permitted the adolescent compared to the child who has not yet attained this level of thought. With their increasing capacity for independent conceptualization of ideas, attitudes, and feelings, adolescents are able to envision alternatives in situations they face, and to challenge those points of view offered by parents which they had previously accepted. Marcia (1966) stated that for the development of a mature and differentiated ego identity to occur it is necessary for the adolescent to question the existing familial value systems,

goals, and beliefs. The inexperience with this process of questioning may explain the present findings that adolescents were hassled by some of their cognitive and psychological changes in thinking as exemplified by "troubling thoughts about your future", "misplacing or losing things", "making silly mistakes", "trouble making decisions", "too many responsibilities", and "feeling confused over what to do". These findings are consistent with their symptomatic reports of "feeling confused", "having to ask others what you should do", "difficulty making decisions", and "worried about sloppiness or carelessness".

It is evident that adolescents become self-centered because they are concerned with the transformations they are undergoing in their thinking, their feelings and emotions, and in their bodies. Because physical appearance is the one personal attribute which is obvious and accessible to others in almost all social interactions, and because it has been demonstrated to be of major importance in interpersonal attraction, as supported by the findings in this study, it follows that concern for physical appearance would assume special salience for the adolescent (Eme et al., 1979).

Petersen and Spiga (1982) have suggested that the emergence of the capacity for abstract thinking in relation to pubertal change may be a key factor in the nature of responses to that change. While they are uncertain of the extent to which the internal biological changes associated with puberty alone produce any behavioral effects in adolescents, these authors have no doubt that the external, visible physical changes of puberty are important by virtue of their social and psychological stimulus value and meaning. They also suggested that the way in which pubertal changes are understood and

responded to by others probably mediates the individual adolescent's response to the biological events. At a concrete level, puberty may be viewed by some adolescents simply as a change in physical appearance. However, for those adolescents who have the cognitive capacity to assume the perspective of another person, the broader biological and social meaning of pubertal change can be understood, and can facilitate their coping with this process.

Within the present study, a number of uplifts were reported by the adolescents attesting to their preoccupation with their social selves and reflect the multiple functions of peer groups. The value of experiencing satisfying interpersonal relationships was supported by such items as "receiving a compliment", "feeling loved", "visiting, phoning, or writing someone", "relating well with friends", "having someone listen to you", "making a friend", "giving a compliment", and "loving someone".

In the long-standing debate on the relative impact of sources of stress on the psychosocial development of adolescents, some researchers have called into question the centrality of peer groups in adolescence. From early childhood, friends assist in the lifelong process of self-development, similar to what Winnicott has called "transitional objects"- people who join in the journey towards maturity, who facilitate separation from the family and encourage developing individuality by providing the contact and comfort needed for the transition from child-in-the-family to person-in-the-world (Rubin, 1985). As there is a shift from parental influence on adolescents to peer influence on them, belonging to a crowd becomes a necessary means by which this transition is effected. Parents do not necessarily decline in importance to adolescents; however, peers do increase in importance (Petersen

& Spiga, 1982).

During adolescence, peer groups appear to serve multiple functions whose salience shifts with age (Brown, Eicher, & Petrie, 1986; Rubin, 1985). It has been argued that the major task of early adolescence is to affiliate with a peer group that can accept one's budding sense of identity and provide supportive social relationships to offset the adolescent's withdrawal from emotional dependence on parents. Another function of peer groups that has been identified is their role in socializing adolescents into appropriate heterosexual interests and behaviour. By contrast, the importance attached to crowd affiliation may depend less upon age than upon the type of group to which an adolescent belongs, that is, the peer group's role in determining the basis of popularity and social status. Because of the extent to which many adolescents today feel intense pressure to perform, to be popular, and to be loved, Levine (1981) has suggested the possibility of an added burden perpetrated by strong media depiction of the adolescent situation.

Given such pressures, it is not a surprising finding that almost all of the adolescents at the first two times of administration, and almost one in two at time three, reported "feeling that people are unfriendly or dislike you", and "wanting to be alone". The privacy of a "room or home (that) is pleasing to you" probably offers some refuge from the intense pressures to be accepted and popular. It may be that over the course of the school year these specific pressures diminish as adolescents become established in their peer groups. Nevertheless, 43% of the items within the symptom dimension, interpersonal sensitivity, were reported on the final administration of the questionnaire, decreasing from 52% at time one, and 48% at time two.

Loneliness due to emotional isolation appears in the absence of a close emotional attachment, whereas loneliness due to social isolation appears in the absence of an engaging social network (Marcoen & Brumagne, 1985). The family and the peer group are considered as the two most important social networks, while parents and peers are important attachment figures. "Wanting to be alone" may be an adaptive response to loneliness and related to feelings of unpopularity. Feelings of isolation are expressed by adolescents who perceive disinterest or implicit criticism on the part of their parents, and the unavailability to them of any other adults such as teachers, or counsellors (Levine, 1981).

While the family continues to have the major impact during the adolescent transition, there is evidence to show the significance of schooling upon the overall psychosocial health and growth of adolescents (Siddique & D'Arcy, 1984; Berkovitz, 1985). In school, children may learn to form satisfying and ego-enhancing relationships with nurturant adults who are not parents or otherwise related. Where there has been a disruption of a relationship with parents, schools can provide adolescents with contexts in which they can continue to mature (Berkowitz, 1985). Within the present study, an average of 68% of the adolescents rated "performing well at school", and 65% reported "liking your fellow students" as sources of satisfaction.

Attending school on a daily basis, being required to perform tasks in and out of school, and having routine social contacts provides adolescents with the necessary structure to facilitate adaptation even at a time when family life may be deteriorating. Significant positive changes can occur as a

result of the ameliorating influences provided by interested and caring school personnel, resulting in new feelings of mastery and self-esteem from success in learning, new friends made in school, and pride in the development of new skills.

It is not clear to what extent the adolescents' concerns about themselves and their future were related to the finding that an average of 65% of the adolescents in this sample reported "not getting enough sleep" as a hassle. More than 70% identified "having difficulty falling asleep, or staying asleep" as a symptom which they had experienced within the previous seven days. This is consistent with a study by Kirmil-Gray and her colleaques (1984) who reported that on the basis of their findings and previous studies which had been done that between 15 and 50% of adolescents report at least occasional difficulty falling asleep or staying asleep, with 7 to 13% of this age-group experiencing chronic and severe insomnia. Adolescent insomnia has been found to be related to anger, depression, poor school adjustment, and life stress. Altered psychobiologic states in early adolescence may also offer some explanation for the high prevalence of reported sleep disturbances. What is important to recognize, however, is that the manner in which adolescents learn to deal with sleep disturbance may set the pattern for how they deal with it in later life. Teaching adolescents ways to reduce daytime stress, and about the need for stable bedtimes and waketimes are more acceptable interventions than pharmacologic treatments for sleep disturbance. The former approach may reduce stress as well as improve sleep.

Interestingly, getting enough sleep was an uplift reported by 60% or more of these same adolescents. This finding may be explained by Lazarus' and

Folkman's (1984) suggestion that baseline conditions of the individual's life affect which of the many transactions of daily living will be viewed and endorsed as hassles or as uplifts. Hassles and uplifts are not merely a reflection of what has actually happened but depend on the baseline conditions of life and how experiences are appraised. In the context of negative life conditions and expectations, positive experiences take on more salience than they do in the context of positive conditions and expectations. It is ill-advised, therefore, to think that hassles and uplifts scales provide a simple measurement of stress or satisfaction on the basis of objective events of living. Although adolescents' endorsements of hassles and uplifts reflect their actual experience it is the personalized significance of the event that makes it salient. This significance may vary greatly from adolescent to adolescent and over periods of an individual's life.

As mentioned previously, the final significant theme that emerged was concerned with the frequency and order in which this sample of adolescents consistently identified such uplifts as "listening to music", "laughing", "having fun", "entertainment", and "socializing", giving the impression of the hedonistic doctrine that pleasure or happiness is the sole or chief good in life. More importantly, however, what it conveys is that having a good time is very much a part of the adolescent's life. This finding is of particular significance because most of the current research of the stresses associated with childhood and adolescence has focused only on negative life events. Of concern as well, because only the potentially negative aspects of adolescence are portrayed, are the writings of authors such as Postman (1982)

who posits a theory as to why childhood is "disappearing", Winn (1984) who argues that adults have encouraged children's early involvement in adult concerns rather than allow children the pleasures and security of a "true" childhood, and Elkind (1984) who states "there is considerable evidence that children are showing more and more serious stress symptoms than ever before . . producing too many young people who may never be productive and responsible citizens, much less lead happy and rewarding lives" (p. viii).

The most frequently identified uplift by this group of adolescents at each time period was listening to music. A better understanding of how adolescents, in particular, and people in general, respond to music provides some explanation for this significant finding.

People respond to music with a complex mix of psychological and physiological reactions triggered by numerous aspects of the music itself. In his review of the literature for the content and influences of popular music, White (1985) found that although the lyrics had changed radically over the years, lyrics alone make little difference to the listeners, who are gratified primarily by the beat, the rhythm, and the sound of the music which together serve as diversions from the stresses of daily living and relieve tension.

Nevertheless the lyrics of music have changed to reflect contemporary society's concerns and issues. The dominant theme in music through the 1950s was love. However, during the 1960s and 1970s, youth music began to reflect themes which expressed protest, social criticism, anti-war expressions, alienation and loneliness, drugs, and racial mistreatment. Women's roles and women became depicted more positively, and as having more egalitarian

relationships with men.

> In its total manifestation - the lyrics, the music, the volume, the artifacts, the audience, the set and setting - the new music frames as well as facilitates an unprecedented questioning of basic cultural values and institutions.
>
> (Harmon, cited in White, 1985, p. 66)

The tendency to have vivid associations with specific pieces of music, and to free-associate while listening to it, adds another, special emotional dimension to musical experiences. Research conducted by Goldstein (cited in Rosenfeld, 1985) has suggested that natural brain opiates, (endorphins), which are thought to be involved in many kinds of "highs", may be responsible for those special feelings of individuals when they experience sudden changes in emotion during their intense enjoyment of music. The thrill sensation which clearly involves the autonomic nervous system, may arise from the brain area that is linked to the limbic system, a subcortical area heavily involved in people's emotional reactions.

For young people who are in the process of forming self-identities and questioning authority, the choice of a particular popular music substream is likely influenced by their values and perceptions about themselves and may be an indication of their inner emotional state. Rock-and-roll has acquired symbolic meanings, interpretations, and identifications that adults seemingly miss or discover well after the fact. By subscribing to popular music, the adolescent claims an identity with other listeners and with performers and writers who share similar views about who they are or might be and what the world is or might be (White, 1985).

In summary, the nature of the stresses identified most frequently by this sample of adolescents support previous findings with a comparable population, namely, that concerns are primarily frequent, chronic, minor events associated with activities of daily living. Of particular interest in this study were the significant, positive correlations found between hassles and uplifts frequency and intensity scores. Such a relationship may reflect either a common response style or a tendency for adolescents of this age who report many hassles to report many uplifts also. Those adolescents who experienced their hassles with high intensity, also experienced their uplifts with a similar intensity. One possible explanation for this particular pattern of relationship between hassles and uplifts is that adolescents who seek many meaningful experiences or have strong and varied commitments (e.g. to school, achievement, social relationships) may encounter numerous relatively minor pleasures and frustrations while actively engaged in their pursuits, and thus experience a high incidence and intensity of both hassles and uplifts. Such a relationship was proposed by Kanner and his colleagues (1981) and lends support to Lazarus' model of stress, that is, the adaptational significance of the relatively minor difficulties and pleasures that characterize everyday life. Measuring only hassles could produce a distorted conception of the postulated relationship between stress and illness.

While the mean level of hassles scores (frequency, total, and intensity) and uplifts frequency scores did not change significantly over the three administration times, the mean level of uplifts total and intensity scores decreased from time one to time three. The relatively constant hassles

and uplifts frequency scores suggest that adolescents are experiencing approximately the same number of hassles and uplifts from one time period to the next, and they appear to be the same ones. The greater fluctuations in the uplifts total and intensity scores indicate that the amount of pleasure associated with uplifts varies more than the number of events experienced. Other possible explanations are methodological in nature. For example, assuming the decrease had little to do with the actual experience of pleasures or problems, the adolescents may have responded more globally at time one and became more selective over time in acknowledging their experiences, or they may have become bored with the task and concomitantly, inattentive.

Coping

It is apparent within the present study that conceptualizing coping solely in terms of defensive processes (emotion-focused function of coping) or problem-solving processes is inadequate. Although the total group reported using significantly fewer total coping strategies over time (possibly for the methodological explanations hypothesized previously) more than 60% of the strategies reported at each time period reflected both problem-focused and emotion-focused items. Folkman and Lazarus (1980) determined previously that whether problem-focused coping or emotion-focused coping were used were differentially influenced by the person(s) involved in the event, its context, how the event was appraised, and by the gender of the participant. In the present study, males and females appeared to differ very

little in the way events were appraised. It was appraised by the majority of adolescents that the event which they had described had the potential for amelioration by direct action, including the seeking of information, whereas it was appraised by approximately 35% of the adolescents that their event held few possibilities for beneficial change and therefore required acceptance or the inhibition of action. Even when it was appraised by some adolescents that there was little to be done for their event, many of them used a combination of problem-focused and emotion-focused strategies to cope with their stressful event. Overall, female adolescents reported higher levels of total coping strategies than male adolescents; specifically, females reported higher mean scores than males for problem-focused coping, wishful thinking, and seeking social support. Whether differences in coping were a function of gender per se, or of the context of the stressful event needs to be determined in future studies.

These findings do not conclusively support the appraisal theory proposed by Lazarus that different modes of coping will be used depending on how the situation was appraised. Though the context of the events is unknown, it appears that the adolescents in this sample consistently employed the same kinds of varied strategies over time. Such a finding would appear to suggest that these adolescents have not yet become as situation-specific as they might in determining which modes of coping to employ. Once again, consistent with their developmental level, the strategies employed most frequently by the adolescents in this sample were wishful thinking ("hope a miracle will happen"), problem-focused ("I'm making a plan of action and following it"), ~~seeking~~ social support ("talk to someone about how I am feeling"), and

emphasizing the positive ("try to look on the bright side of things"). While uplifts of "staying or getting in good physical shape", and "feeling healthy" were reported by more than 60% of the adolescents, tension-reduction strategies ("I jog or exercise") were reported the least frequently of all coping functions. It would appear that with their limited experience, adolescents may not be as knowledgeable as adults of direct approaches, such as jogging or exercise, to managing stressful situations.

It is of interest to note that hassles frequency, and uplifts frequency were positively correlated with problem-focused coping, wishful thinking, seeking social support, and emphasizing the positive. Similarly, tension-reduction activities were positively correlated with hassles frequency, and the ratio of hassles frequency to uplifts frequency was positively correlated with tension-reduction activities. Uplifts intensity was positively correlated with seeking social support, whereas hassles intensity was positively correlated with problem-focused coping, wishful thinking, and tension-reduction strategies. Within the present study, it is not possible to determine whether the increased frequency or intensity of hassles or uplifts experienced led to the greater use of these particular coping strategies, or vice versa. Furthermore, because adolescents were not asked about the stressful events which they had resolved or were successful in overcoming, a large domain of coping responses were not addressed. It is also possible that constellations of coping strategies may be as or even more effective than individual coping strategies. While patterns of stress response behaviors which are conducive to adaptive outcomes have been described for adults (Pearlin & Schooler, 1978), it is not known whether the

same behavior patterns by adolescents would yield similar results. This is another area requiring further investigation.

Adaptational Outcomes (HSCL)

The study of coping in everyday life situations would not be complete without some measurement of the efficacy of coping efforts, which may vary with the kind of person and the context of the situation. In the present study two aspects of effectiveness were measured: (1) the measurement of stressors over time (hassles and uplifts), and (2) the adolescents' subjective distress level (HSCL) when faced with these stressors.

The symptom dimensions reported most frequently by the total group on the HSCL over time (in descending order) were the interpersonal sensitivity dimension, the obsessive-compulsive dimension, the depression dimension, the anxiety dimension, and the somatization dimension. Female adolescents reported significantly higher levels of total symptomatology, depression, and obsessive-compulsive behaviors than the males. Specific examples of the 10 most frequent symptoms (reported by gender and averaged over the three administrations) include more females than males, "blamed (themselves) for things", and experienced "trouble concentrating", and "difficulty making decisions". Although the percentage of items reported within the symptom dimensions decreased over time, the order of the frequency with which the symptom dimensions were reported remained the same. This is consistent with the pattern of coping strategies used.

Overall, the gender differences revealed by this study are noteworthy.

It may be recalled that females reported higher uplifts intensity scores, more total coping strategies and higher levels of total symptomatology than males. Interestingly, the reviews of the literature relating to gender differences have shown that over the age of five, females typically admit to more anxiety than do males (Eme et al., 1979).

Existing research findings indicate that female adolescents tend to be highly dependent on their families and, to a lesser degree, on their peers for emotional support and expression of their personal problems (Rubin, 1985; Siddique & D'Arcy, 1985). The characteristic dependency of females not only exercises a negative impact on their self-esteem and identity but also heightens their sensitivity to family and peer group-related stress. Due to their differential structural positions adolescent males and females are likely to experience their family differently. It has been argued that females are placed in a relatively disadvantageous position in contemporary society. These differences have tended to perpetuate certain socialization philosophies and cultural contradictions regarding sex roles which, in turn, are partly responsible for the greater stress and symptomatology of females. Although boys and girls are equally encouraged for both conventional and competitive roles during childhood, during adolescence there tends to be a marked pressure for girls to adapt to traditional feminine roles inducing role conflict and anxiety (Siddique & D'Arcy, 1985).

Italian-speaking adolescents reported higher levels of somatization and total symptomatology than other adolescent language-groups under study. While these differences may be explained by social and learning experiences which encourage Italian-speaking adolescents to be more expressive of their

feelings than other language-groups, these group differences may also be a function of the school environment, as the majority of the Italian-speaking adolescents attended the same High School. Further investigation of mother tongue differences appears to be justified on the basis of these preliminary findings.

The pattern of findings within the present study appear to rule out certain artifactual explanations, such as the operation of "response sets" or of activity levels. It may be argued, for example, that the positive correlations found among hassles frequency and symptoms, hassles intensity and symptoms, and uplifts frequency and symptoms reflect a tendency for adolescents who checked many items on one scale do so on another. However, that such a response set did not appear in the case of uplifts intensity and symptomatology at any of the time periods weakens it as an explanation.

Although the mean level of total coping strategies and total symptomatology decreased over time, the mean level of total coping strategies reported was positively correlated with the mean level of total symptomatology experienced. Interestingly, over time, the majority of the coping strategies were positively correlated with the symptom dimensions. Again, it was not possible to determine whether more coping strategies were used in response to higher levels of symptoms, or whether increased use of coping strategies resulted in more symptoms being experienced. The finding that the Hassles and Uplifts Scales correlated with adaptational outcomes clearly supports the usefulness of using these scales with adolescents of this age.

The inevitable circularity associated with relational definitions of

stress may be limited by asking what it is about the adolescent in interaction with a given environmental situation that generates specific appraisals. Appraisal shapes the coping process which in turn affects the immediate outcome of the stressful event and likely also the long-term adaptational outcomes of multiple encounters. The discovery of the antecedents of appraisal would be of greater research value than simply comparing people in terms of the amount of stress they experienced. With such a multivalent system, no single variable can stand for stress.

Methodological Limitations

In commenting on the gender differences found in this study, it is important to make the more general point that the sample employed in this research cannot be considered fully representative of the population of Canada as a whole. Nevertheless, according to the 1981 Census, more than 3 in 10 Canadians have ethnic origins that are neither British (40.2%) nor French (26.7%). Moreover, the ethnic diversity of Canadians varies significantly by region, and within cities. The percentage distribution of population by major ethnic groups within the present study is consistent with a Canadian sample. A high divorce rate is a phenomenon that is typical of most highly industrialized countries, with the exception of Italy, with its traditional Catholic orientation. For the present study, the comparative divorce rates for selected countries from which the parents of the adolescents interviewed originated may be of particular interest in explaining why 81% of the sample were living with both their biological

mother and father. The divorces per 1,000 marriages were: for Canada in 1979, 316.7; for Italy in 1978, 30.9; for the United States in 1979, 505.9 (Eichler, 1983, p. 47). Furthermore, the sample is predominantly middle- and upper-class, and there tend to be fewer divorces in families with higher incomes (Eichler, 1983, p. 46).

Finally, while the adolescents' relationship with their interviewer may have facilitated their high level of compliance, this relationship may also have influenced their responses to the measures. The convenience of selecting the four schools and relative size of the sample are additional factors which limit the ability to generalize. Individual factors such as fatigue, as well as the nature of the school environments might have also influenced the findings of the study. The timing of the study may have influenced the results: Between the four schools, the lack of synchrony in testing, the different examination and holiday schedules, and the varying levels of cooperation by the adolescents are all factors which must be taken into consideration. These environmental differences should have been minimized however, because the study was undertaken longitudinally between the months of December 1984 and April 1985.

A number of methodological problems inherent in the style of assessment advocated by Lazarus and Folkman (1984) have been addressed previously in Chapter II. In the present study, the longitudinal design enabled the investigator to study the same adolescents across situations and over time, thus identifying patterns of coping strategies used and assessing their cross-situational stability. While the adolescents were able to describe many strategies that they had utilized to deal with the specific stressful

events, several disadvantages of this method need to be highlighted. It may be difficult to isolate one specific stressful event and the practice of presenting the adolescents with a prepared checklist of coping strategies may have provided "cues" which influenced their responses. Free-response items are important since they may elicit different sources of information about coping strategies. Moreover, the repeated measures of stressful events and coping efforts may have created a problem of dependency in the data which may have led to inflation of relationships (Folkman & Lazarus, 1980).

Implications

This study was designed to examine the nature of the relationship between adolescent stresses and normal adolescent adjustment (coping and adaptation). The findings have contributed toward an increased understanding and awareness of the coping strategies used by 9th-grade adolescents in specific stressful events in their daily lives, and illuminated problem areas that are clearly linked to behaviors.

Most importantly, however, the findings of the present study are a basis and justification for school counsellors, teachers, and administrators to establish or increase student counselling services. Minimally, counselling options need to be available within the school or on a consultancy basis to help adolescents manage stress. To positively influence the behavior of the adolescent, the school professional must understand the adolescent's perspective. Knowledge of the activities of daily living which adolescents experience as stressful and pleasureable, their coping responses, and

outcomes (symptoms) may guide the professional in assisting the adolescent to manage stress more effectively. This knowledge can be shared with parents to heighten their awareness of the adolescent's experience of daily living. Adolescents need to be listened to, taken seriously, and feel that they are playing an important, contributing role in the lives of others in order to find meaning, significance, and/or status in life. Listening to music is a particularly important diversion from the stresses of daily living for adolescents and knowing their musical listening preferences can provide an avenue of communication and facilitate a mutual understanding of the adolescent's current emotional state.

The high level of adolescent compliance in responding to the semi-structured interviews and questionnaires may be seen as an attestation of adolescents' interest in the health consequences of stress. The majority of adolescent respondents viewed stress as a topic of concern. It is important to accept that adolescents of this age are under stress because the emotional and physiological stage of development they are experiencing results in their undergoing many rapid changes as they become increasingly aware of the potential responsibilities of adulthood.

Over the course of one year, 5 to 15% of adolescents suffer from disorders of sufficient severity to handicap them in their everyday life (Rutter, 1982, pp. 16-17). From these prevalence figures it is evident that non-medical professionals, such as teachers, counsellors, and psychologists must be prepared to deal with some kinds of "psychiatric" disorders. Improvement in the sensitivity and expertise of school professionals in identifying and treating such problems is advised. It is obvious that some

adolescents need and want professional health care for their problems, and it is the task of the educator to help the adolescent reach for, and obtain this care.

Qualitatively the majority of these disorders do not constitute illnesses which are different from normality; however, qualitatively, most of these conditions differ from the normal in terms of both severity and of associated impairment (Rutter, 1982). Furthermore, because it is very common for these disorders to be partially, or even entirely, specific to particular situations, the "problem" needs to be addressed from the perspective of the interaction between the adolescent and his or her environment, even though factors within the adolescent may also be relevant (Rutter, 1982).

Teachers can benefit from discussions with professionals who are skilled in the treatment of adolescents with emotional and behavioral difficulties. Such discussions may facilitate a better understanding of the sociological and psychological factors operating in the school environment or in the adolescent's behavior, or provide teachers with knowledge of specific techniques for dealing with various types of behaviors. By having the opportunity to discuss the problems they are encountering, teachers may feel less isolated and develop increased confidence in their approaches to difficult emotional and behavioral problems.

Educators today are concerned with more than the knowledge and attitudes of their students. They are expected to design curricula and lesson plans not only with the traditional attention to cognitive, affective, and psychomotor domains of learning, but also with methods and materials that take into account the contingencies of behavior and that provide for rewards

that will reinforce the desired behavior. The latter are understood to be especially important in health education where the behaviors of increasing concern are so heavily embedded in lifestyle and social learning (Green & Iverson, 1982).

Reid and Massey (1986) have recently reviewed the evidence for the effects of health education on health-related behaviors. Assuming that schools should influence health-related behaviors, they defined the goals of school health education as "the need for personal growth and skill enhancement leading to the development of responsible, autonomous, and assertive young people, capable of making rational and well-informed decisions about their health" (p. 7). Recognizing that educationists may not be primarily concerned with the effects of health-education on health-related behavior, Reid and Massey (1986) defined health education . . . "(as seeking) to equip individuals with knowledge, skills, values, and attitudes which will help them cope successfully with their present and future lives." (p. 7).

In seeking to identify a number of ways to improve the effectiveness of school health education in relation to health behavior, Reid and Massey (1986) highlighted seven essential key factors: (1) provision of adequate teacher in-service education; (2) maximum parental support and involvement in school health education; (3) securing peer support involving elements of small group work as opposed to purely didactic or non-didactic methods focused on individuals; (4) identification of appropriate timing of interventions, for example in the 11-year to 14-year age group, in view of the importance of "anticipatory strategies" for health-related behaviors; (5) close cooperation between the educational and community health services; (6)

development of school policies concerning health-related behavior by teaching and non-teaching staff on school premises, and (7) the need to provide health programs for teachers, in view of the important influence of teachers' own health behavior on their teaching.

It is the belief of the investigator that all students need to be educated in a systematic way about coping with stress. Adolescents' stress levels, coping responses and symptom ratings can be used in assessing adolescent service needs. Responses from the self-administered questionnaires employed in this study can be used to plan and monitor health services for adolescents. The questionnaires can be administered in the schools and the results used to develop the content of their health education curriculum. The instruments could also be used as screening devices to identify adolescents who are at risk and thus are candidates for counselling interventions.

Adolescents need to be taught that various coping mechanisms for life stress are available, for example, exercising, meditation, "talking it out" with a friend, counselling, among others. Counsellors may be required to work on stress reduction techniques, life-skills training, or relationship counselling depending on the concerns uncovered from the responses to the questionnaires. Better utilization of human resources could be made if, for example, the need for specific types of counselling changed over time. Modalities might also shift from individual to small group, or larger group counselling, depending on the nature of the stress issues.

The school nurse is also well placed to offer information relative

to diet, smoking, and so on, and to promote health education. Referrals from schools to appropriate services could target those adolescents who rate their own health as poor or fair and/or who express a desire for help. Traditional medical services must be combined with counselling, education, social support, and advocacy efforts. Schools must be aware of the options available for adolescents within the community so that effective coordination may occur.

While school health education may be ideally suited to offer some reinforcement for healthy behavior, the most important sources of reinforcement, the family, mass media, and peer influences, are beyond the direct control of the school. Although schools can attempt to prepare children and adolescents to recognize and to resist mass media and peer pressures to adopt unhealthy practices, there needs to be increased support in the community to educate parents and to work through the mass media and peer groups of children and adolescents to model and reinforce positive health decisions and practices.

Recommendations for Further Research

This study has shown that variations in responses by gender are important and that this variable as well as others, such as, age, socioeconomic levels, and geographic area should be used by planners in designing services for adolescents. There are profound differences between the lifestyles and needs of adolescents. Individual and group differences in the content of hassles and uplifts need to be systematically assessed

together with other demographic factors, such as mother tongue, to determine the sources of stress and satisfactions that adolescents of all ages and backgrounds experience. More studies are needed to specify the characteristic profiles of other subpopulations incorporating the same measures used in this study.

The influence of situational factors on adolescent coping warrants further investigation. The context of the stressful event, that is, whether it was school-related, family-related, health-related, or other, needs to be specified in order to determine whether context differentially influences problem- and emotion-focused coping. Furthermore, because Lazarus ascribes great importance to appraisal and considers it the critical determinant of the coping process in the cognitive-phenomenological theory of psychological stress, how the event was appraised needs to be examined more critically in light of the coping strategies utilized.

If, as Lazarus and his colleagues believe, coping effectiveness can only be measured by the outcome in morale, social functioning and somatic health, it may be premature to attempt to assess these outcomes until there is a workable approach to the measurement of coping. A better understanding of the consistency of the coping process across stressors and some of the determinants of coping is required. Nevertheless, this study has demonstrated that adolescents are experiencing high levels of symptomatology which need to be better understood in light of the stresses they are also experiencing.

This study has identified issues which need to be addressed relating to the measurement, functions, and evaluation of adolescent coping responses to the activities of daily living. It is only through the dissemination of

these findings and continuing research of such issues that a body of knowledge will be developed to facilitate adolescent's coping with stressful events in order that they may achieve an optimum level of wellness, and ultimately, self-actualization.

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Appendix A

The Ways of Coping Checklist

Below is a list of ways people cope with a wide variety of stressful events. Please indicate by circling the appropriate number the strategies you are using in dealing with (SPECIFIC STRESSFUL EVENT).

		Does not apply and/or not used	Used somewhat	Used quite a bit	Used a great deal
WCCL					
1.	Just concentrate on what I have to do next -- the next step.	0	1	2	3
2.	I try to analyze the problem in order to understand it better.	0	1	2	3
3.	Turn to work or substitute activity to take my mind off things.	0	1	2	3
4.	I feel that time will make a difference - the only thing to do is wait.	0	1	2	3
5.	Bargain or compromise to get something positive from the situation.	0	1	2	3
6.	I'm doing something which I don't think will work, but at least I'm doing something.	0	1	2	3
7.	Try to get the person responsible to change his or her mind.	0	1	2	3
8.	Talk to someone to find out more about the situation.	0	1	2	3
9.	Criticize or lecture myself.	0	1	2	3
10.	Try not to burn my bridges but leave things open somewhat.	0	1	2	3
11.	Hope a miracle will happen.	0	1	2	3
12.	Go along with fate; sometimes I just have bad luck.	0	1	2	3
13.	Go on as if nothing is happening.	0	1	2	3

WCCL		Does not apply and/or not used	Used some-what	Used quite a bit	Used a great deal
14.	I try to keep my feelings to myself.	0	1	2	3
15.	Look for the silver lining, so to speak; try to look on the bright side of things.	0	1	2	3
16.	Sleep more than usual.	0	1	2	3
17.	I express my anger to the person(s) who caused the problem.	0	1	2	3
18.	Accept sympathy and understanding from someone.	0	1	2	3
19.	I tell myself things that help me feel better.	0	1	2	3
20.	I am inspired to do something creative.	0	1	2	3
21.	Try to forget the whole thing.	0	1	2	3
22.	I'm getting professional help.	0	1	2	3
23.	I'm changing or growing as a person in a good way.	0	1	2	3
24.	I'm waiting to see what will happen before doing anything.	0	1	2	3
25.	Apologize or do something to make up.	0	1	2	3
26.	I'm making a plan of action and following it.	0	1	2	3
27.	I accept the next best thing to what I want.	0	1	2	3
28.	I let my feelings out somehow.	0	1	2	3
29.	Realize I brought the problem on myself.	0	1	2	3
30.	I'll come out of the experience better than when I went in.	0	1	2	3
31.	Talk to someone who can do something concrete about the problem.	0	1	2	3

WCCL		Does not apply and/or not used	Used some-what	Used quite a bit	Used a great deal
32.	Get away from it for a while; try to rest or take a vacation.	0	1	2	3
33.	Try to make myself feel better by eating, drinking, smoking, using drugs or medication, etc.	0	1	2	3
34.	Take a big chance or do something risky.	0	1	2	3
35.	I try not to act too hastily or follow my first hunch.	0	1	2	3
36.	Find new faith.	0	1	2	3
37.	Maintain my pride and keep a stiff upper lip.	0	1	2	3
38.	Rediscover what is important in life.	0	1	2	3
39.	Change something so things will turn out all right.	0	1	2	3
40.	Avoid being with people in general.	0	1	2	3
41.	Don't let it get to me; refuse to think too much about it.	0	1	2	3
42.	Ask a relative or friend I respect for advice.	0	1	2	3
43.	Keep others from knowing how bad things are.	0	1	2	3
44.	Make light of the situation; refuse to get too serious about it.	0	1	2	3
45.	Talk to someone about how I am feeling.	0	1	2	3
46.	Stand my ground and fight for what I want.	0	1	2	3
47.	Take it out on other people.	0	1	2	3
48.	Draw on my past experiences; I was in a similar situation before.	0	1	2	3
49.	I know what has to be done, so I am doubling my efforts to make things work.	0	1	2	3

WCCL		Does not apply and/or not used	Used somewhat	Used quite a bit	Used a great deal
50.	Refuse to believe it will happen.	0	1	2	3
51.	Make a promise to myself that things will be different next time.	0	1	2	3
52.	Come up with a couple of different solutions to the problem.	0	1	2	3
53.	Accept it, since nothing can be done	0	1	2	3
54.	I try to keep my feelings from interfering with other things too much.	0	1	2	3
55.	Wish that I can change what is happening or how I feel.	0	1	2	3
56.	Change something about myself.	0	1	2	3
57.	I daydream or imagine a better time or place than the one I am in.	0	1	2	3
58.	Wish that the situation would go away or somehow be over.	0	1	2	3
59.	Have fantasies or wishes about how things might turn out.	0	1	2	3
60.	I pray.	0	1	2	3
61.	I prepare myself for the worst.	0	1	2	3
62.	I go over in my mind what I will say or do.	0	1	2	3
63.	I think about how a person I admire would handle this situation and use that as a model.	0	1	2	3
64.	I try to see things from the other person's point of view.	0	1	2	3
65.	I remind myself how much worse things could be.	0	1	2	3
66.	I jog or exercise.	0	1	2	3
67.	I try something entirely different from any of the above. (Please describe.)	0	1	2	3

_____

_____

Ways of Coping (Revised)

APPRAISAL QUESTION

PLEASE CIRCLE THE NUMBER OF WHICH ONE OF THE FOLLOWING FOUR STATEMENTS BEST DESCRIBES THE SITUATION FOR WHICH YOU HAVE JUST COMPLETED THE CHECKLIST?

IN GENERAL, IS THIS SITUATION ONE:

(1) that you could change or do something about?

(2) that must be accepted or gotten used to?

(3) that you needed to know more about before you could act? OR

(4) one in which you had to hold yourself back from doing what you wanted to do?

Appendix B

Scales From The Ways Of Coping Checklist

Empirically Constructed Scales--

Scale - Problem-focused Coping (alpha = .88)	Factor Loading
62. I go over in my mind what I will say or do.	.72
46. Stand my ground and fight for what I want.	.70
49. I know what has to be done, so I am doubling my efforts to make things work.	.67
52. Come up with a couple of different solutions to the problem.	.67
35. I try not to act too hastily or follow my first hunch.	.66
26. I'm making a plan of action and following it.	.64
64. I try to see things from the other person's point of view.	.61
54. I try to keep my feelings from interfering with other things too much.	.60
39. Change something so things will turn out all right.	.59
2. I try to analyze the problem in order to understand it better.	.54
48. Draw on my past experiences; I was in a similar situation before.	.52

Scale 2 - Wishful Thinking (alpha = .86)	
55. Wish that I can change what is happening or how I feel.	.78
58. Wish that the situation would go away or somehow be over with.	.70
57. I daydream or imagine a better time or place than the one I am in.	.67
59. Have fantasies or wishes about how things might turn out.	.65
11. Hope a miracle will happen.	.61

Scale 3 - Detachment (alpha = .74)	
21. Try to forget the whole thing.	.61
13. Go on as if nothing is happening.	.58
24. I'm waiting to see what will happen before doing anything.	.54
12. Go along with fate; sometimes I just have bad luck.	.52
4. I feel that time will make a difference - the only thing to do is to wait.	.51
53. Accept it, since nothing can be done.	.51

Scales From The Ways Of Coping Checklist

Empirically Constructed Scales

Scale 4 - Seeking Social Support (alpha = .82)	Factor Loading
45. Talk to someone about how I am feeling.	.71
18. Accept sympathy and understanding from someone.	.67
28. I let my feelings out somehow.	.62
31. Talk to someone who can do something concrete about the problem.	.58
8. Talk to someone to find out more about the situation.	.54
42. Ask a relative or friend I respect for advice.	.53
60. I pray.	.49

Scale 5 - Focusing on the Positive (alpha = .70)	
23. I'm changing or growing as a person in a good way.	.72
38. Rediscover what is important in life.	.59
20. I am inspired to do something creative.	.48
15. Look for the silver lining, so to speak; try to look on the bright side of things.	.47

Rationally Created Scales

Scale 6 - Self-blame (alpha = .76)

9. Criticize or lecture myself.
29. Realize I brought the problem on myself.
51. Make a promise to myself that things will be different next time.

Scale 7 - Tension-reduction (alpha = .59)

32. Get away from it for a while; try to rest or take a vacation.
33. Try to make myself feel better by eating, drinking, smoking, using drugs or medications, etc.
66. I jog.

Scale 8 - Keep to Self (alpha = .65)

14. I try to keep my feelings to myself.
40. Avoid being with people in general.
43. Keep others from knowing how bad things are.

Appendix C

Reliabilities and Intercorrelations of Coping Scales

	Alpha	1	2	3	4	5	6	7	8
1. Problem-focused coping	.85		.41	.20	.64	.58	.46	.38	.31
2. Wishful thinking	.84			.51	.42	.29	.63	.50	.54
3. Distancing	.71				.24	.13	.34	.34	.41
4. Seeking social support	.81					.54	.39	.42	.18
5. Emphasizing the positive	.65						.42	.36	.23
6. Self-blame	.75							.31	.53
7. Tension-reduction	.56								.37
8. Self-isolation	.65								

Appendix D

The Hassles Scale (Revised)

Directions: Hassles are irritants that can range from minor annoyances to fairly major pressures, problems, or difficulties. They can occur few or many times.

Listed on the following pages are a number of ways in which a person can feel hassled. First, circle the hassles that have happened to you in the past month. Then look at the numbers on the right of the items you circled. Indicate by circling a 1, 2, or 3 how SEVERE each of the circled hassles has been for you in the past month. If a hassle did not occur in the last month do NOT circle it.

SEVERITY: 1 Somewhat severe
2 Moderately severe
3 Extremely severe

HASSLES

(1) Misplacing or losing things.....1.....2.....3

(2) Troublesome neighbours.....1.....2.....3

(3) Family obligations.....1.....2.....3

(4) Inconsiderate smokers.....1.....2.....3

(5) Troubling thoughts about your future.1.....2.....3

(6) Thoughts about death.....1.....2.....3

(7) Health of a family member.....1.....2.....3

(8) Not enough money for clothing.....1.....2.....3

(9) Concerns about owing money.....1.....2.....3

(10) Someone owes you money.....1.....2.....3

(11) Cutting down on electricity,water... 1.....2.....3

(12) Smoking too much.....1.....2.....3

(13) Use of alcohol.....1.....2.....3

(14) Personal use of drugs.....1.....2.....3

(15) Too many responsibilities.....1.....2.....3

HASSLES

SEVERITY: 1 Somewhat severe
2 Moderately severe
3 Extremely severe

(16) Non-family members living in your house.....1.....2.....3

(17) Care for pet.....1.....2.....3

(18) Concerned about the meaning of life.....1.....2.....3

(19) Trouble relaxing.....1.....2.....3

(20) Trouble making decisions.....1.....2.....3

(21) Problems getting along with school mates....1.....2.....3

(22) Problems getting along with teachers.....1.....2.....3

(23) Don't like school.....1.....2.....3

(24) Too many interruptions.....1.....2.....3

(25) Household chores (indoors).....1.....2.....3

(26) Concerns about parental job security.....1.....2.....3

(27) Not enough money for food.....1.....2.....3

(28) Not enough money for basic necessities.....1.....2.....3

(29) Too much time on your hands.....1.....2.....3

(30) Having to wait.....1.....2.....3

(31) Concerns about accidents.....1.....2.....3

(32) Being lonely.....1.....2.....3

(33) Fear of confrontation.....1.....2.....3

(34) Making silly mistakes.....1.....2.....3

(35) Inability to express yourself.....1.....2.....3

(36) Physical illness.....1.....2.....3

(37) Concerns about your health in general.....1.....2.....3

(38) Physical appearance.....1.....2.....3

(39) Fear of rejection.....1.....2.....3

(40) Concerns about sex.....1.....2.....3

HASSLES

SEVERITY: 1 Somewhat severe
2 Moderately severe
3 Extremely severe

(41) Not seeing enough people.....1.....2.....3

(42) Friends or relatives too far away.....1.....2.....3

(43) Wasting time.....1.....2.....3

(44) Being exploited or feeling used.....1.....2.....3

(45) Concerns about bodily functions.....1.....2.....3

(46) Not getting enough rest.....1.....2.....3

(47) Not getting enough sleep.....1.....2.....3

(48) Problems with your parent(s).....1.....2.....3

(49) Problems with your brothers/sisters.....1.....2.....3

(50) Problems with your boyfriend/girlfriend.....1.....2.....3

(51) Difficulties with your friends.....1.....2.....3

(52) Difficulties seeing or hearing.....1.....2.....3

(53) Overloaded with family responsibilities.....1.....2.....3

(54) Too many things to do.....1.....2.....3

(55) Unchallenging work at school.....1.....2.....3

(56) Concerns about meeting high standards.....1.....2.....3

(57) Trouble reading, writing, or spelling.....1.....2.....3

(58) Problems with parents' separation/divorce...1.....2.....3

(59) Trouble with arithmetic skills.....1.....2.....3

(60) Gossip.....1.....2.....3

(61) Problems with the law.....1.....2.....3

(62) Concerns about weight.....1.....2.....3

(63) Not enough time to do the things you need to do.....1.....2.....3

(64) Television.....1.....2.....3

HASSLES

SEVERITY: 1 Somewhat severe
2 Moderately severe
3 Extremely severe

(65) Not enough personal energy.....1.....2.....3
(66) Problems due to being a man or a woman.....1.....2.....3
(67) Feel confused over what to do.....1.....2.....3
(68) Regrets over past decisions.....1.....2.....3
(69) Menstrual(period) problems.....1.....2.....3
(70) The weather.....1.....2.....3
(71) Nightmares.....1.....2.....3
(72) Concerns about getting ahead.....1.....2.....3
(73) Not enough time for family.....1.....2.....3
(74) Transportation problems.....1.....2.....3
(75) Not enough money for entertainment and recreation.....1.....2.....3
(76) Prejudice and discrimination from others....1.....2.....3
(77) Not enough time for entertainment and recreation.....1.....2.....3
(78) Yardwork.....1.....2.....3
(79) Concerns about news events.....1.....2.....3
(80) Noise.....1.....2.....3
(81) Crime.....1.....2.....3
(82) Traffic.....1.....2.....3
(83) Pollution.....1.....2.....3
(84) Lack of privacy at home.....1.....2.....3
(85) School performance (exams,grades).....1.....2.....3

HAVE WE MISSED ANY OF YOUR HASSLES? IF SO, WRITE THEM IN BELOW:

(86) 1.....2.....3
(87) 1.....2.....3

HAS THERE BEEN A CHANGE IN YOUR LIFE THAT AFFECTED HOW YOU ANSWERED THIS SCALE? WHAT WAS IT?

Appendix E

The Uplifts Scale (Revised)

Directions: Uplifts are events that make you feel good. They can be sources of peace, satisfaction, or joy. Some occur often, others are relatively rare.

On the following pages, circle the events that made you feel good in the past month. Then look at the numbers on the right of the items you circled. Indicate by circling a 1, 2, or 3 how OFTEN each of the circled uplifts has occurred in the last month. If an uplift did not occur in the last month, do NOT circle it.

HOW OFTEN: 1 Somewhat often
2 Moderately often
3 Extremely often

UPLIFTS

(1) Getting enough sleep.....1.....2.....3

(2) Practicing your hobby.....1.....2.....3

(3) Being lucky.....1.....2.....3

(4) Saving money.....1.....2.....3

(5) Earning money.....1.....2.....3

(6) Nature.....1.....2.....3

(7) Liking your fellow students.....1.....2.....3

(8) Being on vacation from school.....1.....2.....3

(9) Gossiping: "shooting the bull".....1.....2.....3

(10) Being rested.....1.....2.....3

(11) Feeling healthy.....1.....2.....3

(12) Finding something presumed lost.....1.....2.....3

(13) Recovering from illness.....1.....2.....3

(14) Staying or getting in good physical shape....1.....2.....3

(15) Spending time with parents.....1.....2.....3

UPLIFTS

HOW OFTEN: 1 Somewhat often
2 Moderately often
3 Extremely often

(16) Getting away with something.....1.....2.....3

(17) Visiting, phoning, or writing someone.....1.....2.....3

(18) Relating well with your girlfriend/boyfriend...1.....2.....3

(19) Completing a task.....1.....2.....3

(20) Giving a compliment.....1.....2.....3

(21) Receiving a compliment.....1.....2.....3

(22) Meeting family responsibilities.....1.....2.....3

(23) Relating well with friends.....1.....2.....3

(24) Being efficient.....1.....2.....3

(25) Meeting your responsibilities.....1.....2.....3

(26) Quitting or cutting down on alcohol.....1.....2.....3

(27) Quitting or cutting down on smoking.....1.....2.....3

(28) Solving an ongoing practical problem.....1.....2.....3

(29) Daydreaming.....1.....2.....3

(30) Weight.....1.....2.....3

(31) Sex.....1.....2.....3

(32) Having enough time to do what you want.....1.....2.....3

(33) Eating out.....1.....2.....3

(34) Having enough (personal) energy.....1.....2.....3

(35) Resolving inner confusions.....1.....2.....3

(36) Finding no prejudice or discrimination when you expect it.....1.....2.....3

(37) Capitalizing on an unexpected opportunity.....1.....2.....3

(38) Using drugs or alcohol.....1.....2.....3

UPLIFTS

HOW OFTEN: 1 Somewhat often
2 Moderately often
3 Extremely often

(39) Life being meaningful.....1.....2.....3

(40) Being well-prepared.....1.....2.....3

(41) Eating.....1.....2.....3

(42) Relaxing.....1.....2.....3

(43) Having the "right" amount of things to do.....1.....2.....3

(44) Being visited, phoned, or sent a letter.....1.....2.....3

(45) The weather.....1.....2.....3

(46) Thinking about the future.....1.....2.....3

(47) Spending time with family.....1.....2.....3

(48) Reading.....1.....2.....3

(49) Shopping.....1.....2.....3

(50) Listening to music.....1.....2.....3

(51) Smoking.....1.....2.....3

(52) Giving a present.....1.....2.....3

(53) Receiving a present.....1.....2.....3

(54) Having enough money.....1.....2.....3

(55) Health of a family member improving.....1.....2.....3

(56) Resolving confusion over what to do.....1.....2.....3

(57) Thinking about health.....1.....2.....3

(58) Socializing (being with friends, parties).....1.....2.....3

(59) Making a friend.....1.....2.....3

(60) Sharing something.....1.....2.....3

(61) Being a good "listener".....1.....2.....3

(62) Having someone listen to you.....1.....2.....3

(63) Feeling understood.....1.....2.....3

UPLIFTS

HOW OFTEN: 1 Somewhat often
2 Moderately often
3 Extremely often

(64) Having enough money for entertainment and recreation.....1.....2.....3

(65) Entertainment (movies, T.V., concerts).....1.....2.....3

(66) Good news on local or world level.....1.....2.....3

(67) Getting good advice.....1.....2.....3

(68) Recreation (sports, games, etc).....1.....2.....3

(69) Performing well at school(grades,etc.).....1.....2.....3

(70) Growing as a person.....1.....2.....3

(71) Improving or gaining new skills.....1.....2.....3

(72) Free time.....1.....2.....3

(73) Expressing yourself well.....1.....2.....3

(74) Laughing.....1.....2.....3

(75) Enjoying school.....1.....2.....3

(76) Gett ng unexpected money.....1.....2.....3

(77) Dreaming.....1.....2.....3

(78) Having fun.....1.....2.....3

(79) Going some place that's different.....1.....2.....3

(80) Enjoying non-family members living in your home.....1.....2.....3

(81) Pets.....1.....2.....3

(82) Feeling loved.....1.....2.....3

(83) Making decisions.....1.....2.....3

(84) Thinking about the past.....1.....2.....3

(85) Giving good advice.....1.....2.....3

(86) Participating in religious practices.....1.....2.....3

UPLIFTS

HOW OFTEN: 1 Somewhat often
2 Moderately often
3 Extremely often

(87) Meditating.....1.....2.....3
(88) Confronting someone or something.....1.....2.....3
(89) Being accepted.....1.....2.....3
(90) Loving someone.....1.....2.....3
(91) Parents pleased with your school work.....1.....2.....3
(92) Teachers pleased with your school work.....1.....2.....3
(93) Being alone.....1.....2.....3
(94) Feeling safe.....1.....2.....3
(95) Doing volunteer work.....1.....2.....3
(96) Learning something.....1.....2.....3
(97) Being "one" with the world.....1.....2.....3
(98) Exercising.....1.....2.....3
(99) Meeting a challenge.....1.....2.....3
(100) Flirting.....1.....2.....3
(101) Hugging and/or kissing.....1.....2.....3
(102) Cooking.....1.....2.....3
(103) Doing yardwork.....1.....2.....3
(104) Your room or home is pleasing to you.....1.....2.....3
(105) Fixing or repairing something.....1.....2.....3
(106) Making something.....1.....2.....3

HAVE WE MISSED ANY OF YOUR UPLIFTS? IF SO, PLEASE WRITE THEM IN:

(107) 1.....2.....3
(108) 1.....2.....3
(109) 1.....2.....3

HAS THERE BEEN A CHANGE IN YOUR LIFE THAT AFFECTED HOW YOU ANSWERED THIS SCALE? IF SO, WHAT WAS IT?

Appendix F

The Hopkins Symptom Checklist

PLEASE RATE YOURSELF ON EACH OF THE ITEMS LISTED BELOW WITH REFERENCE TO: HOW YOU HAVE FELT DURING THE PAST 7 DAYS INCLUDING TODAY

SEVERITY: 1 Not at all distressed
2 Somewhat distressed
3 Moderately distressed
4 Extremely distressed

HSCL

(1) Headaches.....1.....2.....3.....4

(2) Nervousness or shakiness inside.....1.....2.....3.....4

(3) Being unable to get rid of bad thoughts or ideas.....1.....2.....3.....4

(4) Faintness or dizziness.....1.....2.....3.....4

(5) Loss of sexual interest or pleasure.....1.....2.....3.....4

(6) Feeling critical of others.....1.....2.....3.....4

(7) Bad dreams.....1.....2.....3.....4

(8) Difficulty in speaking when you are excited.....1.....2.....3.....4

(9) Trouble remembering things.....1.....2.....3.....4

(10) Worried about sloppiness or carelessness.....1.....2.....3.....4

(11) Feeling easily annoyed or irritated.....1.....2.....3.....4

(12) Pains in the heart or chest.....1.....2.....3.....4

(13) Itching.....1.....2.....3.....4

(14) Feeling low in energy or slowed down.....1.....2.....3.....4

SEVERITY: 1 Not at all distressed
2 Somewhat distressed
3 Moderately distressed
4 Extremely distressed

HSCL

(15) Thoughts of ending your life.....1.....2.....3.....4

(16) Sweating.....1.....2.....3.....4

(17) Trembling.....1.....2.....3.....4

(18) Feeling confused.....1.....2.....3.....4

(19) Poor appetite.....1.....2.....3.....4

(20) Crying easily.....1.....2.....3.....4

(21) Feeling shy or uneasy with the opposite sex.....1.....2.....3.....4

(22) A feeling of being trapped or caught.....1.....2.....3.....4

(23) Suddenly scared for no reason.....1.....2.....3.....4

(24) Temper outbursts you could not control.....1.....2.....3.....4

(25) Constipation.....1.....2.....3.....4

(26) Blaming yourself for things.....1.....2.....3.....4

(27) Pains in the lower part of your back.....1.....2.....3.....4

(28) Feeling blocked or stymied.....1.....2.....3.....4

(29) Feeling lonely.....1.....2.....3.....4

(30) Feeling blue.....1.....2.....3.....4

(31) Worrying or stewing about things.....1.....2.....3.....4

(32) Feeling no interest in things.....1.....2.....3.....4

(33) Feeling fearful.....1.....2.....3.....4

(34) Your feelings being easily hurt.....1.....2.....3.....4

SEVERITY: 1 Not at all distressed
2 Somewhat distressed
3 Moderately distressed
4 Extremely distressed

HSCL

(35) Having to ask others what you should do.....1.....2.....3.....4

(36) Feeling others do not understand you or are unsympathetic.....1.....2.....3.....4

(37) Feeling that people are unfriendly or dislike you.....1.....2.....3.....4

(38) Having to do things very slowly to be sure you are doing them right.....1.....2.....3.....4

(39) Heart pounding or racing.....1.....2.....3.....4

(40) Nausea or upset stomach.....1.....2.....3.....4

(41) Feeling inferior to others.....1.....2.....3.....4

(42) Soreness of your muscles.....1.....2.....3.....4

(43) Loose bowel movements.....1.....2.....3.....4

(44) Difficulty in falling asleep or staying asleep.....1.....2.....3.....4

(45) Having to check and double check what you do.....1.....2.....3.....4

(46) Difficulty making decisions.....1.....2.....3.....4

(47) Wanting to be alone.....1.....2.....3.....4

(48) Trouble getting your breath.....1.....2.....3.....4

(49) Hot or cold spells.....1.....2.....3.....4

(50) Having to avoid certain places or activities because they frighten you....1.....2.....3.....4

(51) Your mind going blank.....1.....2.....3.....4

SEVERITY: 1 Not at all distressed
2 Somehat distressed
3 Moderately distressed
4 Extremely distressed

HSCL

(52) Numbness or tingling in parts of your body.....1.....2.....3.....4

(53) A lump in your throat.....1.....2.....3.....4

(54) Feeling hopeless about the future.....1.....2.....3.....4

(55) Trouble concentrating.....1.....2.....3.....4

(56) Weakness in parts of your body.....1.....2.....3.....4

(57) Feeling tense or keyed up.....1.....2.....3.....4

(58) Heavy feelings in your arms or legs.....1.....2.....3.....4

Appendix G

HSCL Dimensions - Item-Total Correlations & Internal Consistency Reliability

Somatization (Internal consistency r = 0.87 (coefficient a))

No.	Item	Item-total r
1	headaches	0.51
4	faintness or dizziness	0.62
12	pains in the heart or chest	0.66
14	feeling low in energy or slowed down	0.60
27	pains in lower part of your back	0.65
42	soreness of your muscles	0.70
48	trouble getting your breath	0.67
49	hot or cold spells	0.64
52	numbness or tingling in parts of your body	0.71
53	a lump in your throat	0.55
56	weakness in parts of your body	0.75
58	heavy feeling in your arms or legs	0.72

HSCL Dimensions - Item-Total Correlations & Internal Consistency Reliability

Obsessive-Compulsive (Internal consistency r = 0.87 (coefficient a))

No.	Item	Item-total r
9	trouble remembering things	0.73
10	worried about sloppiness or carelessness	0.60
28	feeling blocked or stymied in getting things done	0.73
38	having to do things very slowly in order to be sure you were doing them right	0.73
45	having to check and double-check what you do	0.76
46	difficulty making decisions	0.77
51	your mind going blank	0.70
55	trouble concentrating	0.79

Interpersonal Sensitivity (Internal consistency r = 0.85 (coefficient a)

No.	Item	Item-total r
6	feeling critical of others	0.67
11	feeling easily annoyed or irritated	0.72
24	temper outbursts you could not control	0.69
34	your feelings being easily hurt	0.74
36	feeling that others do not understand you or are unsympathetic	0.75
37	feeling that people are unfriendly or dislike you	0.77
41	feeling inferior to others	0.72

HSCL Dimensions - Item-Total Correlations & Internal Consistency Reliability

Depression (Internal consistency r = 0.86 (coefficient a))

No.	Item	Item-total r
5	loss of sexual interest or pleasure	0.49
15	thoughts of ending your life	0.54
19	poor appetite	0.45
20	crying easily	0.60
22	a feeling of being trapped or caught	0.68
26	blaming yourself for things	0.68
29	feeling lonely	0.77
30	feeling blue	0.80
31	worrying or stewing about things	0.73
32	feeling no interest in things	0.66
54	feeling hopeless about the future	0.77

Anxiety (Internal consistency r = 0.84 (coefficient a)

No.	Item	Item-total r
2	nervousness or shakiness inside	0.69
17	trembling	0.70
23	suddenly scared for no reason	0.77
33	feeling fearful	0.78
39	heart pounding or racing	0.69
50	having to avoid certain things,places, or activities because they frighten you	0.69
57	feeling tense or keyed up	0.68

Appendix H

Letter of Consent to School Administrator

November 1984

TO WHOM THIS MAY CONCERN

Dear Sir/Madam:

This letter is to request your permission to allow me, under the supervision of the Department of Educational Psychology and Counselling at McGill University, to conduct a research study on the coping strategies used by grade 9 students in your school.

The general purpose of this study is to examine and describe the kinds of situations that adolescents find stressful in their daily lives and the specific ways they deal with those situations.

Each student who participates in the study will be seen individually, and asked to describe an event or situation which he/she has found stressful in the recent past, as well as to complete 3 questionnaires designed to assess the frequency and severity of the daily stresses, his/her thoughts and actions that deal with these stresses, and how he/she has been feeling during the previous week. These tasks will take about one hour to complete and will be arranged through the Guidance Department to be done while the student is at school. The adolescent will be asked to repeat this interview process a total of 3 times, once every 5 weeks. The research is not attempting to test adolescents. The students will have this explained to them.

Letters of permission, authorizing the student to participate in the study will be distributed to the parents.Complete secrecy and confidentiality will be maintained. No reports of data will use any child's name or allow identification of individual children. An overall description of the results of this study will be made available to the School and to parents on completion of the study.

I thank you for your consideration of this matter.

If you have any questions about the research please feel free to contact me at the following telephone number ( ), or call Dr. F.Dumont at McGill University at 392-8886.

Yours sincerely,

Appendix I

Letter of Consent to Student

November 1984

Dear Student:

The School that you are attending is cooperating with McGill University in a study investigating the nature of the relationship between adolescent stresses and normal adolescent development.

The general purpose of this study is to examine and describe the kinds of situations that adolescents find stressful in their daily lives and the specific ways they deal with those situations.

Each student who participates in the study will be seen individually, and asked to describe an event or situation which he/she has found stressful in the recent past, as well as to complete 3 questionnaires designed to assess the frequency and severity of the daily stresses, his/her thoughts and actions to deal with these stresses, and how he/she has been feeling during the previous week. These tasks will take about one hour to complete and will be arranged through the Guidance Department to be done while the student is at school. The student will be asked to repeat this interview process a total of 3 times, once every 5 weeks. The research is not attempting to test the student.

Complete secrecy and confidentiality will be maintained. No reports of data will use the student's name or allow identification of individuals. An overall description of the results of this study will be made available on completion of the study.

Thank you for your consideration of this matter.

If you have any questions about the research, please feel free to contact me in the Guidance Department.

Kindly indicate if you are willing to participate on the attached tear-off slip and return it to me in the Guidance Department as soon as possible.

Yours sincerely,

I, _____ agree to participate in the study investigating the nature of the relationship between adolescent stresses and normal adolescent development described in the above memorandum. I understand that it will be carried out by the Guidance Department, in cooperation with the Department of Educational Psychology and Counselling at McGill University.

Date: _____ _____

Signature of Student

Appendix J

Demographic Data Sheet

(To be completed by Counselling Intern on 1st Interview of student)

DATE:

COUNSELLING INTERN:

STUDENT CODE:

GENDER OF STUDENT:

AGE OF STUDENT:

MOTHER TONGUE (language spoken at home by parents):

STUDENT LIVING WITH ONE OR BOTH PARENTS AT HOME OR OTHER:

IS THE FATHER EMPLOYED? YES NO N/A FATHER'S OCCUPATION:

IS THE MOTHER EMPLOYED OUTSIDE THE HOME? YES NO N/A

MOTHER'S OCCUPATION:

Appendix K

Letter of Consent to Parents

November 1984

Dear Parents:

The School that your child is attending is cooperating with McGill University in a study investigating the nature of the relationship between adolescent stresses and normal adolescent adjustment.

The general purpose of this study is to examine and describe the kinds of situations that adolescents find stressful in their daily lives and the specific ways they deal with those situations.

Each student who participates in the study will be seen individually, and asked to describe an event or situation which he/she has found stressful in the recent past, as well as to complete 3 questionnaires designed to assess the frequency and severity of the daily stresses, his/her thoughts and actions that deal with these stresses, and how he/she has been feeling during the previous week. These tasks will take about one hour to complete and will be arranged through the Guidance Department to be done while your child is at school. The adolescent will be asked to repeat this interview process a total of 3 times, once every 5 weeks. The research is not attempting to test adolescents. The students will have this explained to them.

Complete secrecy and confidentiality will be maintained. No reports of data will use your child's name or allow identification of individual children. An overall description of the results of this study will be made available to parents on completion of the study.

Thank you for your consideration of this matter.

If you have any questions about the research please feel free to contact me at the following telephone number ( ).

I hope that you will allow your child to participate. Kindly indicate your wishes on the attached tear-off slip and have your child return it to the Guidance Department as soon as possible.

Yours sincerely,

I authorize my child, _____ to participate in the study investigating the nature of the relationship between adolescent stresses and normal adolescent adjustment described in the above memorandum. I understand that it will be carried out by the Guidance Department, in cooperation with the Department of Educational Psychology and Counselling at McGill University.

Date: _____

Signature of Parent or Guardian

Appendix L

Ethical Research Statement
Research Committee of the Faculty of Education

Name of researcher Inge Schamborzki
Title of research proposal Stress and Coping in Adolescence
Grant agency applied to, if any _____

ANSWER EACH QUESTION OR THIS STATEMENT WILL BE RETURNED

1. In your research plans, how do you intend to ensure that informed consent is obtained from subjects? (Informed consent requires that subjects fully understand the nature, procedures, risks and benefits of the research and freely agree to participate in the study.) Please attach a sample of your consent form(s).

   The 4 interviewers are 2nd year Master in Counselling students who have previously obtained permission to do internships in the Guidance Departments in their respective high schools. These students will now request permission from the Principals to conduct the research in their schools. If this is granted, then parental consent will be requested from those grade 9 students randomly selected from the class lists to participate in the research.

2. What assurance can you offer that there are only minimal physical or psychological risks to your study?

   The study is at the exploratory-descriptive level of inquiry only. Only full-time students attending school on a regular basis will be asked to respond to the questionnaires. The sample population will be a "normal", "healthy", group of grade 9 students.

3. What evidence can you offer that the proposed research will not encroach upon the subject's right to privacy?

   Participation is on a voluntary basis. While it is hoped that the subjects will respond to all of the questions openly and honestly, the students are clearly able to not respond to those items which they might feel encroach on their privacy. It is the investigators opinion that all of the questions are age-appropriate.

4. Describe the provisions that will be made to ensure that the identity of subjects and the information obtained will be kept in confidence.

   The information obtained from the subjects by the interviewers will be coded in such a way that the principal investigator will not be aware of the identity of the individual students.

5. Kindly attach a brief summary of your research and research procedures.

The purpose of the study will be to describe and analyze the coping strategies used by adolescents in specific, stressful events in their daily lives.

The population will consist of 80 adolescents (40 males, 40 females) attending the 9th-grade on a full-time basis, in one of 4 consenting, English-speaking high schools in the Montreal area, who meet the inclusion criteria as described and who agree, with parental consent, to participate in the study.

Four research instruments will be used to collect the data:
1. A semi-structured interview of a few inutes duration to find out the kinds of events that stress adolescents in their daily lives, and how they deal with them;
2. The Ways of Coping Checklist (revised) reported by Lazarus and his colleagues (1980;1984) that is a 66-iten self report measure designed to elicit the broad range of cognitive and behavioral strategies people use to manage stressful demands. The subject responds on a 4-point Likert scale;
3. The Daily Hassles and Uplifts Scales (revised) designed by Lazarus and his colleagues again, to assess the frequency and severity of daily hassles and uplifts. Subjects are asked to circle a list of items related to school, health, family, friends, the environment, that they experienced in the previous month; and,
4. The Hopkins Symptom Checklist (Derogatis & Colleagues, 1974) is a 58-item self-report symptom rating scale that has demonstrated a sensitivity to low levels of symptomatology in normal populations and that is particularly likely to show short term changes. It can be utilized as in this situation as a standardized source of information regarding the clinical status of the adolescent.

Each of these measures will be administered by the Counselling Interns, who are experienced interviewers with adolescents, 3 times at five week intervals, once the appropriate consent forms have been completed. The actual times will be coordinated by the Interns to occur during school hours when the adolescents would not be missing otherwise important class time.

The data will be analyzed to determine generally speaking, to what extent adolescents are consistent or inconsistent in their use of particular strategies to deal with the diverse stressful events of living over time; what some of the factors are that influence the various strategies adolescents use; and to what extent the daily hassles experienced, and their use of particular coping strategies, can be related, if at all, to the psychological clinical status of the adolescent.